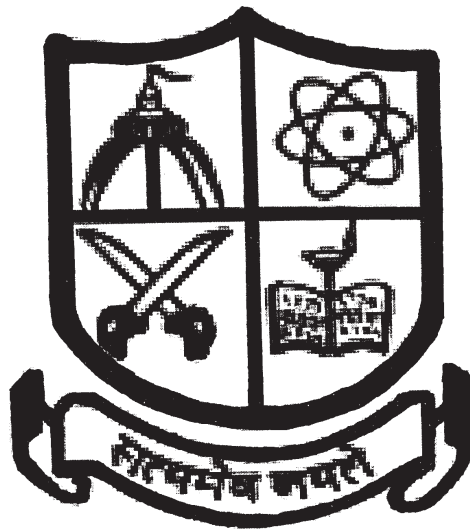


COURSES OF STUDIES ARTS STREAM

Admission Batch - 2023-24



Buxi Jagabandhu Bidyadhar Autonomous College

Bhubaneswar - 751014

Accredited at the 'A' Level by

National Assessment and Accreditation Council (NAAC)

Telephone/Fax : 0674-2436971, Website : www.bjbcollege.ac.in

General Instructions

CBCS SYLLABUS

- Details of course structure for B.Sc/BA/B.Com (core) :
(with suitable modification of draft model provided by OSHEC)

	Courses	Credits
		Theory + Practical
I.	Core Course (14 Papers)	14 x 4 = 56
	Core Course Practical/Tutorial (14 Papers)	14 x 2 = 28
II.	Elective Course	
	A.1 Discipline Specific Elective (3 Papers)	3 x 4 = 12
	A.2 Discipline Specific Elective Practical/Tutorial (3 Papers)	3 x 2 = 6
	A.3. Discipline Specific Elective Project (Report and Presentation) (1 Paper)	6
III.	Generic Elective/Interdisciplinary 2 papers/2 subjects (GE-1 & GE-2 in 1 st year) and Generic Elective (GE-3 & GE4 in 2 nd year) Practical/Tutorial (4 Papers each from GE - 1, GE - 2, GE - 3, GE - 4)	4 x 4 = 16 4 x 2 = 8
IV.	Ability Enhancement Compulsory Course(AECC) (2 Papers of 4 Credit each)	4 x 2 = 8
	(i) AECC-1 (Environmental Studies & Disaster mgt.)	
	(ii) AECC-2 Odia/Hindi/Communicative English	
	(iii) AECC-EV-I,II,III,IV,V,VI (From 2021 Adm. Batch)	1 x 6 = 6
V.	SECC (Skill Enhancement Compulsory Course) (2 Papers of 2 Credit each) Refer to 18.4,18.5,18.6.	4 x 2 = 8
Total Credit		154

Arts, Science and Commerce students can also opt for NCC and other subjects (as and when required by the Board of Studies) as additional Generic Elective in the 1st year (1st and 2nd Semester) to enhance their credit points.

- Mark Distribution Core Courses: 14x100=1400
- Discipline specific elective: 3x100=300
- Project + Viva: 1x100 =100
- Generic Elective- 1, 2 2x100=200
- Generic Elective- 3, 4 2x100=200
- Ability Enhancement (Compulsory) 2x100=200
- AECC (Ethics & Values) 6 x 25 = 150
- Skill Enhancement Compulsory Course 2x100=200
- Total Mark = 2750, Total number of Papers = 32
- Subjects with Practical: Theory-75 Marks, Practical-25 Marks
Mid Semester Theory-15 Marks, End Semester Theory-60 Marks
There is no Practical Exam. in Mid Semester.
- Subjects without Practical : 100 Marks
Mid Semester-20 Marks, End Semester-80 Marks

SEMESTER	COURSE	COURSE NAME	Credits
I. 5 Papers (425 Marks) 23 credits	Ability Enhancement Compulsory Course-I AECC-EV-I	Environmental Studies & Disaster mgt Ethics & Value	04 01
	Core Course-I		4/5
	Core Course-I Practical/Tutorial		2/1
	Core Course-II		4/5
	Core Course-II Practical/Tutorial		2/1
	Generic Elective -1	GE-1	4/5
	Generic Elective -1 Practical/Tutorial		2/1
II. 4 Papers (425 Marks) 23 credits	Ability Enhancement Compulsory Course-II AECC-EV-II	Communicative Eng / Odia / Hindi Ethics & Value	04 01
	Core Course-III		4/5
	Core Course-III Practical/Tutorial		2/1
	Core Course-IV		4/5
	Core Course-IV Practical/Tutorial		2/1
	Generic Elective -2	GE-2	4/5
	Generic Elective -2 Practical/Tutorial		2/1
III. 6 Papers (525 Marks) 28 credits/ 29 credits	AECC-EV -III	Ethics & Value	01
	Core Course-V		4/5
	Core Course-V Practical/Tutorial		2/1
	Core Course-VI		4/5
	Core Course-VI Practical/Tutorial		2/1
	Core Course-VII		4/5
	Core Course-VII Practical/Tutorial		2/1
	Skill Enhancement Compulsory Course -1	SEC-1	4
	Generic Elective -3	GE-3	4/5
Generic Elective -3 Practical/Tutorial		2/1	
IV. 6 Papers (525 Marks) 29 credits	AECC-EV -IV	Ethics & Value	01
	Core Course-VIII		4/5
	Core Course-VIII Practical/Tutorial		2/1
	Core Course-IX		4/5
	Core Course-IX Practical/Tutorial		2/1
	Core Course-X		4/5
	Core Course-X Practical/Tutorial		2/1
	Skill Enhancement Compulsory Course -2	SEC -2	4
	Generic Elective -4	GE-4	4/5
Generic Elective -4 Practical/Tutorial		2/1	
V. 5 Papers (425 Marks) 25 credits	AECC-EV -V	Ethics & Value	01
	Core Course-XI		4/5
	Core Course-XI Practical/Tutorial		2/1
	Core Course-XII		4/5
	Core Course-XII Practical/Tutorial		2/1
	Discipline Specific Elective -1	DSE-1	4/5
	Discipline Specific Elective -1 Practical/Tutorial	DSE-1 Practical/Tutorial	2/1
	Discipline Specific Elective -2	DSE-2	4/5
Discipline Specific Elective- 2 Practical/Tutorial	DSE-2 Practical/Tutorial	2/1	
VI. 5 Papers (425 Marks) 25 credits	AECC-EV -VI	Ethics & Value	01
	Core course-XIII		4/5
	Core Course-XIII Practical/Tutorial		2/1
	Core course-XIV		4/5
	Core Course-XIV Practical/Tutorial		2/1
	Discipline Specific Elective3	DSE-3	4/5
	Discipline Specific Elective -3 Practical/Tutorial	DSE-3 Practical/Tutorial	2/1
Discipline Specific Elective-4	DSE-4 (Project Work)	6	
Total Credits			154

Model Regulation for Under Graduate Programme

(BA/B.Com/B.Sc) As per CBCS system from 2019 admission batch

(with suitable modification)

1. Compulsory Registration for 1st Semester :

- (A) Registration for 1st semester is compulsory. A candidate admitted to +3 Course but not registered for 1st semester examination, his/her admission will be automatically cancelled. If a student doesn't appear for all the papers in both first & second semester examination his/her admission for the said course will be cancelled.
- (B) Only one admit card (called Examination card) for all semester examinations should be issued to the student by Controller of Examination (COE) in the first semester. This will be valid for all semesters.

2. ● Mid semester examination of will be of 01 hour duration for 20/15 marks (20 for subject having no practical and 15 for subject with practical papers). There shall be no pass mark in Mid semester Examination. The type of questions will be decided by the college authority. Absence in Mid semester Examination will be declared fall in that paper.
- A student who fails to appear in a Mid semester examination will allowed one more chance to take the same examination. There will be no provision to reappear in the Mid semester Examination for Improvement. This will be applicable for the students of 2019 admission batch.
- It a student does not appear for all the papers in both first and second semester examinations, his/her admission for the said course will be cancelled.

3. GRADING SYSTEM

Grading system in each paper (Mid+End Semester Exam) in a semester :

Qualification	Grade	Mark Secured from 100	Grade Points	Classification for Honours/Core
Outstanding	'O'	90-100	10	First class Hons.
Excellent	'A+'	80-89	9	
Very Good	'A'	70-79	8	
Good	'B+'	60-69	7	
Above average	'B'	50-59	6	second class Hons
Fair	'C'	45-49	5	
Pass	'D'	40-44	4	Pass
Failed	'F'	Below 400	0	Fail
Absent	'ABS'	00	0	Fail
Malpractice	'M'	00	0	M.P.

- (a) The Candidate obtaining Grade-F is considered failed and will be required to clear the Back paper(s) in the subsequent examinations within the stipulated time.
- (b) Candidate in Honours Courses securing “B” Grade and above in aggregate in their first appearance will be awarded Distinction. However, students who could not appear at an examination due to their representing the University or state in Inter-University or Inter-State competitions in Games and Sports at National/International level or attending National level NCC/NSS camps will get one chance exemption for Distinction.
- (c) FAIL/ MP/ HARD CASE and Back Paper Clearance candidates in any Semester Examination are not award of Distinction
- (d) Minimum percentage of marks to be secured for passing:

40% (40 out of 100) in theory paper by taking both components (i.e. Mid + End Semester Examination) and minimum pass mark for practical paper in 40%.

(i) No pass mark for Mid-Semester Examination, A student has to appear at the Mid Semester Examination. Securing “ABS” in Mid-Semester Examination students will be declared fail in that paper, through he/she secures pass mark in theory and practical paper. Such candidates would require to appear at the Mid-Semester Examinations in subsequent semester.

(ii) There will be no Mid-Semester examination (for AECC-Ethics and value)

(iii) In order to clear a semester examination a candidate is required to pass in all theory and practical papers/project component of the said paper.

- (e) Mark Distribution:

A. Subjects without Practical :

Mid Semester	End Semester	Total
20	80	100

B. Subjects with Practical :

Mid Semester	End Semester		Total
	(a)Theory	(b)practical	
15	60 25	(20+05 Record)	100

- C.** DSE-4 for all Core students (6th semester) is the project.

Project- The mark distribution would be subject specific. In general the project will carry 80 marks and Viva Voce/Seminar will carry 20 marks. The project paper will not have mid semester Examination and it will be evaluated by an internal examiner specified by the college.

- D.** AECC (EV - I to EV - VI) there is no mid semester exam for students.

N.B.: A Candidate has to secure Grade-D or above to pass in each of the Papers.

- 4.** A student’s level of competence shall be categorized by a GRADE POINT AVERAGE to be specified as :

SGPA - Semester Grade Point Average

CGPA - Cumulative Grade Point Average

- (a) **POINT** - Integer equivalent of each letter grade
 (b) **CREDIT** - Integer signifying the relative emphasis of individual course item(s) in a semester as indicated by the Course structure and syllabus.

CREDIT POINT - (b) x (a) for each course item

CREDIT INDEX - $\frac{\sum \text{CREDIT POINT}}{\sum \text{CREDIT}}$ of course items in each semester.

GRADE POINT AVERAGE - $\frac{\text{CREDIT INDEX}}{\sum \text{CREDIT}}$

SEMESTER GRADE POINT AVERAGE (SGPA) = $\frac{\text{CREDIT INDEX for each Semester}}{\sum \text{CREDIT}}$

CUMULATIVE GRADE POINT AVERAGE (CGPA) = $\frac{\text{CREDIT INDEX of all previous Semester up to 6th Semester}}{\sum \text{CREDIT}}$

- (c) Formula of Equivalent percentage of marks
 Case (a) Equivalent percentage of marks = $(\text{CGPA} - 0.5) \times 10$ for $4 < \text{CGPA} < 10$
 case (b) Equivalent percentage of marks = $\text{CGPA} \times 10$ for $\text{CGPA} < 4$.

- A student in order to retain honours has to secure Grade 'C' and above in each of the Core papers. Further in order to obtain distinction a student has to secure Grade 'C' in all the papers in 1st appearance
- The details of grading system and percentage of mark calculation shall be printed on the backside of University Gradesheet.

REPEAT EXAMINATION

- A student has to clear back papers (i.e., in the paper/papers one has failed) by appearing at subsequent two consecutive semesters of the same nomenclature.
- A student after passing out may appear in improvement in any number of papers in the two immediate examinations with batch students. The higher marks shall be retained.
- A student has to pass the course within 6 years from the date of admission for Under Graduate students. For post Graduate students, it has to be completed within 4 years from the date of admission.
- No improvement will be allowed for the students who have cleared the semesters by appearing special back examination.

HARD CASE RULE

- 2% of grace mark on the aggregate mark subject to maximum of 5 (five) marks in single paper shall be given. This shall be applicable in each semester.
- 0.5% (point five percent) grace mark can be given for award of B & B+ Grade in single semester provided grace mark, under 6.1 hasn't been awarded.

QUESTION PATTERN**A. FOR NON-PRACTICAL SUBJECTS OTHER THAN ENGLISH, ODIA, HINDI AND SANSKRIT (TOTAL MARKS 80) (CORE, DSE, GE)**

1. Part-I will carry 12 one - mark questions in the form of fill in the blanks and one word answer (1x12=12)
2. Part-II will carry 10 two-mark questions of which 8 have to be answered. The answer should be two or three sentences maximum (2 x 8 = 16).
3. Part-III will carry 10 three - marks questions out of which 8 have to be answered. The answer should be within 75 words (3 x 8 = 24)
4. Part- IV will carry 4 seven-marks questions or format. The question can be set from each unit. The answer should be within 500 words maximum. (7 x 4 = 28)

B. FOR PRACTICAL SUBJECTS (TOTAL MARKS 60) (CORE, DSE, GE)

1. Part-I will carry 8 one-mark questions in the form of fill in the blanks and one word answer (1x 8 = 8)
2. Part-II will carry 10 one point five (1.5) mark question of which 8 have to be answered. The answer should be written in two or three sentence maximum (1.5 x 8 = 12)
3. Part-III will carry 10 two (2) marks questions out of which 8 have to be answered. The answer should be within 75 words maximum. (2 x 8 = 16)
4. Part-IV will carry 4 six marks questions of either or format. The either or question can be set from each unit. The answer should be within 500 words maximum (6 x 4 = 24)

C. FOR LANGUAGE SUBJECTS (TOTAL MARKS 80) ENGLISH :**1. (Core, Course, DSE & GE)**

Part-I : 4 long questions of 14 marks each to be set from units-1-4 in either or format (14 x 4 = 56)

Part-II : 4 short notes / annotation / analysis of 6 marks each covering all the units with internal choice (6 x 4 = 24)

2. FOR AECC- II COMMUNICATION (ENGLISH) (TOTAL MARKS - 80)

Part-I : 5 short questions of 4 marks each to be set from unit 1 covering all prescribed stories with internal choice (4 x 5 = 20)

Part-II : 5 short questions of 4 marks each to be set from unit 2 covering all prescribed prose pieces with internal choice (4 x 5 = 20)

Part-III : An unknown passage to be set with 5 questions carrying 4 marks each. (4 x 5 = 20)

Part-IV : 10 bit questions carrying 2 marks each from grammar / vocabulary and usage (2 x 10 = 20)

D. FOR LANGUAGE SUBJECTS : AECC II (ODIA / HINDI / SANSKRIT) MIL COMMUNICATION / CORE / DSE / GE FOR TOTAL MARKS - 80

Part-I it will carry 12 two (2) - marks questions out of which 10 have to be answered. (2 x 10 = 20)

Part-II it will carry 4 15-mark questions of either or format. The either or question can be set from each unit. (15 x 4 = 60)

E. FOR AECC- I FOR (EVS & DM) (TOTAL MARKS- 80)

Part-I it will carry 12 two (2) marks questions out of which 10 have to be answered. (2 x 10 = 20)

Part-II it will carry 4 15-mark questions of either or format. The either or question can be set from each unit. (15 x 4 = 60)

F. FOR ETHICS & VALUES (EV 1-6) (TOTAL MARKS 25)

Part- I it will carry 5 Nos. of questions each carrying 1 mark (1 x 5 = 5)

Part-II it will carry 5 (five) 2marks questions (2 x 5 = 10)

Part-III it will carry 2 (two) questions each carrying 5 marks, to be answered within 250 words each (5 x 2 = 10)

G. FOR SEC- I COMMUNICATIVE ENGLISH (TOTAL MARKS 80)

Part-I: 20 Nos. 1-Marks Questions from grammar and Usage (choose the best, fill up...)(1 x 20 = 20)

Part-II: 10 Nos. 2-Marks Questions from Proof Reading (Punctuation, article...)(2 x 10 = 20)

Part-III: 5 Nos. 2-Marks Questions on very short notes on the Reading process, skills.... (2 x 5 =10)

Part-IV: 5 Nos. 2-Marks Questions from Reading comprehension (very short questions from an unseen extract) (2 x 5 =10)

Part-V: 10 Nos. 2-Marks Questions: Vocabulary and usage (contextual pattern) (2 x 5 = 10)

Part-VI: 10 Nos. 2-Marks Questions: Vocabulary and usage (contextual pattern) (2 x 10 = 20)

H. FOR SEC- II QUANTITATIVE AND LOGICAL THINKING (TOTAL MARKS 80)

Part-I: 10 Nos. questions of 2 marks each (2 x 10 = 20)

Part-II: 10 Nos. questions of 3 marks each (3 x 10 = 30)

Part-III: 6 Nos. questions of 5 marks each (5 x 6 = 30)

IN ARTS HE / SHE SHALL HAVE TO CHOOSE

- (a) One core subject from among the list of following subjects: Anthropology, Economics, Education, English, Geography, Hindi, History, Mathematics, Indian Music(HV), Odia, Philosophy, Political Science, Psychology, Sanskrit, Sociology, Statistics or any other subject to be opened in the future as per the rule of the College/University.
- (b) One Generic elective (GE) subjects : one for First Year from group I and one for the 2nd year from group II. Each elective subject is composed of two papers of 100 marks each.
Group I - (GE-1,GE-2):Anthropology, English, Philosophy, Hindi, History, Psychology, Mathematics, Sanskrit & NCC.

Group II - (GE-3, GE-4): Economics, Education, Geography, Indian Music(HV), Odia, political science, Sociology & Statistics.

(c) All the compulsory subjects for Science & Arts

Semester	AECC Course	SEC Course
1st Sem	AECC- Environment studies and Disaster Mgt. AECC- EV1	
2nd Sem	AECC - 2 MIL Communication (English/Odia/Hindi) AECC- EV2	
3rd Sem	AECC- EV-3	SEC-1 Communicative English
4th Sem	AECC- EV-4	SEC-2 QLT (Quantitative & Logical Thinking)
5th Sem	AECC- EV-5	
6th Sem	AECC- EV-6	

(d) Discipline Specific Electives (DSE)

This particular course is related to respective core subjects. The students can choose

- (i) Two DSE subjects related to their core subjects in 5th Semester provided in the syllabus
(ii) Two DSE courses including the project work in the 6th Semester.

* The students have to go through the required tests to be eligible for N.C.C.

GRADE SHEET

At the end of 6(six) semester, a grade sheet shall be made available to each student.



2021 Admission Batch Onwards CBCS Syllabus (Arts Stream)

SEMESTER -I	SEMESTER -II
AECC-1- Environmental Studies & Disaster Mgt. : 100 (80 + 20) Core - 1 : 100 (80 + 20) Core - 2 : 100 (80 + 20) AECC (EV-I) Ethics and Values : 25 For Practical Subjects Core - 1 (Theory) : 75 (60 + 15) (Lab) : 25 Core - 2 (Theory) : 75 (60 + 15) (Lab) : 25 For Practical Subjects GE - 1 (Theory) : 75 (60 + 15) (Lab) : 25	AECC-2- MIL Communication (Eng /Odia / Hindi) : 100 (80 + 20) AECC (EV-II) Ethics and Values : 25 Core - 3 : 100 (80 + 20) Core - 4 : 100 (80 + 20) For Practical Subjects Core - 3 (Theory) : 75 (60 + 15) (Lab) : 25 Core - 4 (Theory) : 75 (60 + 15) (Lab) : 25 For Practical Subjects GE - 2 (Theory) : 75 (60 + 15) (Lab) : 25
SEMESTER -III	SEMESTER -IV
AECC(EV-III) Ethics and Values : 25 SECC -1 Communicative English : 100 (80 + 20) Core - 5 : 100 (80 + 20) Core - 6 : 100 (80 + 20) Core - 7 : 100 (80 + 20) For Practical Subjects Core - 5 (Theory) : 75 (60 + 15) (Lab) : 25 Core - 6 (Theory) : 75 (60 + 15) (Lab) : 25 Core - 7 (Theory) : 75 (60 + 15) (Lab) : 25 GE - 3 : 100 (80 + 20) For Practical Subjects GE - 3 (Theory) : 75 (60 + 15) (Lab) : 25	AECC (EV-IV) Ethics and Values : 25 SEC C-2 Qnty. & Logical Thinking : 100 (80 + 20) Core - 8 : 100 (80 + 20) Core - 9 : 100 (80 + 20) Core -10 : 100 (80 + 20) For Practical Subjects Core - 8 (Theory) : 75 (60 +15) (Lab) : 25 Core - 9 (Theory) : 75 (60 +15) (Lab) : 25 Core -10 (Theory) : 75 (60 +15) (Lab) : 25 GE - 4 : 100 (80 + 20) For Practical Subjects GE - 4 (Theory) : 75 (60 +15) (Lab) : 25
SEMESTER -V	SEMESTER -VI
AECC(EV-V) Ethics and Values : 25 Core -11 : 100 (80 + 20) Core -12 : 100 (80 + 20) For Practical Subjects Core -11(Theory) : 75 (60 + 15) (Lab) : 25 Core -12 (Theory) : 75 (60 + 15) (Lab) : 25 Core - 7 (Theory) : 75 (60 + 15) (Lab) : 25 DSE - 1 : 100 (80 + 20) DSE - 2 : 100 (80 + 20) For Practical Subjects DSE - 1 (Theory) : 75 (60 + 15) (Lab) : 25 DSE - 2 (Theory) : 75 (60 + 15) (Lab) : 25	AECC(EV-VI) Ethics and Values : 25 Core -13 : 100 (80 + 20) Core -14 : 100 (80 + 20) For Practical Subjects Core -13 (Theory) : 75 (60 + 15) (Lab) : 25 Core -14 (Theory) : 75 (60 + 15) (Lab) : 25 DSE - 3 : 100 (80 + 20) DSE - 4 (Project) : 100 For Practical Subjects DSE - 3 (Theory) : 75 (60 + 15) (Lab) : 25

CONTENTS

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05.	SEC-1-Communicative English	19
06.	AECC-I-EVS & DM -	21
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08.	SEC-2-QLT -	29
09.	Addl. G.E.-2 NCC -	29
10.	Anthropology -	31
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14.	Geography -	149
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16.	History -	189
17.	Mathematics -	213
18.	Music -	244
19.	Odia -	268
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21.	Political Science -	301
22.	Psychology -	327
23.	Sanskrit -	359
24.	Sociology -	383
25.	Statistics -	413

COURSE OBJECTIVES AND LEARNING OUTCOMES OF NCC GE COURSE

The NCC GE course is introduced from 2014 in different colleges of Odisha.

1. BJB (Autonomous) College, Bhubaneswar.
2. Ramadevi Women's (Autonomous) college, Bhubaneswar.
3. Khariar (Autonomous) College, Khariar.

The Philosophy of introducing the subject by UGC is to give basic military training to our young generation who are opting for career in defense, Paramilitary forces and state police cadre in various Ranks. As the NCC cadets are appearing 5000 marks written, practical and viva test in 'B' certificate and "C" certificate examinations during NCC career, here this theory paper of NCC GE I and II in 1st and 2nd semesters are abridged and selected portions of vast "B" and "C" examination syllabus is taught. They will keep elective subject of 200 marks from the above course to reduce their total syllabus pressure.

AIMS OF NCC:

1. To develop character, commandership, discipline, leadership, secular outlook, spirit of adventure and the ideals of selfless service among the youth of the country.
2. To create a human resource of organized trained and motivated youth to provide leadership in all walks of life and always available for the service of the Nation.
3. To provide a suitable environment to motivate the youth to take up a career in the Armed forces.

NCC SLOGAN:

- * Nation first.
- * Motto of NCC - Unity and discipline.
- * NCC helps a lot in promoting National integration and patriotism.

+3 FIRST YEAR FIRST SEMESTER

ADDL. GENERIC ELECTIVE - I

PAPER - I

NCC (Arts/Science/Commerce)

Time : 3 Hours
Credit : 6

End Semester : 60 Marks,
Mid-Semester : 15 Marks

The NCC

Unit-1

- (a) Aims and Objectives of NCC.
Organisation & Training and NCC Song. Incentives.
 - (b) Basic organisation of the Armed Forces Organisation, Army Badges of Rank.
-

- (c) Religions, Culture, Traditions and Customs of India. National Integration : Importance and Necessity.

Unit-2

- (a) Introduction to Personality Development, Factors Influencing / shaping Personality, Self Awareness-know yourself, change your mind set.
(b) Types of communications.

Unit-3

- (a) Civil Defence organisation, types of emergencies/National Disaster
(b) National Resources, Conservation, Water conservation, Rain water Harvesting
(c) Basics of Social service, weaker sections of our society & their needs., Social & Rural Development projects: MNREGA.SASY, NSAP etc., Contribution of youth towards social Welfare

Unit-4

- (a) Introduction to types of maps & conventional signs.
(b) Scales & Grid system, Topographical Forms & Technical terms.
(c) Relief, contours and Gradient.

PRACTICAL-1Mark - **25**

- | | | | |
|----|------------------|---|----|
| 1. | Foot-Drill | - | 15 |
| 2. | Health & Hygiene | - | 10 |

+3 FIRST YEAR SECOND SEMESTER**AECC - 2****COMMUNICATION ODIA (Arts/ Science)**

Time : 3 Hours
Credit : 6

End Semester Theory : 80 Marks
Mid Semester Theory : 20 Marks

ଦକ୍ଷତାବର୍ଦ୍ଧକ ବାଧ୍ୟତାମୂଳକ ପାଠ୍ୟକ୍ରମ**ଯୋଗାଯୋଗମୂଳକ ମାତୃଭାଷା - ଓଡ଼ିଆ****ପ୍ରଥମ ପତ୍ର****କଳା ଓ ବିଜ୍ଞାନ (ସାଧାରଣ / ସମ୍ମାନ) ଶ୍ରେଣୀ ପାଇଁ ଉଦ୍ଦିଷ୍ଟ**

ପାଠ୍ୟକ୍ରମର ଭୂମିକା :

ଏହି ପାଠ୍ୟକ୍ରମଟି ପସନ୍ଦ ଓ ଆସ୍ଥାଭିତ୍ତିକ (ସିବିସିଏସ୍) ପାଠ୍ୟ ପ୍ରଣାଳୀ ଅନୁସାରେ ପ୍ରସ୍ତୁତ ହୋଇଛି । ବିଭିନ୍ନ ସ୍ତରରେ ଆବଶ୍ୟକ ଅନୁସାରେ ସମସାମୟିକ ପରିସ୍ଥିତିକୁ ନେଇ ଭାବବିନିମୟ ଓ ପାରସ୍ପରିକ ଯୋଗାଯୋଗ ସ୍ଥାପନ କିପରି ଓଡ଼ିଆ ଭାଷାରେ ସହଜରେ, ସରଳରେ ହୋଇପାରିବ- ଏ ଦିଗ ପ୍ରତି ଏଥିରେ ଧ୍ୟାନ ଦିଆଯାଇଛି । ଓଡ଼ିଆ ଭାଷା ଓ ସାହିତ୍ୟର ପ୍ରାୟୋଗିକ ଜ୍ଞାନର ବିକାଶ ନିମିତ୍ତ +୩ ସ୍ତରୀୟ ବିଦ୍ୟାର୍ଥୀଙ୍କୁ ଏହି ପାଠ୍ୟକ୍ରମର ଖସଡ଼ାଟି ସାହାଯ୍ୟ କରିବ । ସେଥିପାଇଁ ପ୍ରଚଳିତ ଭାଷାର ବୈଦ୍ୟାକରଣିକ, ବ୍ୟାବହାରିକ ଓ ପ୍ରାୟୋଗିକ ଦିଗ ପ୍ରତି ଏଥିରେ ଧ୍ୟାନ ଦିଆଯାଇଛି । ଏଥିରେ ସଂଯୋଗ ପ୍ରକ୍ରିୟାର ଅନୁବିଧି, ଯୋଗାଯୋଗର ତଥ୍ୟ ଓ ତତ୍ତ୍ୱ ପ୍ରତି ଗୁରୁତ୍ୱ ଦିଆଯାଇଛି । ସରକାରୀ କାର୍ଯ୍ୟାଳୟରେ ଓଡ଼ିଆ ଭାଷାର ବ୍ୟବହାରରେ ଏହା ଦକ୍ଷତା ବୃଦ୍ଧି କରିବ । ଓଡ଼ିଆ ଭାଷାର ପ୍ରୟୋଗରେ ସେମାନେ ଶୁଦ୍ଧ ଓ ପରିଚ୍ଛନ୍ନ ଭାବରେ ଯେ କୌଣସି ପ୍ରକାର ଜ୍ଞାନର ସୂଚନା ତଥ୍ୟ ଓ ସିଦ୍ଧାନ୍ତକୁ ମୌଖିକ ଓ ଲିଖିତ ସ୍ତରରେ ସହଜରେ ପ୍ରକାଶ କରିପାରିବେ ଏବଂ ସେମାନଙ୍କ ମାତୃଭାଷା ପ୍ରୟୋଗର ବିକାଶ ଘଟିପାରିବ ।

ମୂଲ୍ୟ ବିଭାଜନ ପଦ୍ଧତି : (ସବୁଥିରୁ ବିକଳ୍ପ ପଢ଼ିବ)

(କ) ନିର୍ଦ୍ଧାରିତ ପାଠ୍ୟର ସବୁ ଏକକ (ୟୁନିଟ୍)ରୁ ବିକଳ୍ପ ସହ ଦୁଇଟି ଲେଖାଏଁ ମୋଟ ୮ଟି

୧୫ ନମ୍ବର ବିଶିଷ୍ଟ ଦୀର୍ଘପ୍ରଶ୍ନ ପଢ଼ିବ । ବିଦ୍ୟାର୍ଥୀଙ୍କୁ ୪ଟି ପ୍ରଶ୍ନର ଉତ୍ତର ଦେବାକୁ ହେବ । (୧୫ X ୪ = ୬୦)

(ଖ) ନିର୍ଦ୍ଧାରିତ ପାଠ୍ୟର ସବୁ ଏକକରୁ ୧୨ ଟି ଅତି ସଂକ୍ଷିପ୍ତ ପ୍ରଶ୍ନ ପଢ଼ିବ । ସେଥିରୁ ୧୦ଟି

ପ୍ରଶ୍ନ ଉତ୍ତର ଦେବାକୁ ହେବ । (୧୦ X ୨ = ୨୦)

(ଗ) ମହାବିଦ୍ୟାଳୟ ସ୍ତରୀୟ ଆନ୍ତଃପରୀକ୍ଷା

-୨୦

ମୋଟ ମୂଲ୍ୟାଙ୍କ - ୧୦୦

ଦକ୍ଷତାବର୍ଦ୍ଧକ ବାଧ୍ୟତାମୂଳକ ପାଠ୍ୟକ୍ରମ ଯୋଗାଯୋଗମୂଳକ ମାତୃଭାଷା - ଓଡ଼ିଆ

ଦ୍ୱିତୀୟ ପତ୍ର

କଳା ଓ ବିଜ୍ଞାନ (ସାଧାରଣ / ସମ୍ମାନ) ଶ୍ରେଣୀ ପାଇଁ ଉଦ୍ଦିଷ୍ଟ

- ୧ମ ଏକକ / ଯୁନିଟ୍ : ଯୋଗାଯୋଗର ପରିଭାଷା, ଅନୁବିଧି, ପରିସର ଓ ପ୍ରକାରଭେଦ ।
- ୨ୟ ଏକକ / ଯୁନିଟ୍ : ସାକ୍ଷାତ୍‌କାର, ଭାଷଣ କଳା ।
- ୩ୟ ଏକକ / ଯୁନିଟ୍ : ସମ୍ବାଦର ପରିଭାଷା, ପରିସର ଓ ସମ୍ବାଦ ପ୍ରସ୍ତୁତି ।
- ୪ର୍ଥ ଏକକ / ଯୁନିଟ୍ : ଓଡ଼ିଆ ଭାଷାର ବର୍ଣ୍ଣମାଳା, ବର୍ଣ୍ଣାଶୁଦ୍ଧିର ନିରାକରଣ । (ବନାନ ତ୍ରୁଟି - ସାଦୃଶ୍ୟ ଜନିତ ଅଶୁଦ୍ଧି, ବାକ୍ୟ ବିଧିଜନିତ ଅଶୁଦ୍ଧି, ସମାର୍ଥବୋଧକ ଶବ୍ଦାଶୁଦ୍ଧି, ପ୍ରତ୍ୟୟ ଜନିତ ଅଶୁଦ୍ଧି, ଶବ୍ଦ ସଂଯୋଗାତ୍ମକ ଓ ସ୍ୱରସଙ୍ଗତି ଜନିତ ଅଶୁଦ୍ଧି ।

ସହାୟକ ଗ୍ରନ୍ଥସୂଚୀ :

୧. ଯୋଗାଯୋଗ ମୂଳକ ମାତୃଭାଷା (ଓଡ଼ିଆ) ସାମଲ ବିରଞ୍ଚି ନାରାୟଣ, ସତ୍ୟନାରାୟଣ ବୁକ୍ ଷୋର, କଟକ ।
୨. ସଂଯୋଗ ଅନୁବିଧି, ସନ୍ତୋଷ କୁମାର ତ୍ରିପାଠୀ, ନାଳନ୍ଦା, କଟକ ।
୩. ଭାଷଣ କଳା ଓ ଅନ୍ୟାନ୍ୟ ପ୍ରସଙ୍ଗ - କୃଷ୍ଣଚନ୍ଦ୍ର ପ୍ରଧାନ, ସତ୍ୟନାରାୟଣ ବୁକ୍ ଷୋର, କଟକ ।
୪. ପ୍ରାୟୋଗିକ ଓଡ଼ିଆ ଭାଷା - ଓଡ଼ିଆ ରାଜ୍ୟ ପାଠ୍ୟ ପୁସ୍ତକ ପ୍ରଣୟନ ଓ ପ୍ରକାଶନ ସଂସ୍ଥା, ଭୁବନେଶ୍ୱର ।
୫. ସମ୍ବାଦ ଓ ସମ୍ବାଦିକତା - ଚନ୍ଦ୍ରଶେଖର ମହାପାତ୍ର, ଓଡ଼ିଆ ରାଜ୍ୟ ପାଠ୍ୟପୁସ୍ତକ ପ୍ରଣୟନ ଓ ପ୍ରକାଶନ ସଂସ୍ଥା, ଭୁବନେଶ୍ୱର ।
୬. ନିର୍ଭୁଲ ଲେଖାର ମୂଳସୂତ୍ର, ନୀଳାଦ୍ରି ଭୂଷଣ ହରିଚନ୍ଦନ, ପି.ସି.ଆଇ ପବ୍ଲିକେସନ, ଭୁବନେଶ୍ୱର ।
୭. ସର୍ବସାର ବ୍ୟାକରଣ - ନାରାୟଣ ମହାପାତ୍ର ଓ ଶ୍ରୀଧର ଦାସ, ନିୟୁ ଷ୍ଟୁଡେଣ୍ଟସ୍ ଷୋର, କଟକ ।

+3 THIRD YEAR FIFTH SEMESTER

AECC - 2

COMMUNICATION HINDI (Arts/ Science)

Time : 3 Hrs.

Credit: 06

End Semester Theory : 80 Marks

Mid-Semester Theory : 20 Marks

Unit- 1:

कविता

- (ग) कबीर - साखी : १ से १०
- (ग) तुलसी - विनयपत्रिका - पद १ और २
- (गग) प्रसाद - मधुमय देश
- (गन्) निराला - भिक्षुक
- (न्) अज्ञेय - हिरोशिमा

Unit -II; Basic:

गद्य

- (ग) रामचन्द्र शुक्ल - उत्साह
- (ग) हजारी प्रसाद द्विवेदी - कुटज
- (गग) हरिशंकर परसाई - सदाचार का तावीज

Unit -lit:

शब्द ज्ञान

- | | |
|----------------------|------------------|
| (ग) शब्द शुद्धि | (ग) वाक्य शुद्धि |
| (गग) पर्यायवाची शब्द | (गन्) विलोम शब्द |

Unit - IV:

सामान्य ज्ञान

- (ग) निबंध लेखन (Eassy Writing)

पाठ्य पुस्तक :

- १) हिन्दी प्रसून - सं. डॉ. अंजुमन आरा, प्लानेट वी, कटक
- २) आधुनिक हिन्दी व्याकरण और रचना - वासुदेवनन्दन प्रसाद, भारती भवन, दिल्ली

+ 3 FIRST YEAR SECOND SEMESTER

AECC - 2

MIL COMMUNICATION ENGLISH (Arts/Science)

Time: 3 Hours
Credits: 06

End Semester: 80 Marks
Mid Semester: 20 Marks

INTRODUCTION :

The paper is focused upon developing one fundamental skill of Language learning; reading which needs a through rethink and revision. In order to build a strong base for acquisition of the communication skills, suitable reading content is selected from diverse areas in prose form. This would boost the learner's competence in expressive and comprehension skills. The well researched language exercises in the form of usage, vocabulary and grammar is the other area that should attract the teacher and learner to work out for giving decent shape to the mastery of English language.

UNIT 1 : Short story

- (i) Jim Corbett - The Fight between Leopards
- (ii) Dash Benhur - The Bicycle
- (iii) Dinanath Pathy - George V High School
- (iv) Alexander Baron - The Man who knew too much
- (v) Will f Jenkins - Uneasy Homecoming

UNIT 2 : Prose

- (i) Mahatma Gandhi - The way to Equal Distribution
- (ii) S Radhakrishnan - A call to Youth
- (iii) CV Raman - Water - The Elixir of Life
- (iv) Harold Nicolson - An Educated Person
- (v) Claire Needell Hollander - No Learning without FeelingS

UNIT 3 :

Comprehension of a passage and answering the questions

UNIT 4 :

Language exercises, test of vocabulary, usage and grammar

Text Books :

All stories and prose pieces

Reference Books :

- The Widening Arc: A Selection of prose and stories, Ed. AR Parhi, S Deepika, P Jani, Kitab Bhavan, Bhubaneswar.
 - A Communicative Grammar of English, Geoffrey Leech.
 - A University Grammar of English, Randolph quirk and Sidney Greenbaum
 - Developing Reading Skills. F. Grellet. Combridge: Combridge University Press, 1981.
-

+ 3 FIRST YEAR THIRD SEMESTER

SEC - 1

(COMMUNICATIVE ENGLISH)

Time: **3 Hours**

Credits: **4**

End Semester: **50 Marks**

Mid Semester: **20 Marks**

This special course of Communicative English aims to engage the students more creatively to improve their English language and communication skills. This paper will be taught under Skill Enhancement compulsory course - 1 (SECC -1). The main intent of this paper is to strengthen the language competency of graduate students, majority of who are set to enter the job market with high hopes. Needless to say, a good command over English language is one skill which various companies expect from the prospective employees.

UNIT - I : CONTEXTS OF COMMUNICATION AND PHONETIC FEATURES

1. Why English Communication is essential and how to improve the skill ?
2. Introduction to voice and Accent
 - a. Why do we have such different accents ?
 - b. Accent Training - Consequences
 - c. Voice and accent in the Enterprise Industry
 - d. Globally Comprehensible Accent
 - e. Introduction to Phonetics
 - f. International Phonetic Alphabet.
3. Consonant Sounds
4. Vowels
5. Diphthongs
6. A Few Phonic Rules
7. Word Stress: Syllables
8. Intonation and Stress
9. Pacing and Chunking
 - a. Common Patterns of Pacing
 - b. Importance of Chunking
10. Fluency
11. Indianisms - Errors in pronunciation

UNIT II : GRAMMAR

1. English: Spoken Versus Written Communication
 2. Nouns
 - a. Kinds of Nouns
 - b. Nouns Number
 - c. Noun Gender
 - d. Countable and Uncountable Nouns
-

3. Pronouns
4. Adjectives
 - a. Positioning of adjectives
 - b. Comparative Degrees of Adjectives
 - c. Order of Adjectives
5. Adverbs
 - a. Kinds of Adverb
 - b. Degree of Comparison
 - c. Word Order with Adverbs
6. Prepositions
Prepositions with Adjectives, Nouns and Verbs
7. Conjunctions
 - a. Coordinating Conjunctions
 - b. Subordinating Conjunctions
 - c. Correlative Conjunctions
 - d. Conneting Adverbs
8. Verbs
 - a. Verb Classification
 - b. List of irregular verbs
9. subject and verb agreement
10. Determiners and Modifiers
11. Proof Reading and Punctuation
12. Tenses
13. Common errors in grammar and vocabulary

UNIT II : READING COMPREHENSION

Reading A-7 Step Process, Techniques to enhance students reading skills, types of reading skills (Skimming, Scanning, Extensive reading, Intensive reading). Three levels of Reading, improving your reading speed. Reading comprehension practice exercises.

ENVIRONMENTAL STUDIES & DISASTER MANAGEMENT

(AECC - 1)/ SEMESTER-1 (From 2021 Admission Batch)

Time : **3 Hours**

End Semester : **80 Marks**

Credit : **4**

Mid Semester : **20 Marks**

Course Objectives:

- To gain knowledge on Environment, its structure, climate change, sustainable development, disaster management, different type of diseases and public health management.
- To develop understanding on the Environment, ecosystem, biogeochemical cycle, environmental pollution, and capability to identify relevant environmental issues.
- To analyses the various underlying causes, evaluate the practices and policies, and develop framework to make informed decisions.

Unit 1 (Environment)

The Environment : The Atmosphere, Lithosphere. Hydrosphere, Biosphere (01 period)

Ecosystem : Energy flow in the ecosystem (01 period)

Biogeochemical cycle : Water Cycle, Carbon Cycle, Nitrogen Cycle (02 periods)

Pollution : Water Pollution, Air Pollution, Soil Pollution, Radiation Pollution, Industrial Pollution, Light Pollution, Sound Pollution (05 periods)

Environmental Laws (Water Act 1974, Air Act 1981, The Wildlife Protection Act 1972, The Environment Protection Act 1986), The Forest Conservation Act 1980 (04 periods)

Unit 2 : (Climate Change & Sustainable Development)

Population Ecology : Individuals, Species. Population, Community (01 period)

Human Population Growth, Population Control Methods (01 period)

Urbanization and its effect on society (01 period)

Climate Change : Causes, effect, Global Warming, Corbon Footprint and environmental protection (05 periods)

Steps taken towards Sustainable Development : Ban of single use plastics, Automobile Scrapping policy, Promotion of Electrical Vehicles (03 periods)

Brief idea on Sustainable Development : Goals (SDGs), Agenda 21 of Rio Earth Summit (02 periods)

UNIT III (DISASTER MANAGEMENT)

Disaster Management : Types of disasters (Natural and Man- made) and their causes and effect. (02 periods)

Vulnerability Assessment and Risk Analysis : Vulnerability to various disasters (Flood, Cyclone, Earthquake, Heat waves and Lightning) (02 periods)

Institutional Framework : Institutional arrangements for disaster management (National Disaster Management Authority (NDMA), state Disaster Management Authority (SDMA), District Disaster Management Authority (DDMA), National Disaster Response Force (NDRF) and Odisha Disaster Rapid Action Force (ODRAF) (02 periods)

Preparedness Measures : Disaster Management Cycle, Early Warning System Pre-Disaster and Post-Disaster Preparedness, Strengthening of SDMA and DDMA, Community Preparedness, Stakeholder participation, Corporate Social Responsibility (CSR) (05 periods)

Survival Skills : Survival skills adopted during an after disaster (Flood, Cyclone, Earthquake, Heat waves and Lightning) (02 periods)

UNIT IV (Public Health Management)

Brief idea on epidemics and Pandemics (01 period)

Non - communicable diseases with special reference to cardiovascular diseases, Cancer, Diabetes, Hypertension and Obesity and their prevention (02 period)

Communicable disease with special reference to Covid-19, Flu, Hepatitis, AIDS and Tuberculosis and their transmission (02 periods)

Dynamics of Disease Transmission : Mode of transmission (Direct/Indirect), Events after infection: immunity (Active vrs Passive, Innate vrs Acquired, Herd Immunity), Incubation Period (02 periods)

Prevention of Epidemics/Pandemics Diseases : Preventing Measure (Quarantine, Sanitization, Personal Protective measures such as Hand washing and use of protective devices, Vaccination); Control Measures (Surveillance, Isolation, Contact Tracing) (03 periods)

Life Style Management : (Diet, Physical Exercise, Yoga and Sleeping habit) (02 periods)

Role of Different sectors in Managing Health Disaster : Role of Government (Centre and State), Community, Civil Society student mass, NGOs (01 periods)

Course Outcome

On successful completion of the course the learners will be able to:

- Recognize the connections between the earth and human activity.
- Analyze and describe the effects of humans on the environment.
- Apply knowledge, ideas, and techniques from several disciplines to environmental issues.

Books Recommended :

1. Asthana DK and Asthana M: A Text Book of Environmental Studies, S. Chand, New Delhi
 2. Bharucha E: A Text Book of Environmental Studies, New Delhi : UGC
 3. Dash MC and Mishra PC: Man and Environmental, McMillan, London
 4. Disaster Management and Mitigation Plan, 2013 of Dept. of Health & Family Welfare, Govt. of Odisha
-

5. Mishra DD: Fundamental Concepts in Environmental Studies, S. Chand, New Delhi
6. National Policy on Disaster Management, 2009
7. National Disaster Management Plan, 2019*
8. Odum EP: Fundamentals of Ecology, Natraj Publications
9. State Disaster Management Plan, 2019 of Government of Odisha*
10. Standard Operating Procedure (SOP) issued by Govt. of India and Govt. of Odisha on Public Health Managements in the websites: www.mohfw.gov.in and health.odisha.gov.in*
11. The Disaster Management Act, 2005 of Government of India*

[Note: star(*) marked References, published by the state as well as Central Government are available in the open sources]

AECC EV - I (Ethics & Values) From 2021 Admission Batch

SEMESTER - I/ Unit - 1

Title : ISSUES RELATING TO WOMEN

Total No. of periods: 15

Full Mark- 25 Credit Point - 1 in each semester

1.0 Aims of the Unit:

- The module aims to generate a sensitivity among the students towards women
- Enable them to value the contributions of women, from family to the larger society
- To generate among them a distinct urge to respect women.
- To appreciate that women should have equal status and equal entitlements as member of the society.

Learning Objectives:

After going through the contents of the module and the classroom transactions on the contents, the students are expected to

Have changes in their perceptions and practices towards women

Develop proper attitude towards women and value their work and contribution

Come forward to challenge unethical treatments against women

End gender based hierarchy and hegemony, remove the feeling that women are counter to men and bring about a complementarity among the hitherto existing gender binary.

Allow women to realize their self worth and contribute their best for betterment of the society

Pioneer in creating a gender equal society where the well being happiness and security of the women will be well protected; contributing towards a better and happier society.

1.1 Introduction:

General introduction on Ethics and Values, Gender equality as an essential precursor to social progress, the present scenario, Desirable gender related values.

(Taught by Sociology Deptt. -3classes per month)

1.2 Women and Family

Pre-natal sex selection, Gendered practices in the family, Gender based division of labour in the family, Marriage and women, Marriage and women's consent, Child marriage Practice of dowry, Women and family violence.

(Taught by Social Deptt. -3classes per month)

1.3 Women and Work

Women's work : The invisible hands, Exploitation of Women at work, Gender Stereotyping at work, Glass ceiling, Women and pay gap, Sexual Harassment of women at work, Working women and role conflict.

(Taught by Psychology Deptt. -4 classes per month)

1.4 Women, Community and Society

Violence against women in public spaces, Gender Sensitive language and communication, Gendered language, Sexist Language, Gender neutral language, Women and property Rights, Women's property Rights in Indian Laws, the Functionality of Women's Property Rights

(Taught by social work Deptt. - 4 Classes Per Month)

EV -II SEMESTER - IV/ UNIT -2

TITLE: VALUES AND GOOD CITIZENSHIP

2.0 Aim of the Unit :

- * Introducing the Salient features of Indian Constitution to students and to inculcate the sense of patriotism in them
- * Encouraging them to Volunteer for social work
- * Instilling appropriate work ethics in them

Learning Objectives:

- * Understanding Basic Values of Indian Constitution
- * Inculcating Volunteerism for Social change
- * Helping students to become good human being and citizen.

2.1 Indian Constitution

Salient Values of Preamble : Sovereign, Socialist, Secular, Democratic, Republic, Justice, liberty, Equality and Fraternity.

(Taught by Political Science Deptt. - 3 Classes per Month)

2.2 Patriotism

Patriotic Value and ingredients of nation building, Concept of Good Citizenship, Emotional Connection with the country, Duties of Citizens and Qualities of Good Citizens.

(Taught by History Deptt. - 4 Classes Per Month)

2.3 Volunteerism

Concept and facets of Volunteerism and Leadership, Building a better society through Volunteerism, Blood Donation, Social Work, Helping the Aged, Environmental Protection.

(Taught by Social Work Deptt. - 4 Classes Per Month)

2.4 Work Ethics

Punctuality, Cleanliness, Law abidingness, Rational Thinking and Scientific Temper.

(Taught by E.V.S. Deptt. - 4 Classes Per Month)

EV -III SEMESTER - III / UNIT -3

TITLE: ISSUES OF DRUG, TOBACCO AND ALCOHOL ADDICTION

(All the Papers taught by Social Work Deptt.)

3.0 Aims of the Unit:

- * Creating awareness about health and Societal hazards of drugs, tobacco and alcohol addiction
- * Sensitizing students about professional support system for treatment and rehabilitation.

Learning Objectives:

- * The students become aware of the grave danger of consuming alcohol, tobacco and drugs
- * Students would encourage their friends to remain away from tobacco, alcohol, drugs and seek professional help when needed.

3.1 Extent of the Problem

Extent of Drug and Tobacco addiction and alcoholism in India, Myths associated with them, Health, Hazards associated with them and how they have become silent killers.

3.2 Socio-Economic Impact

Socio-economic impact of Drug and Tobacco addiction and alcoholism:

Loss of physical and mental strength, Loss of character, Loss of family ties and relationship, Loss of earning and livelihood potentials, Loss of social respect and dignity etc.

3.3 Laws to Address this Problem

Salient features of social legislation such as NDPS Act, 1985 and COTPA Act, 2003, Mechanism and Government Schemes for prevention of addiction and rehabilitation.

3.4 Role of Stake - holders

Provision of Tobacco free campus and role of students, Role of students in their family and immediate surroundings, Role of NGO's and other agencies.

EV -IV SEMESTER - IV/ UNIT -4

TITLE: ETHICAL VALUES FOR STUDENT LIFE

4.0 Aims of the Unit:

- * To familiarize the students with core values of Academics and Goals of Education
- * To create an awareness about Unethical practices in the academics.

Learning Objectives :

- * The students will learn to behave ethically in the campus
- * Exhibit respectful treatment to others in an organizational context
- * Contribute to develop a positive social environment through active participation and co-operation with others.

4.1 Meaning and Objective of Education

Knowledge is power and quest for knowledge is the real meaning of education, not quest for Degree and qualifications; Real education builds character : Difference between Academic Qualification and Ability. Academic failure could be failure within the classroom, but not outside (i.e. Failed in Exam, passed in life!) (Taught by Edn/B.Ed. Deptt.- 3 Classes Per Month)

4.2 Challenges for Ethical Practices in Institution of Higher Education :

Ragging, Suicide and Need for Educational Counseling, Violence vs. Peaceful protest, conflict resolution, Plagiarism and violation of intellectual property Rights, Cheating in Examination and other Fraudulent Practices. (Taught by E.V.S. Deptt. - 4 Classes Per Month)

4.3 Inter personal Relation and Community Life in HEI :

Green precher and conservation of Energy, Community Life in Campus including Hostels, Local common area, Inter personal relations (Students - Teacher, Students - student and Man-Woman, Positive Friendship). (Taught by Geography Deptt. - 4 Classes Per Month)

4.4 Ethical Leadership in Academic Institution :

Concept and Traits of Leadership to provide solution, everyone has Leadership Role (not limited to position), concept of Ethical leadership, Scope of Leadership in College and Universities for students, Teachers and Administrators, Importance of Co-curricular and extra-curricular activities. (Taught by psychology Deptt. - Classes Per Month)

EV - V SEMESTER - V/ UNIT - 5

TITLE: VULNERABLE SECTIONS OF SOCIETY : UNDERSTANDING THEIR ISSUES

5.0 Aims of the Unit:

To create an awareness amongst students about the need for ensuring dignity and equality for the vulnerable sections of the society.

Learning Objectives:

- * Students would be able to appreciate values and ethics relating to vulnerable sections of the society.
- * Students would learn to practice equality, diversity and social justice.
- * Students would become more empathetic and compassionate towards vulnerable sections of the society.

5.1 Issues Relating to Children :

Nutrition and health, Child Exploitation : Child labour, Trafficking, Sexual Exploitation

5.2 Issues Relating to Elderly Persons :

Abuse of elders, Financial Insecurity, Loneliness and social Insecurity, Health Care Issues, Needs for a Happy and Dignified Ageing

5.3 Issues Relating to Persons with Disability :

Rights of PWD, affirmative action, Prevention of discrimination, providing equal opportunity, various scheme for empowering PWD and social justice for PWD

5.4 Issues Relating to Third Gender :

Understanding the Third Gender, Social justice for them, Removal of discrimination, Affirmative action and Acceptance of diversity of gender.

EV - VI SEMESTER - V/ UNIT - 6

TITLE: ENVIRONMENTAL & TECHNO ETHICS

6.0 Aims of the Unit:

- * To develop awareness and sensitize students about the importance of environment for a sustainable earth and to bring Green Technology into action.
 - * To focus their attention towards cleanliness, preservation of biodiversity and practice of conservation of natural resources.
 - * To make them understand the judicious use of modern technology strictly on need basis
-

- * To use science and technology for preservation of environment and its sustainable development but not for destruction.

Learning Objectives:

- * Develop an understanding of environmental ethics and work towards sustainable development
- * To use science and technology for preservation of environment and its sustainable development but not for destruction.

6.1 Environmental Ethics :

Types of Ecological Values, Environmental Values & Valuing, Nature, Equitable use of resources, Role of Individual in the conservation of resources for future generation, Bio Ethics-Genetic manipulation in plants and animals for benefit of society and cruelty and cruelty against animal.

6.2 Promotion of Green Technology :

Goal of Green Technology : Reduce recycling, **Renew** (removal of chemicals) **Refuse** and **Responsibility**

Green Technology in relation to : Energy and Construction.

6.3 Ethics and Technology :

Ethics and Technology with reference to Science, gadget, machine etc. and interaction with each other.

Agricultural, Industrial, Digital, Globalized, Age etc.

6.4 Judicious Use of Technology :

Judicious Use of Mobile Phones, Electrical machines, Plastics, Television, Computers and their harmful effects.

Ethics and Use of Digital Technology : Cyber ethic - Crimes and Ethical hacking.

Ethics and Social Media : WhatsApp, Facebook, Twitter and others.

+ 3 FIRST YEAR FOURTH SEMESTER

SEC - 2

QUANTITATIVE AND LOGICAL THINKING

Time: 3 Hours
Credits: 06

End Semester: 80 Marks
Mid Semester: 20 Marks

Unit - 1 : QUANTITATIVE APTITUDE & DATA INTERPRETATION

1. Whole numbers, Integers, Rational and irrational numbers, Fractions, Square roots and cube roots, Surds and indices, Problems on Numbers, Divisibility. Steps of Long Division Method for Finding Square Roots.
2. Basic concepts, Different formulae of Percentage, Profit and Loss, Discount, Simple Interest, Ratio and Proportion, Mixture.
3. Time and Work, Pipes and Cisterns, Basic concepts of Time, Distance and Speed; relationship among them
4. Concept of Angles, Different Polygons like triangles, rectangle, square, right angled triangle, Pythagorean Theorem, Perimeter and Area of Triangles, Rectangles, Circles.
5. Raw and Grouped Data, Bar graphs, Pie charts, Mean, Mode, Events and sample space, Probability.

Unit - II : LOGICAL REASONING

1. Analogy based on Kinds of relationships, Simple Analogy; Pattern and Series of Numbers, Letters, Figures. Coding-Decoding of Numbers, Letters, Symbols (Figures), Blood relations.
2. Logical Statements-Two premise argument, More than two premise argument using connective

Unit - III :

Venn Diagrams, Mirror Images, Problems on Cubes and Dices

+3 FIRST YEAR SECOND SEMESTER

GENERIC ELECTIVE - 2

NCC (Arts/Science/Commerce)

Time : 3 Hours
Credit : 6

End Semester : 60 Marks,
Mid-Semester : 20 Marks

Unit-1

- a) Freedom struggle and Nationalist Movement in India, Nationalist Interest, objectives threats and opportunities,
- b) Self defence

Unit-2

- a) Scout and Patrol
 - b) Judging Distance
-

Unit-3

- a) Dressing of Wounds
- b) Yoga : Introduction and Exercises, Physical and Mental Health
- c) Fractures : types and treatment, evacuation of Casualties

Unit-4

- a) Cardinal points & types of north
- b) Types of bearing & use of Service Protractor
- c) Prismatic compass & its use

PRACTICAL-2Full Mark - **25** Marks

- | | | | |
|----|------------------|---|----|
| 1. | Map Reading | - | 15 |
| 2. | Judging Distance | - | 10 |

ANTHROPOLOGY

PROGRAM SPECIFIC OUTCOMES:

- * The students of Anthropology will learn the history, branches, scope and relevance of anthropology.
- * They will comprehensively understand the concepts and theories of major branches of anthropology i.e. Biological, Social, Archaeological anthropology and linguistic anthropology.
- * Students will be familiar with approaches, techniques, methodologies and study designs commonly used in anthropological research.
- * They will understand the distinction of conducting population-based fieldwork independently and collecting useful qualitative and quantitative data pertaining to their research work.
- * A student of anthropology will be able to relate all the core papers and DSE papers with social, archaeological, biological and cultural environment of communities.
- * Students would finally understand the importance of anthropological research aspect in policy making and improving human life by application of anthropological knowledge as acquired from the programme.

+3 FIRST YEAR FIRST SEMESTER

Core Paper - 1

INTRODUCTION TO BIOLOGICAL ANTHROPOLOGY

Time : 3 Hrs.

Credit : 04

End Semester Theory : 60 Marks

Mid Semester Theory : 15 Marks

THEORY

Unit I :

History of Physical Anthropology and development of Modern Biological anthropology, aim, scope and its relationship with allied disciplines; Difference in the approaches of modern and traditional Biological Anthropology.

Unit II :

History and development of understanding human evolution (pre-19th and post-19th Century); Theories of evolution: Lamarckism, Darwinism, Synthetic theory, and Mutation theory.

Unit III:

Primates: General Characteristics, Distribution and Classification of Non-human living primates. Comparative anatomy and behaviour of human and non-human primates.

Unit IV:

Structure and function of an animal cell; cell theory and cell division (Mitosis and Meiosis), Mendel's Laws of inheritance and its application to man.

PRACTICALCredit : **02****25** Marks

Introduction to Anthropology Laboratory: Dry Lab and Wet Lab, Calibration and Standardization of Instruments, Demonstration of Instruments: Anthropometry, Spreading Calliper, Sliding Calliper, Weighing Machine and Steel tape.

Somatometry

- | | |
|-------------------------|--------------------------------|
| 1. Stature | 6. Maximum bizygomatic breadth |
| 2. Sitting height | 7. Bigonial breadth |
| 3. Body weight | 8. Morphological facial height |
| 4. Maximum head length | 9. Head circumference |
| 5. Maximum head breadth | 10. Minimum frontal breadth |

Course Outcome:

- * Understand about the subject matter and scope of biological anthropology.
- * Find out the relationship of biological anthropology with other disciplines.
- * Make an understanding of biology, genetics, and fossil evidences to examine the process of human biological and cultural evolution over time.
- * Describe the basic differences between human and other primates and also to justify the position of man in animal kingdom and Human Cell in detail.

Text book recommended:

1. Shukla B.R.K. & Rastogi, S. 1990. *Physical Anthropology & Human Genetics: An Introduction*. PlakaPrakashan. Delhi.
2. Das B.M. 2008. *Outlines of Physical Anthropology*. Kitab Mahal, New Delhi.
3. Sarkar, R. M. 2004. *Fundamentals of Physical Anthropology* (New Edition). Book World. Kolkata.
4. Mukherji, D., D. Mukherjee and P. Bharti and A. Mukhopadhyaya. 2018. *Laboratory Manual for Biological Anthropology: Revised and Enlarged 2nd Edition*. SCHOLAR Booksellers & Publishers, Kolkata.

Suggested Readings

1. Jurmain R., Kilgore L., Trevathan W., Ciochon R.L. (2012). *Introduction to Physical Anthropology* Wadsworth Publ., USA.
 2. Stanford C., Allen J.S. and Anton S.C. (2010). *Exploring Biological Anthropology. The Essentials*. Prentice Hall Publ, USA.
-

+3 FIRST YEAR FIRST SEMESTER

Core Paper - 2

Introduction to Socio-cultural Anthropology

Time : 3 Hrs.

Credit : 4

End Semester Theory : 60 Marks

Mid Semester Theory : 15 Marks

THEORY

Unit I:

Anthropological perspective and orientation; Scope and relevance of Social Anthropology; Relationship of Social Anthropology with other disciplines (Sociology, Psychology, Political Science, Economics, History)

Unit II:

Concepts of Society and Culture, Status and Role; Groups and Institution, Social Stratification (Caste and Class, Characteristics and Differences).

Unit III:

Social Organization, Social Institution: Family, Marriage, Kinship, Descent Groups- Lineage, clan and function.

Unit IV:

Social Control- Primitive Law, Difference between Modern and Primitive Law. Tribal Youth Dormitory and function.

PRACTICAL

Credit : 02

25 Marks

Methods and Techniques of Social Anthropology: The practical will include the following techniques and methods in collection of data in Social Anthropology.

1. Observation
2. Interview
3. Questionnaire and Schedule
4. Case study
5. Life history

Course outcome

- * The course will boost the basic knowledge of the students on social-cultural anthropology.
- * Students will gain more about the basic concepts of the society and culture.
- * This will help students understand the fundamental knowledge on the functioning and the importance of various social institutions.
- * The students will have knowledge about the various control mechanism in the society including tribal dormitories and their function.

Text book recommended:

1. Ember C. R. et al. (2011). *Anthropology*. New Delhi: Dorling Kindersley.
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2. Haviland, Prins, Walrath, McBride (2008). *Cultural Anthropology*. Cengage Learning India Pvt. Ltd., New Delhi.
3. Kapadia, K.M,1966, *Marriage and Family in India*, Oxford University Press, London
4. Murdock, G.P. 1949, *Social structure*, Macmillan Co. London
5. Tylor, E. B. 1920 (originally in 1871), *Primitive Culture*, New York: J.

Suggested Readings

1. Beattie J. (1964). *Other Cultures*. London: Cohen & West Limited.
2. Bernard H.R. (1940). *Research Methods in Cultural Anthropology*. Newbury Park: Sage Publications.
3. Davis K. (1981). *Human Society*. New Delhi: Surjeet Publications.
4. Delaney C. (2004). '*Orientation and disorientation*' In *Investigating Culture: An Experiential Introduction to Anthropology*. Wiley-Blackwell.
5. Ferraro G. and Andreatta S. (2008). In *Cultural Anthropology: An Applied Perspective*. Belmont: Wadsworth.
6. Karen O'reilly. (2012). '*Practical Issues in Interviewing*' *Ethnographic Methods*. Abingdon: Routledge
8. Lang G. (1956). 'Concept of Status and Role in Anthropology: Their Definitions and Use. *The American Catholic Sociological Review*, 17(3): 206-218
8. O'reilly K. (2012). *Ethnographic Methods*. Abingdon: Routledge.
9. Parsons T. (1968). *The Structure of Social Action*. New York: Free Press
10. Rapport N. and Overing J. (2004). *Key Concepts in Social and Cultural Anthropology*. London: Routledge.
11. Royal Anthropological Institute of Great Britain and Ireland (1971). '*Methods*' In *Notes and Queries on Anthropology*. London: Routledge & Kegan Paul Ltd.

+3 FIRST YEAR FIRST SEMESTER

GENERIC ELECTIVE-1

INTRODUCTION TO BIOLOGICAL ANTHROPOLOGY

Time : 3 Hrs.
Credit : 04

End Semester Theory : 60 Marks
Mid Semester Theory : 15 Marks

THEORY

Unit I:

History of Physical Anthropology and development of Modern Biological anthropology, aim, scope and its relationship with allied disciplines; Difference in the approaches of modern and traditional Biological Anthropology.

Unit II:

History and development of understanding human evolution (pre-19th and post-19th Century); Theories of evolution: Lamarckism, Darwinism, Synthetic theory, and Mutation theory.

Unit III:

Primates: General Characteristics, Distribution and Classification of Non-human living primates. Comparative anatomy and behaviour of human and non-human primates.

Unit IV:

Structure and function of an animal cell; cell theory and cell division (Mitosis and Meiosis), Mendel's Laws of inheritance and its application to man.

PRACTICALCredit : **02****25** Marks

Introduction to Anthropology Laboratory: Dry Lab and Wet Lab, Calibration and Standardization of Instruments, Demonstration of Instruments: Anthropometry, Spreading Calliper, Sliding Calliper, Weighing Machine and Steel tape.

Somatometry

- | | |
|-------------------------|--------------------------------|
| 1. Stature | 6. Maximum bizygomatic breadth |
| 2. Sitting height | 7. Bigonial breadth |
| 3. Body weight | 8. Morphological facial height |
| 4. Maximum head length | 9. Head circumference |
| 5. Maximum head breadth | 10. Minimum frontal breadth |

Course Outcome:

- * Understand about the subject matter and scope of biological anthropology.
- * Find out the relationship of biological anthropology with other disciplines.
- * Make an understanding of biology, genetics, and fossil evidences to examine the process of human biological and cultural evolution over time.
- * Describe the basic differences between human and other primates and also to justify the position of man in animal kingdom and Human cell in detail.

Text book recommended:

1. Shukla B.R.K. & Rastogi, S. 1990. *Physical Anthropology & Human Genetics: An Introduction*. PlakaPrakashan. Delhi.
2. Das B.M. 2008. *Outlines of Physical Anthropology*. Kitab Mahal, New Delhi.
3. Sarkar, R. M. 2004. *Fundamentals of Physical Anthropology* (New Edition).Book World. Kolkata.
4. Mukherji, D., D. Mukherjee and P. Bharti and A .Mukhopadhyya. 2018. *Laboratory Manual for Biological Anthropology: Revised and Enlarged 2nd Edition*. SCHOLAR Booksellers & Publishers, Kolkata.

Suggested Readings

1. Jurmain R., Kilgore L., Trevathan W., Ciochon R.L. (2012). Introduction to Physical Anthropology Wadsworth Publ., USA.
 2. Stanford C., Allen J.S. and Anton S.C. (2010). Exploring Biological Anthropology. The Essentials. Prentice Hall Publ, USA.
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+3 FIRST YEAR SECOND SEMESTER

Core Paper - 3

ARCHAEOLOGICAL ANTHROPOLOGY

Time : 3 Hrs.

Credit : 04

End Semester Theory : 60 Marks

Mid Semester Theory : 15 Marks

THEORY

Unit I:

Introduction, Definition and scope of archaeological anthropology; Relation with other disciplines; Methods of studying archaeological anthropology.

Unit II:

Methods of Estimation of Time and Reconstruction of the Past; Absolute dating methods: Radiocarbon 14 dating (C14), Potassium-Argon, Dendrochronology, Fission Track Dating; Relative dating methods: Stratigraphy, Paleontology, Palynology.

Unit III:

Geochronology of Pleistocene Epoch; Glacial and Interglacial; Pluviation and Inter Pluviation; Different types of geoclimatic events.

Unit IV:

Understanding Culture; Technique of tool manufacture and estimation of their relative efficiency; Classification of tools: primary and combination of fabrication techniques; Earliest evidence of culture in the World: Konso, Olorgesaille, Olduvai Gorge, Pirro Nord, Dmanisi, Attirampakkam, Isampur, Kuliana.

PRACTICAL

Credit : 02

25 Marks

Typo-technological Analysis of Prehistoric Tools: Identification, Interpretation and Drawings of the tool Types

1. Core Tool Types
2. Flake Tool Types
3. Blade Tool Types
4. Microlithic Tool Type
5. Neolithic Tool Type

Course outcome

- * The students will be stimulated with the basic understanding of archaeological anthropology.
 - * The students will boost their knowledge of the present and past culture of human civilization.
 - * The students will be equipped with knowledge on tool typology, geological time scale of evolution.
 - * They will have clear understanding of various tools and techniques of tool manufacturing.
-

Text book recommended:

1. Bhattacharya D.K. (1990). *An introduction to Prehistoric Archaeology, Delhi*, Hindustan Publishing Corporation.
2. Rammi Reddy, V. 1987. Elements of Prehistory, New Delhi: Mittal Publications
3. Sankalia H.D. (1964). *Stone Age Tools*. Poona Deccan College

Suggested Readings

1. Allchin and Allchin (1993). *The Rise of Civilization of India and Pakistan*. Cambridge University Press
2. Bhattacharya D.K. (1978). *Emergence of Culture in Europe*, Delhi, B.R. Publication.
3. Bhattacharya D.K. (1979). *Old Stone Age Tools and Techniques*. Calcutta, K.P. Bagchi Company
4. Bhattacharya D.K. (1996). *Palaeolithic Europe*. Netherlands, Humanities Press.
5. Champion et al. (1984). *Prehistoric Europe*. New York, Academic Press.
6. Fagan B.M. (1983). *People of Earth: An Introduction*. Boston, Little, Brown & Company.
7. Phillipson D. W. (2005). *African Archaeology*. Cambridge, Cambridge University Press.
8. Renfrew, C. and Paul Bahn 1996, *Archaeology: Theory, Method and Practice*: Thames & Hudson ... London

+3 FIRST YEAR SECOND SEMESTER

Core Paper - 4

FUNDAMENTALS OF HUMAN ORIGIN & EVOLUTION

Time : 3 Hrs.

Credit : 04

End Semester Theory : 60 Marks

Mid Semester Theory : 15 Marks

THEORY

Unit-I:

Primate origin, evolution and radiation: Ramapithecus, Dryopithecus, distribution, features and their phylogenetic relationships.

Unit-II:

Australopithecines: distribution, features and their phylogenetic relationships. Appearance of genus Homo (*Homo habilis*) and related finds. *Homo erectus* from Asia, Europe and Africa: Distribution, features and their phylogenetic status.

Unit-III:

The origin of *Homo sapiens*: Fossil evidences of Neanderthals and Archaic *Homo sapiens sapiens*, Origin of modern humans (*Homo sapiens sapiens*): Distribution and features

Unit-IV:

Theories of human evolution: Multiregional and Out of Africa theory; Hominization process.

PRACTICAL

Credit : **02**

25 Marks

- | | |
|---|--|
| 1. Craniometry : Maximum cranial length
Maximum bizygomatic breadth
Minimum frontal breadth
Nasal breadth
Greatest occipital breadth
Cranial index | Maximum cranial breadth
Maximum frontal breadth
Nasal height
Bi-mastoid breadth
Upper facial height
Nasal index |
| 2.. Osteometry: Measurements of long bones: lengths, minimum/least circumference and caliber index. | |
| 3. Identification of casts of fossils of family Hominidae: Drawing and comparison of characteristics. | |

Course Outcomes

- * The students will have a comprehensive understanding of primate evolution, eir distribution pattern, characteristic features and phylogenetic relationships.
- * Basic understanding about the origin of genus Homo, Origin of Homo sapiens, Neanderthals & Archaic Homo sapiens.
- * Understanding on the origin of anatomically modern humans, distribution, their characteristic features & hominization process.
- * To teach students on different sizes and shapes of human skulls.

Text book recommended:

1. Shukla B.R.K. & Rastogi, S. 1990. *Physical Anthropology & Human Genetics: An Introduction*. Palka Prakashan. Delhi.
2. Das B.M. 2008. *Outlines of Physical Anthropology*. Kitab Mahal, New Delhi.
3. Sarkar, R. M. 2004. *Fundamentals of Physical Anthropology* (New Edition).Book World. Kolkata.
4. Singh I.P. and M.K. Bhasin. 1989. *A Laboratory Manual on Biological Anthropology: Anthropometry*. Kamal-Raj Enterprises, Delhi.

Suggested Readings

1. Buettner-Janusch, J. (1966). *Origins of Man: Physical Anthropology*. John Wiley & Sons, Inc., New York, London, Sydney.
2. Conroy, G.C. (1997). *Reconstructing Human Origins: A Modern Synthesis*. W. W. Norton & Company, New York, London.
3. Howell F.C. (1977). *Horizons of Anthropology*. Eds. S. Tax and L.G. Freeman, Aldine Publishing House, Chicago.
4. Nystrom P. and Ashmore P. (2011). *The Life of Primates*. PHI Learning Private Limited, New Delhi.
5. Seth P. K. and Seth S. (1986). *The Primates*. Northern Book Centre, New Delhi, Allahabad.
6. Singh I. P. and Bhasin M.K. (1989). *Anthropometry: A Laboratory Manual on Biological Anthropology*. Kamla-Raj Enterprises, Chawri Bazar, Delhi.
7. Standford C.; Allen J.S. and Anton S.C. (2012). *Biological Anthropology: The Natural History of Mankind*. PHI Learning Private Limited, New Delhi.
8. Swindler D. R. (2009). *Introduction to the Primates*. Overseas Press India Pvt. Ltd., New Delhi.

+3 FIRST YEAR FIRST SEMESTER

GENERIC ELECTIVE-2

INTRODUCTION TO SOCIO-CULTURAL ANTHROPOLOGY

Time : **3 Hrs.**
Credit : **04**

End Semester Theory : **60 Marks**
Mid Semester Theory : **15 Marks**

THEORY

Unit I:

Anthropological perspective and orientation; Branches of Anthropology; Scope and relevance of Social Anthropology; Relationship of Social Anthropology with other disciplines (Sociology, Psychology, Political Science, Economics, History)

Unit II:

Concepts of Society and Culture, Status and Role; Groups and Institution, Social Stratification (caste and class, characteristics and differences)

Unit III:

Social Organization and Social Institution: Family, Marriage, Kinship, Descent Group-Lineage, Clan and Function.

Unit IV:

Theory and Practice of Ethnographic Fieldwork; Survey Method; Tools of data collection: Observation, Interview, Questionnaire, Case Study.

PRACTICAL

Credit : **02**

25 Marks

Methods and Techniques of Social Anthropology: The practical will include the following techniques and methods in collection of data in Social Anthropology.

1. Observation
2. Interview
3. Questionnaire and Schedule
4. Case study
5. Life history

Course Outcome

- * The course will boost the basic knowledge of the students on social-cultural anthropology.
- * Students will gain more about the basic concepts of the society and culture.
- * This will help students understand the fundamental knowledge on the functioning and the importance of various social institutions.
- * The students will have knowledge about the various methods of research and tools and techniques used in fieldwork.

Text book recommended:

1. Ember C. R. et al. (2011). *Anthropology*. New Delhi: Dorling Kindersley.
 2. Haviland, Prins, Walrath, McBride (2007). *Introduction to Anthropology*. Cengage Learning India Pvt. Ltd., New Delhi
 3. Haviland, Prins, Walrath, McBride (2008). *Cultural Anthropology*. Cengage Learning India Pvt. Ltd., New Delhi
-

Suggested Readings

1. Beattie J. (1964). *Other Cultures*. London: Cohen & West Limited.
2. Bernard H.R. (1940). *Research Methods in Cultural Anthropology*. Newbury Park: Sage Publications.
3. Davis K. (1981). *Human Society*. New Delhi: Surjeet Publications.
4. Delaney C. (2004). 'Orientation and disorientation' In *Investigating Culture: An Experiential Introduction to Anthropology*. Wiley-Blackwell.
6. Ferraro G. and Andreatta S. (2008). In *Cultural Anthropology: An Applied Perspective*. Belmont: Wadsworth.
7. Karen O'reilly. (2012). 'Practical Issues in Interviewing' *Ethnographic Methods*. Abingdon: Routledge
8. Lang G. (1956). 'Concept of Status and Role in Anthropology: Their Definitions and Use. *The American Catholic Sociological Review*, 17(3): 206-218
9. O'reilly K. (2012). *Ethnographic Methods*. Abingdon: Routledge.
10. Parsons T. (1968). *The Structure of Social Action*. New York: Free Press
11. Rapport N. and Overing J. (2004). *Key Concepts in Social and Cultural Anthropology*. London: Routledge.
12. Royal Anthropological Institute of Great Britain and Ireland (1971). 'Methods' In *Notes and Queries on Anthropology*. London: Routledge & Kegan Paul Ltd.

+3 SECOND YEAR THIRD SEMESTER

Core Paper - 5

TRIBES AND PEASANTS IN INDIA

Time : 3 Hrs.
Credit : 04

End Semester Theory : 60 Marks
Mid Semester Theory : 15 Marks

THEORY

Unit I:

Definition and Concept of Tribe; Problems of nomenclature, distribution and classification (Linguistic, Racial, Geographic, Economic); Features of tribes in India.

Unit II:

Tribes in India. The history of tribal administration; Constitutional safeguards; Draft of National Tribal Policy, Issues of acculturation, assimilation and integration; Impact of development schemes and programme on tribal life.

Unit III:

Concept of Indian Village; The concept of peasantry; Approaches to the study of peasants—economic, political and cultural. Characteristics of Indian village: social organization, economy and changes. Caste system and its changes in the Indian society.

Unit IV:

Ethnicity Issues: Tribal and peasant, movements; Identity issues.

PRACTICALCredit : **02****25 Marks**

Reading of Ethnography: Students are required to read and analyze any two of the ethnographies (as listed below) and prepare a report based upon it. The report should clearly link up the study with the concept of tribe and peasantry and delineate clearly the concept used in the text.

1. Research questions/objectives of the study and their relevance.
2. Theoretical scheme.
3. Methods and techniques used in the study.
4. Key findings and their significance in the context of the objectives of the study.
5. Critical analysis of the finding on the basis of contemporary available resources

List of Ethnographies:

1. Walker A. (1986). *The Todas*. Delhi : Hindustan Publishing Corporation
2. Verrier Elwin (1992). *The Muria and their Ghotul*. USA: Oxford University Press.
3. Malinowski M. (1922). *Argonauts of the Western Pacific*. London: Routledge and Kegan Paul Ltd.
4. Furer-Haimendorf C.V. (1939). *The Naked Nagas*. London: Methuen and Co.
5. Evans-Pritchard E.E. (1940). *The Nuer: A Description of the Modes of Livelihood and Political Institutions of a Nilotic People*. Oxford : Clarendon Press.
6. Majumdar D. N. (1950). *Affairs of tribes*. Lucknow: Universal Publishers Ltd.
7. Dube S.C. (1955). *Indian Village*. London: Routledge and Kegan Paul Ltd.
8. Berreman G.D. (1963). *Hindus of the Himalayas*. Berkeley: California University Press.

Course outcome:

- * The students will be equipped with Knowledge about the concept of tribes 'and caste and peasant system of Indian.
- * Clear understanding on the constitutional provisions for the welfare of the tribes.
- * Knowledge on various progressive Acts so far made for the development of the tribes in India.
- * To provide the basic knowledge of ethnography and the importance of ethnography in anthropology.

Suggested Readings

1. Gupta D. (1991). *Social Stratification*. Oxford University Press: Delhi.
 2. Madan V. (2002). *The Village in India*. Oxford University Press: Delhi.
 3. Nathan D. (1998). *Tribe-Caste Question*. Simla: IAS.
 4. National Tribal Policy (draft). (2006). Ministry of Tribal Affairs. Government of India.
 5. Patnaik S.M. (1996). *Displacement, Rehabilitation and Social change*. Inter India Publication, Delhi.
 6. Shah G. (2002). *Social Movement and the State*. Delhi: Sage.
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7. Shanin T. (1987). Peasants and Peasantry. New York, Blackwell.
8. Vidyarthi L.P. and Rai B.K. (1985) Tribal Culture in India, New Delhi, Concept Publishing Company.
9. Wolf E. (1966). Peasants. NJ, Prentice Hall.

+3 SECOND YEAR THIRD SEMESTER

Core Paper - 6 HUMAN ECOLOGY

Time : 3 Hrs.
Credit : 04

End Semester Theory : 60 Marks
Mid Semester Theory : 15 Marks

THEORY

Unit 1:

Concepts in Ecology: Definition, Eco-sensitivity, adaptation, acclimation, acclimatization, Ecosystem: Types and Components (biotic and abiotic).

Unit II:

Methods of studying human ecology. Adaptation to various ecological stresses: heat, cold and high altitude; Ecological rules and their applicability to human populations.

Unit III:

Culture as a tool of adaptation; various modes of human adaptation in pre-state societies; (i) Hunting and food gathering (ii) Pastoralism and (iii) Shifting cultivation and Agriculture and peasantry.

Unit VI:

Ecological themes of state formation: i. Neolithic revolution, ii. Hydraulic Civilization, Impact of urbanization and industrialization on Man.

PRACTICAL

Credit : 02

25 Marks

BIOLOGICAL DIMENSIONS

Size and Shape Measurements

- | | |
|---------------------------------|---------------------------------|
| 1. Stature | 5. Total Lower Extremity Length |
| 2. Sitting Height | 6. Nasal Breadth |
| 3. Body Weight | 7. Nasal Height |
| 4. Total Upper Extremity Length | |

Size and Shape Indices (Any two)

- | | |
|----------------------------|--|
| 1. Body Mass Index | 4. Relative Upper Extremity Length |
| 2. Ponderal Index | 5. Relative Total Lower Extremity Length |
| 3. Relative Sitting Height | 6. Nasal Index |

Cultural Dimensions

1. Make a research design pertaining to any environmental problem and do a project based on it.

Course outcome:

- * The students will have knowledge about the concept of ecology and about human ecology particularly based on biological and cultural dimensions.
- * Will strengthen the knowledge on the concept of human ecology, types of adaptation, various ecological stresses and ecological rules.
- * Knowledge of various modes of human adaptation process at pre-state society such as hunting and gathering, pastoralism and shifting cultivation communities.
- * To provide the basic knowledge about the procedures of taking measurement of different body shapes of the human being such as measurement of stature, sitting height, nasal breadth, body weight, body mass index, ponder index and nasal index.

Text book recommended:

1. Mukherji, D., D. Mukherjee and P. Bharti and A. Mukhopadhyaya. 2018. *Laboratory Manual for Biological Anthropology: Revised and Enlarged 2nd Edition*. SCHOLAR Booksellers & Publishers, Kolkata.

Suggested Reading

1. Human ecology: biocultural adaptation in human communities. (2006) Schutkowski, H. Berlin. Springer Verlag.
 2. Human ecology and cognitive style: comparative studies in cultural and physical adaptation (1976). Berry, J.B. New York: John Wiley.
 3. Human ecology. (1964) Stapledon. Faber & Faber.
 4. Studies in Human Ecology. (1961) Theodorson, G.A. Row, Peterson & Company Elmsford, New York.
 5. Human ecology: (1973) Problems and Solutions. Paul R. Ehrlich, Anne H. Ehrlich and John P. Holdress. W.H. Freeman & Company, San Francisco.
 6. Cohen, Yehudi A. 1968. Man in adaptation; the cultural present. Chicago: Aldine Pub. Co.
 7. Redfield, Robert. (1965). Peasant society and culture an anthropological approach to civilization. Chicago [u.a.]: Univ. of Chicago Press.
 8. Symposium on Man the Hunter, Richard B. Lee, and Irven DeVore. 1969. Man the hunter. Chicago: Aldine Pub. Co.
 9. Dave Deeksha & S.S. Katewa (2012). Text Book of Environmental Studies. Cengage Learning India Pvt. Ltd., Delhi
 10. Eugene P. Odum and Gary W. Barrett (2004). Fundamentals of Ecology. Cengage Learning; 5 edition.
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+3 SECOND YEAR THIRD SEMESTER

Core Paper - 7

BIOLOGICAL DIVERSITY IN HUMAN POPULATIONS

Time : 3 Hrs.

Credit : 04

End Semester Theory : 60 Marks

Mid Semester Theory : 15 Marks

THEORY

Unit I:

Concept of Biological Variability; Sources of Genetic Variation; Structuring Genetic Variation; Interpretation of Human Variation, Genetic Polymorphism (Serological, Biochemical and DNA Markers).

Unit II:

Concept of Race and UNESCO Statement on Race, A Comparative account of various races of the world. A critical appraisal of contribution of Risley, Guha, Eickstedt and Sarkar towards understanding ethnic elements in the Indian populations.

Unit III:

Demographic Anthropology: meaning and scope, Sources of Demographic Data, Demographic Processes, Demographic profile of Indian populations and its growth structure. National population policy.

Unit IV:

Role of Bio-cultural Factors: Bio-cultural factors influencing the diseases and nutritional status; Evolution of Human diet, biological perspectives of ageing process among different populations.

PRACTICAL(Any Two)

Credit : 02

25 Marks

1. Craniometric Measurements (Skull & Mandible)
2. Determination of A,B,O; and Rh blood groups of ten subjects.
3. Analysis and interpretation of finger ball pattern types, palmar main lines and pattern index; Finger print classification and development of chance prints and statistical treatment of the data collected (Ten Subjects)
4. Collection of demographic data from secondary sources.

Course Outcomes

- * The students will have fundamental understanding of biological variability, race & sources of genetic variability.
 - * Understand ethnic elements in India & genetic diversity among the Indian population.
 - * Understand the demographic component of human population and analyze the bio cultural factors.
 - * Develop an analytical understanding of blood group system, finger print classification & interpretation of finger prints pattern.
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Text book recommended:

1. Shukla B.R.K. & Rastogi, S. 1990. *Physical Anthropology & Human Genetics: An Introduction*. Plaka Prakashan. Delhi.
2. Das B.M. 2008. *Outlines of Physical Anthropology*. Kitab Mahal, New Delhi.
3. Sarkar, R. M. 2004. *Fundamentals of Physical Anthropology* (New Edition).Book World. Kolkata.
4. Mukherji, D., D. Mukherjee and P. Bharti and A .Mukhopadhyaya. 2018. *Laboratory Manual for Biological Anthropology: Revised and Enlarged 2nd Edition*. SCHOLAR Booksellers & Publishers, Kolkata.

Suggested readings:

1. Baker P.T. and J.S. Weiner (ed.) (1996) *The Biology of Human Adaptability*. Oxford & New York, Oxford University Press.
 2. Bhende A. and T. Kantikar (2006) *Principles of Population Studies*. Himalayan Publishing House, Mumbai
 3. Bogin B. (1999). *Pattern of Human Growth*. 2nd edition CUP.
 4. Cameron Noel and Barry Bogin (2012) *Human Growth and development*. Second edition, Academic Press Elsevier.
 5. Eckhardt R.B.(1979) *The Study of Human Evolution*. McGrand Hill Book Company, USA.
 6. Frisancho R. (1993) *Human Adaptation and Accommodation*. University of Michigan press
 7. Harrison G.A., Tanner, J.M., Pilbeam, D.R., Baker, P.T. (1988) *Human Biology*. Oxford University Press.
 8. Jurmain Robert Lynn kilgoreWendaTrevathan and Ciochon (2010). *Introduction to Physical Anthropology*. Wadsworth Publishing, USA.
 9. Kapoor A.K. and Satwanti Kapoor (ed) (1995). *Biology of Highlanders*. Jammu, Vinod Publisher & Distributor.
 10. Kapoor A.K. and Satwanti Kapoor (eds) (2004) *India's Elderly-A Multidisciplinary Dimension*. Mittal Publication, New Delhi.
 11. Klepinge L.L. (2006). *Fundamentals of Forensic Anthropology*. John Willey & Sons., New Jersey.
 12. Malhotra K.C. and B. Balakrishnan(1996) *Human Population Genetics in India*.
 13. Malina Robert M., Claude. Bouchard, Oded. Bar-Or. (2004) Growth, and Physical Activity. *Human Kinetics*.
 14. Stanford C., Allen, S.J. and Anton, C.S. (2013): *Biological Anthropology*. 3rd edition, Pearson, USA.
 15. Bhende A. and Kaniikar, T. (2010) *Principles of Population Studies*. Himalaya Publishing House. Mumbai
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+3 SECOND YEAR FOURTH SEMESTER

Core Paper - 8 THEORIES OF CULTURE AND SOCIETY

Time : 3 Hrs.
Credit : 04

End Semester Theory : 60 Marks
Mid Semester Theory : 15 Marks

THEORY

Unit I:

Culture, Meaning, Definition, Concept, Component. Culture Pattern, Culture, Centre, Culture Trait, Culture complex, Culture areas.

Unit II:

Emergence of Fieldwork tradition; Historical Particularism – Franz Boas. Diffusionism – American, British, German.

Unit III:

Durkheim and Social integration; Functionalism and Structural-functionalism (Mallinowski, Radcliffe Brown)

Unit IV:

Structuralism: Claude Levi-Strauss and Edmund Leach; Symbolism and Interpretative approach (Clifford Geertz)

PRACTICAL

Credit : 02

25 Marks

As a part of the practical following exercises will be undertaken by the students so as to enable them to connect the theories they learn with things of everyday living.

1. To identify a topic relating to contemporary issue and formulate research questions and clearly identify the theoretical perspectives from which they are derived.
2. Identification of variables of a study.
3. Various types of hypotheses.
4. Formulation of hypothesis.
5. Distinction between hypothesis testing and exploratory research.
6. Identification of universe and unit of study with justifications.
7. Choice of appropriate research technique and method in the context of theoretical framework.
8. Data collection and analysis

Course Outcomes

- * Students will be able to know the history on the different theoretical development of Anthropology.
- * Students will be able to understand the role of American and British Anthropology in the development of Anthropology as a discipline.

- * Students will be able to collect data by using different tools and techniques on various social issues.
- * They will be able to analyze qualitative and quantitative data.

Suggested Readings

1. Applebaum H.A. (1987) *Perspectives in Cultural Anthropology*. Albany: State University of New York.
2. Barnard A. (2000). *History and Theory in Anthropology*. Cambridge: Cambridge University.
3. McGee R.J. and Warms R.L. (1996) *Anthropological Theories: An Introductory History*.
4. Moore M. and Sanders T. (2006). *Anthropology in Theory: Issues in Epistemology*, Malden, MA: Blackwell Publishing

Text Book Recommended:

1. Behura, N.K. *Anthropological thought and Theories*, New Delhi
2. Geertz, C. 1973. *The Interpretation of Culture*, New York: Basic Books.
3. Harris, M. 1969. *The Rise of Anthropological Theory*, London: Routledge and Kegan Paul.
4. Honnigman, J. J. (Ed). 1997, *A Hand Book of Social and Cultural Anthropology*, Vol-II, University of North Carolina, New Delhi: Rawat Publications
5. Kroeber, A. L. 1953. *Anthropology Today: An Encyclopedic Inventory*. Chicago
6. Levi-Strauss, C. 1983, *Structural Anthropology*, Chicago: University of Chicago Press
7. Manners and Kaplan (Ed). 1968. *Theory in Anthropology: A Course Book*, Chicago: Aldine Publishing Company
8. Morgan, L. H. 1963. (Originally 1877), *Ancient Society*, New York
9. Merton, R. K. 1957, *Social Theory and Social Structure*, New York
10. Radcliffe-Brown, A. R. 1952, *Structure and Function in Primitive Society*. New York: Free Press

+3 SECOND YEAR FOURTH SEMESTER

Core Paper - 9

HUMAN GROWTH AND DEVELOPMENT

Time : 3 Hrs.

Credit : 04

End Semester Theory : 60 Marks

Mid Semester Theory : 15 Marks

THEORY

Unit I:

Concept of human growth, development, differentiation and maturation; Evolutionary perspective on human growth.

Unit II:

Prenatal (conception till birth) and postnatal (birth till senescence) period of growth, pattern of normal growth curves, variation from normal growth (canalization, catch-up growth and catch-down growth), ethnic and gender differences in growth curves, secular trend.

Unit III:

Bio-cultural factors (genetic, social, and ecological factors) influencing patterns of growth and variation, methods and techniques to study growth, significance/ applicability of growth studies
Nutritional epidemiology-concept of balanced diet, impact of malnutrition (over and under) with special reference to obesity, Kwashiorkor and Marasmus. Assessment of nutritional status.

Unit IV:

Human physique and body composition – models and techniques; gender and ethnic differences; Somatotyping and human physique with reference to Sheldon, Parnell, Heath and Carter methods.

PRACTICAL (Any two)Credit : **02****25 Marks**

1. Growth status: Somatometry (stature, body weight, mid upper arm circumference etc), assessment of chronological age, percentile, z-score, height for age, weight for age, BMI for age
2. Obesity assessment: General (BMI, body fat %, Conicity index, body adiposity indices) and regional adiposity indices (WC, WHR, WHtR)
3. Estimation of body composition (fat percentage and muscle mass) with skinfold thickness and bioelectric impedance
4. Nutritional assessment through dietary pattern and anthropometric indices

Text book recommended:

1. Das B.M. 2008. *Outlines of Physical Anthropology*. Kitab Mahal, New Delhi.
2. Mukherji, D., D. Mukherjee and P. Bharti and A .Mukhopadhyaya. 2018. *Laboratory Manual for Biological Anthropology: Revised and Enlarged 2nd Edition*. SCHOLAR Booksellers & Publishers, Kolkata.

Course Outcomes

- * The students will learn about the concepts and indicators of growth and development
- * Types and patterns of growth curves and know different stages of growth: Prenatal and Postnatal periods.
- * Have knowledge on various bio-cultural factors which influence the growth, analysis of body physique and somatotype.
- * The students will learn how to assess growth, obesity, body composition and nutritional status.

Suggested Readings

1. Bogin B. (1999) *Patterns of human growth*. Cambridge University Press.
 2. Frisancho R. (1993) *Human Adaptation and Accommodation*. University of Michigan Press.
 3. Cameron N and Bogin B. (2012) *Human Growth and Development*. Second edition, Academic press Elsevier.
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4. Harrison GA and Howard M. (1998). Human Adaptation. Oxford University Press.
5. Harrison GA, Tanner JM, Pibeam DR, Baker PT. (1988). Human Biology. Oxford University Press.
6. Jurmain R, Kilgore L, Trevathan W. Essentials of physical anthropology. Wadsworth publishing.
7. Kapoor AK and Kapoor S. (1995) Biology of Highlanders. Vinod Publisher and Distributor.
8. Kathleen K. (2008). Encyclopedia of Obesity. Sage.
9. Malina RM, Bouchard C, Oded B. (2004) Growth, Maturation, and Physical Activity. Human Kinetics.
10. McArdle WD, Katch FI, Katch VL. (2001) Exercise Physiology: Energy, Nutrition, and Human Performance.
11. Singh I, Kapoor AK, Kapoor S. (1989). Morpho-Physiological and demographic status of the Western Himalyan population. In Basu and Gupta (eds.). Human Biology of Asian Highland Populations in the global context.
12. Sinha R and Kapoor S. (2009). Obesity: A multidimensional approach to contemporary global issue. Dhanraj Publishers. Delhi.

+3 SECOND YEAR FOURTH SEMESTER

Core Paper - 10 RESEARCH METHOD

Time : 3 Hrs.
Credit : 04

End Semester Theory : 60 Marks
Mid Semester Theory : 15 Marks

THEORY

Unit I:

Field work tradition in Anthropology; Ethnographic approach, contribution of Malinowski, Boas and other pioneers; cultural relativism, ethnocentrism, etic and emic perspectives, comparative and historical methods, techniques of rapport establishment identification of representative categories of informants, maintenance of field diary and logbook.

Unit II:

Research Design, Review of literature, conceptual framework, formulation of research problem, formulation of hypothesis, sampling and reference; Tools of data collection (Observation, Interview, Questionnaire, Case Study, Life history, FGD, PRA, RRA) Genealogy; data analysis and report writing- Chapterization, preparing a text for submission and publication, concepts of preface, notes (end and footnotes), bibliography (annotated) and references cited, review and index.

Unit III:

Ethics and Politics of Research, ethical issues in the context of human subject research; privacy and confidentiality in research; Issues of academic fraud and plagiarism, conflicts of interest, authorship and publication.

Unit IV:

Basic tenets of qualitative research and its relationship with quantitative research; Types of variables, presentation and summarization of data (tabulation and illustration). Descriptive statistics- Measures of Central Tendency, standard deviation,

PRACTICALCredit : **02****25 Marks**

1. Construction of Genealogy & Pedigree Analysis.
2. Observation: Direct, Indirect, Participant, Non-participant, Controlled
3. Questionnaire and Schedule, Interview- Unstructured, Structured, Key informant Interview, Focussed Group Discussion, and Free listing, pile sorting
4. Case study and life history.

Course Outcomes

- * Students will be able to know the origin of fieldwork as method and as tradition in Anthropology.
- * They will be acquainted with the field work contribution of anthropologists like B. Malinowski, Radcliff Brown, Franz Boas and other anthropologists.
- * They will know how to formulate their own research problems and how to decide suitable methods best suited for their own research.
- * Students able to write their research paper and may publish in different journals.

Text book Recommended

1. Garrard E and Dawson A. What is the role of the research ethics committee? Paternalism

Suggested Readings

1. Bernard H.R. Research Methods in Anthropology, Qualitative and Quantitative Approaches. Jaipur: Rawat Publications. 2006.
2. Madrigal L. Statistics for Anthropology. Cambridge: Cambridge University Press. 2012.
3. Zar JH. Biostatistical Analysis. Prentice Hall. 2010.
4. Michael A. The Professional Stranger. Emerald Publishing. 1996.
5. Emerson RM, Fretz RI and Shaw L. Writing Ethnographic Field Notes. Chicago, University of Chicago Press. 1995.
6. Lawrence NW. Social Research Methods, Qualitative and Quantitative Approaches. Boton: Allyn and Bacon. 2000.
7. O'reilly K. Ethnographic Methods. London and New York: Routledge. 2005.
8. Patnaik S.M. Culture, Identity and Development: An Account of Team Ethnography among the Bhil of Jhabua. Jaipur: Rawat Publications. 2011.
9. Pelto PJ and Pelto GH. Anthropological Research, The Structure of Inquiry. Cambridge: Cambridge University Press. 1978.
10. Sarantakos S. Social Research. London: Macmillan Press. 1998.

+3 THIRD YEAR FIFTH SEMESTER

Core Paper - 11

PREHISTORIC ARCHAEOLOGY OF INDIA

Time : 3 Hrs.

Credit : 04

End Semester Theory : 60 Marks

Mid Semester Theory : 15 Marks

THEORY

Unit I: Pleistocene chronology of India; Palaeolithic cultures in India.

Palaeolithic cultures in India: Lower Palaeolithic cultures – evidences from Kashmir Valley and Peninsular India), Middle Palaeolithic culture in India, Upper Palaeolithic culture in India (characteristic features, major tool types, important sites, chronology with stratigraphic evidences). Some important sites of Odisha may be discussed on the above cultural periods.

Unit II: Mesolithic cultures in India.

Mesolithic cultures in India (characteristic features, major tool types, important regions and sites, chronology with stratigraphic evidences (some important sites of Odisha may be discussed on above cultural periods).

Unit III: Neolithic cultures in India.

Neolithic culture in India (characteristic features, major tool types, important regions and sites, chronology with stratigraphic evidences (some important sites of Odisha may be discussed on above cultural periods).

Unit IV: Rock art of India.

Prehistoric Art in India with special reference to Central India and Odisha.

PRACTICAL

Credit : 02

25 Marks

1. Identification of tools:

(a) Hand axe varieties, chopper/chopping tools	(b) Cleaver varieties
(c) Side scraper varieties	(d) Knives
(e) Burins	(f) End scrapers
(g) Borer	(h) Microlithic tools
(i) Bone tools	
2. Identification of lithic technology.

Course Outcomes

- * Understand various Lithic cultures and description of various tools used in Palaeolithic, Mesolithic and Neolithic era and their techniques.
- * Students will know about distribution and interpretation of habitat and economy of lower Palaeolithic, middle Palaeolithic, upper Palaeolithic, Mesolithic, Neolithic, chalcolithic, megalithic culture.
- * Students will also know about Prehistoric art and identification of tools along with lithic technology.

Text Books Recommended:

1. Bhattacharya, D. K.1990, An Introduction to Prehistoric Archaeology. Delhi: Hindustan Publishing Corporation.
2. Bhattacharya, D. K.1990, *An Outline of Indian Prehistory. Delhi: Palaka Prakashan.*

Suggested Reading:

1. Agarwal, D. P.1984, *Archaeology of India*. New Delhi: Select Book Services Syndicate.
2. Allchin, Briget. and Raymond Allchin,1982. *The Rise of Civilization in India and Pakistan*.Cambridge: Cambridge University Press.
3. Allchin, B. and R. Allchin, 1997. *Origins of Civilization: The Prehistory and Early Archaeology of South Asia*. New Delhi. Viking by Penguin Books India (P) Ltd.
4. Basa, K.K and P. Mohanty . Archaeology of Odisha(Orissa), Delhi Pratibha Prakasan
5. Chakrabarti, D.K. 2001. *India: An Archaeological History: Palaeolithic Beginning to Early Historic Foundation*. New Delhi: Oxford University press.
6. Jain, V.K.2009, *Prehistory and Protohistory of India*. New Delhi: D.K. Printworld (P) Ltd.
7. Paddayya, K. (Ed.), 2002, *Recent Studies in Indian Archaeology*. New Delhi.
8. Pappu R. S.2001, *Aheulian Culture in Peninsular India— An Ecological Perspective*, New Delhi: D.K. Printworld (P) Ltd.
9. Rammi Reddy, V.1987, *Elements of Prehistory*. New Delhi: Mittal Publications.
10. Rammi Reddy, V.1989, *Palaeolithic and Mesolithic Cultures*. New Delhi: Mittal Publications.
11. Rammi Reddy, V.1991, *Neolithic and Post-Neolithic Cultures*. New Delhi: Mittal Publications.
12. Sankalia, H.D.1974. *Prehistory and Protohistory of India and Pakistan*. Pune: Deccan College.
13. Sankalia (1982) Stone Tool Type and Technology. Delhi, B.R.Publication.
14. Settar, S. and R. Korisettar (Ed), 2001, *Indian Archaeology in Retrospect*, Vol.1: PREHISTORY Archaeology of South Asia. New Delhi: Manohar in association with Indian Council of Historical Research.

+3 THIRD YEAR FIFTH SEMESTER**Core Paper - 12****ANTHROPOLOGY IN PRACTICE**

Time : 3 Hrs.

Credit : 04

End Semester Theory : 60 Marks

Mid Semester Theory : 15 Marks

THEORY**Unit I:**

Academic Anthropology; Academics and Practitioners: Differences, Structure, Activities, Controversies and Issues: Applied Anthropology, Action Anthropology and Development Anthropology.

Unit II:

Role of Anthropology in Development; Anthropology and Public Policy, Need Assessment and Community Development, Anthropology of NGO's, Business Anthropology, Environment and Community Health, Social and economic sustainability, Cultural resource management.

Unit III:

Future Dynamics in Anthropology; Trends in Anthropology: Anthropology of Tourism, Anthropology in Census; Designing and Fashion, Visual Anthropology.

Unit IV:

Biosocial anthropology in practice; Bio-social elements of human development at national and international level, application of conceptual framework of Forensic Anthropology in judicial settings both criminal and civil, Population Dynamics and relationship between population growth and various aspects of culture such as means of subsistence, kinship, social complexity, social stratification and political organization, Bio-social counselling of an individual or population.

PRACTICALCredit : **02****25 Marks**

1. The students will visit a NGO or corporate office or census office in Odisha and its adjoining areas and write principal observations on the same.
2. Write a project on constitutional provisions or evaluation of any development project/report.
3. Draw a scene of crime and identify the various evidences in a portrayed crime scene.
4. Write a project on Religious Tourism / Tribal Tourism / Health Tourism / Fashion / Human Rights / Ecotourism.
5. Write a project on the demographic profile from secondary data.
6. Collect data on bio-social problem and design counselling and give the analysis and interpretation.

Course Outcome

- * Acquire knowledge on the concept of Academic anthropology, its application and controversies and issues of Applied and Action Anthropology.
- * The students trained in development anthropology and public policy can help NGOs to contemplate on ground realities of urban and rural developmental issues in holistic manner along with the idea of social and economic sustainability and Culture Resource Management.
- * The students will also have an idea on the contemporary topics such as tourism, Census Study, fashion & designing, and Visual Anthropology,
- * The students will be competent in community engagements to understand community problems, their health aspects and even offer bio-social counselling.

Text Books Recommended:

1. Vidyarthi V (1981). Tribal Development and its Administration. Concept Publishing Company, New Delhi.
 2. Vidyarthi LP. (1990). Applied Anthropology in India – Principles, Problems and Case Studies. Kitab Mahal, U.P.
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3. Vidyarthi LP and BN Sahay (2001). Applied Anthropology and Development in India, National Publishing House, New Delhi.

Suggested Readings

1. Arya A and Kapoor AK. (2012). Gender and Health Management in Afro-Indians. Global Vision Publishing House, New Delhi.
2. Ervic, Alexander M., (2000). Applied Anthropology: Tools and Perspectives for Contemporary Practise, Boston, MA: Allyn and Bacon.
3. Erwin A. (2004). Applied Anthropology Tools and Practice, Allyn and Bacon.
4. Goodale M. (2009). Human Rights: An Anthropological Reader. Wiley Blackwell.
5. Gupta S and Kapoor AK. (2007). Human Rights, Development and Tribe. In : Genes, Environment and Health – Anthropological Perspectives. K. Sharma, R.K. Pathak, S.Mehra and Talwar I (eds.). Serials Publications, New Delhi.
6. Margaret AG. (2003). Applied Anthropology: A Career-Oriented Approach, Boston, MA: Allyn and Bacon.
7. Kapoor AK and Singh D. (1997). Rural Development through NGO's. Rawat Publications, Jaipur.
8. Kumar RK and Kapoor AK. (2009). Management of a Primitive Tribe: Role of Development Dynamics. Academic Excellence, Delhi.
9. Noaln RW. (2002). Anthropology in Practice: Building a Career outside the Academy. Publishing Lynne Reinner. Publications, New Delhi.
10. Patnaik SM (2007). Anthropology of Tourism: Insights from Nagaland. The Eastern Anthropologist. 60(3&4):455-470
11. Srivastav OS (1996). Demographic and Population Studies. Vikas Publishing House, India

+3 THIRD YEAR FIFTH SEMESTER

DSE - 1

ANTHROPOLOGY OF RELIGION, POLITICS AND ECONOMY

Time : 3 Hrs.
Credit : 04

End Semester Theory : 60 Marks
Mid Semester Theory : 15 Marks

THEORY

Unit I:

Anthropological approaches to understand religion- magic, animism, animatism, totemism, naturism; witchcraft and sorcery; Religious specialists: shaman, priests, mystics; Overview of Anthropological Theories of Religion; Religion as the sacrality of ecological adaptation and socialness.

Unit II:

Economic institutions: principles of production, distribution, and consumption in simple and complex societies; various forms of exchange: barter, trade and market; Forms of currencies; reciprocities: generalized, balanced and negative.

Unit III:

Political institutions: concepts of power and authority; types of authority; state and stateless societies; law and justice in simple and complex societies; the meaning and sources of identity in complex contemporary societies; the origins of modern politics, its institutions, and cultures, both Western (UK) and Non-Western (India).

Unit IV:

Interrelationship between Religion, Magic and Science. Religious conversion and movements, emergence of new religious sects in the global order.

PRACTICALCredit : **02****25 Marks**

1. Case study of any of the social institute (religion, economic, political) with respect to culture perspective.

Course outcomes

- * The students will get the opportunity to understand the definitional boundaries, approaches and methodologies for anthropological studies of religion in society.
- * The students can analyse and assess economic scenario and market opportunities for rural, tribal and urban set ups and be better equipped with subsistence level strategies.
- * Students can reflect on political affairs, civil society, local level politics in order to explore leadership possibilities and participate in nation building and emergence of a new era of religion convergence and religious sects in global order.

Text book recommended:

1. Barbara M. (2011). Cultural Anthropology. New Jersey: Pearson Education.
2. Ember C.R. (2011). Anthropology. New Delhi: Dorling Kinderslay

Suggested Readings:

1. Durkheim E. (1986). The elementary forms of the religious life, a study in religious sociology. New York:Macmillan.
 2. Benedict A. (2006). Imagined Communities: Reflections on the Origin and Spread of Nationalism. Verso
 3. Gledhill J. (2000). Power and Its Disguises: Anthropological Perspectives on Politics. 2nd ed. London: Pluto Press.
 4. Henrich J, Boyd R, Bowles S, Camerer C, Fehr E, Gintis H, McElreath R, Alvard M et al. (2005). 'Economic Man' in cross-cultural perspective: Behavioral experiments in 15 smallscale societies. Behavior and Brain Science. 28(6):795-815;
 5. Henrich J. (2002). Decision-making, cultural transmission, and adaptation in economic anthropology. In: J. Ensminger (Ed.), Theory in Economic Anthropology (pp. 251-295). Walnut Creek, CA: Altamira Press.
 6. Lambek. M. (2008) A Reader in the Anthropology of Religion.
 7. Eller JD. (2007). Introducing Anthropology of Religion. New York: Routledge.
 8. Barbara M. (2011). Cultural Anthropology. New Jersey: Pearson Education.
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9. Herskovits MJ. (1952). Economic Anthropology: A Study in Comparative Economics. New York: Alfred A Knopf Inc.
10. Malinowski B. (1922) Argonauts of the Western Pacific. London: Routledge. Balandier G. (1972). Political Anthropology. Middlesex: Penguin

+3 THIRD YEAR FIFTH SEMESTER

DSE - 2

TRIBAL CULTURES OF INDIA

Time : 3 Hrs.

Credit : 04

End Semester Theory : 60 Marks

Mid Semester Theory : 15 Marks

THEORY

Unit I:

Concept of tribes and its problematic nature, General and specific characteristics of tribes, Classification and distribution of tribes based on their economy, occupation and religion, Racial elements among the tribes, Scheduled and non-scheduled categories of tribes, Particularly Vulnerable Tribal Groups (PVTGs).

Unit II:

Tribe- caste continuum, Gender and Tribe, Distribution of tribes in India (Racial, Language, Geographic, Economic)

Unit III:

Tribes: Nomenclature- emic and etic differences; Tribal movements, Problems of tribal development.

Unit IV:

Forest policies and tribes, Migration and occupational shift, Tribal arts and aesthetics Displacement, rehabilitation and social change Globalization among Indian tribes.

PRACTICAL

Credit : 02

25 Marks

1. Distribution of Indian Tribes: PVTGs, ST
2. Location of different tribes on the map of India
3. Write an annotated bibliography on any one tribe
4. Write the social structure of any one tribe of India

Text book recommended:

1. Vidyarthi L.P and Rai B.K.. (1976). The tribal culture of India. Concept Publishing Co, Delhi

Course Outcomes

- * Students will be able to understand and explain problematic nature of the concept of tribe in India.

- * Will be able to analyse policies formulated especially for tribes; and identify the gap between policy formulation, implementation and local needs.
- * Students can know the migration and occupational shift along with the different changes and rehabilitation of Indian tribes.
- * Students will learn about distribution of various categories of tribes in India and how to write an annotated bibliography and social structure of one of them.

Suggested Readings:

1. Behera, D.K and Georg Pfeffer. Contemporary Society Tribal Studies, Volume I to VII. New Delhi: Concept Publishing Company
 2. Georg Pfeffer. Hunters, Tribes and Peasant: Cultural Crisis and Comparison. Bhubaneswar: Niswas.
 3. Vidarthy, L.P. and Rai. Applied Anthropology in India.
 4. Vidarthy.L.P. and B.N. Sahay . Applied Anthropology and Development in India. New Delhi: National Publishing House.
 5. Bhende A. and Kaniikar, T. (2010) *Principles of Population Studies*. Himalaya Publishing House. Mumbai (All Units, It covers most topics)
 6. Caldwell J.C. (2006). *Demographic Transition Theory*. Springer.
 7. Census of India (2001,2011), SRS bulletin (2013), NFHS (2006), CRS, NSSO (Can be seen from browsing net)
 8. Gautam R.K., Kshatriya, G.K. and Kapoor A.K. (2010) *Population Ecology and Family Planning*. Serials publications. New Delhi.
 9. Howell N. (1986) Demographic Anthropology. Ann. Rev. Anthropol. 15: 219-246
 10. Kshatriya G.K. (2000). Ecology and health with special reference to Indian tribes. *Human Ecology special volume 9:229-245*.
 11. Misra BD (1982). *An introduction to the study of population*. South Asia publ. ltd. New Delhi.
 12. Park K. (2000) *Text book of Preventive and Social Medicine*. BanarsidasBhanot, Jabalpur.
 13. Patra P.K. and Kapoor, A.K. (2009) *Demography And Development Dynamics in a Primitive Tribe of Himalayas*. International Book Distributors, Dehradun
 14. Riley N.E. and Mc Carthy, J. (2003) *Demography in the Age of the Postmodern*. Cambridge University press. UK. Pages 1-13 and 32-98
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+3 THIRD YEAR SIXTH SEMESTER

Core Paper - 13 FORENSIC ANTHROPOLOGY

Time : 3 Hrs.
Credit : 04

End Semester Theory : 60 Marks
Mid Semester Theory : 15 Marks

THEORY

Unit-I:

Introduction to Forensic Anthropology: Definition, Brief History, Scope, Applications and Integration of Forensic Anthropology.

Unit-II:

Basic Human Skeletal Biology, Identification of Human and Non-Human Skeletal Remains, Ancestry, age, sex and stature estimation from bones. Discovery and Techniques for recovering skeletal Human Remains.

Unit-III:

Personal Identification, Complete and Partial Identification, Methods of Identification in Living Persons: Somatometry, Somatoscopy, Occupational Marks, Scars, Bite Marks, Tattoo Marks, Fingerprints, Footprints, Lip Prints, Nails, Handwriting, Deformities and Others.

Unit-IV:

Serology: Identification and Individualization of bloodstain, urine, semen and saliva. Forensic Odontology-Tooth Structure and Growth, Bite Marks, and DNA Profiling.

PRACTICAL

Credit : 02

25 Marks

1. Study of Human Long Bones. Estimation of age, sex and stature from bones.
2. Somatometric and Somatoscopic Observation on living persons.
3. Identification of bloodstain, urine, semen and saliva.
4. Examination & of Fingerprints and Handwriting.

Text book recommended:

1. Mukherji, D., D. Mukherjee and P. Bharti and A. Mukhopadhyaya. 2018. *Laboratory Manual for Biological Anthropology: Revised and Enlarged 2nd Edition*. SCHOLAR Booksellers & Publishers, Kolkata.

Course Outcomes

- * Gives Idea to use the methods and techniques in forensic anthropology.
 - * Students will know about Basic Human Skeletal Biology and Personal Identification of humans.
 - * Student should be able to identify and collect the biological materials found at crime scenes.
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- * The students will learn about Human Long Bones, somatometric and somatoscopic observation on living persons, Identification of bloodstain, urine, semen saliva and examination of Fingerprints and Handwriting.

Suggested Readings:

1. Bass W.M. (1971). Human Osteology: A Laboratory and Field manual of the Human Skeleton. Columbia: Special Publications Missouri Archaeological Society.
2. Black S. and Ferguson E. (2011). *Forensic Anthropology 2000 to 2010*. CRC Press, London.
3. Byers, S. N. (2008). Forensic Anthropology. Boston: Pearson Education LTD.
4. Gunn A. (2009) *Essential Forensic Biology* (2nd ed). Chichester: Wiley-Blackwell
5. Modi, R. B. J. P. (2013). *A Textbook of Medical Jurisprudence and Toxicology*. Elsevier.
6. Reddy V. R. (1985). Dental Anthropology, Inter-India Publication, New Delhi.
7. Spencer, C. (2004). Genetic Testimony: A Guide to Forensic DNA Profiling, Pearson, New Delhi.
8. Vats Y., Dhall J.K. and Kapoor A.K. (2011). Gender Variation in Morphological Patterns of Lip Prints among some North Indian Population. *J. Forensic Odontology*, 4: 11-15.
9. Wilkinson, C. (2004). *Forensic facial reconstruction*. Cambridge University Press.
10. Nath, Surendra . Forensic Anthropology. Kitab Mahal, New Delhi.

+3 THIRD YEAR SIXTH SEMESTER

Core Paper - 14

FIELDWORK AND DISSERTATION

Time : 3 Hrs.
Credit : 04

End Semester Theory : 60 Marks
Mid Semester Theory : 15 Marks

THEORY

Empirical study among the tribal, rural and urban communities of Odisha is to be conducted for a minimum period of 21 days in semester VI under the guidance of a teacher or teachers. Two copies of dissertations are to be submitted for examination on the basis of fieldwork and presentation of seminar. The Examination of Dissertation shall be conducted by an internal and an external examiner.

Mid-term Examination	=	15 marks
(Seminar presentation by the student based on his/her fieldwork/field topic)		
End-term Examination		
Dissertation based on 21 days fieldwork	=	60 marks
Field diary (15 marks) and	=	25 marks
Viva-voce (10 marks)		

*The dissertation has to be submitted by the student positively before the end semester examination. The dissertation will be evaluated both by the internal and external examiners

Course Outcome-

- * It helps to interact with the people and provide a real-life experience to know the people and gather ethnographic data.
- * The skill of writing dissertation/reports, scientific paper and evaluation of reports.
- * Possess the skill to prepare research finding presentation.
- * The skill of data tabulations, data processing and data analysis.

+3 THIRD YEAR SIXTH SEMESTER

DSE - 3

ANTHROPOLOGY OF INDIA

Time : 3 Hrs.
Credit : 04

End Semester Theory : 60 Marks
Mid Semester Theory : 15 Marks

THEORY

Unit I:

Origin, history and development of Anthropology in India, approaches to study Indian society and culture- traditional and contemporary Racial and linguistic elements in Indian population. Understanding the diversity of Indian social structure - concept of Varna, Jati, Caste, Ashram or purusharatha, gender hierarchies - their economic and cultural impact, origin and evolution of social structures and their underlying philosophies; Contribution of contemporary biological, social and archaeological anthropologists in India.

Unit II:

Aspects of Indian Village –social organization, agriculture and impact of market economy on villages; Tribal situation in India- biogenetic variability, linguistic and socioeconomic characteristics; Problems of tribal peoples, land-alienation, indebtedness, lack of educational facilities, shifting-cultivation, migration, forests and tribal unemployment, health and nutrition, tribal movement and quest for identity

Unit-III:

Developmental projects- tribal displacements and rehabilitation problem; Impact of culture-contact, urbanization and industrialization on tribal and rural Population; Basic concepts -Great tradition and little tradition, sacred complex, Universalization and Parochialization, Sanskritization and Westernization, Dominant caste, Tribe-caste; continuum, Nature-Man-Spirit complex, Pseudo-tribalism.

Unit IV:

Problems of exploitation and deprivation of scheduled caste/ tribe and Other Backward Classes. Constitutional Provisions for the Scheduled caste and scheduled tribes, Evaluation and Development of Indian Population; Human Rights, Protection and enforcement of human rights,

Human rights of special category and marginal groups, Emerging trends of human rights with respect to terrorism, globalization and environment.

PRACTICAL

Credit : **02**

25 Marks

1. Identify various traits/variables which can be used in racial classification and comment on its relevance.
2. Review a book/edited volume on Indian social structure such as caste, religion, tribe or rural population and give its salient features.
3. Explore the biological diversity of any population group considering a minimum of five genetic traits.
4. Highlight the contributions of any two contemporary Indian anthropologists.

Course Outcome-

- * Deep knowledge on the historical perspective of Indian Anthropology and various approaches of studying Indian civilization.
- * Have proper understanding of caste system and village system in India with different dimension.
- * The knowledge of racial/ethnic/gender diversities will help students in critically evaluating existing policies in domains of rural, tribal and urban life suggesting relevant policy measures.
- * The students can be trained in understanding problems and prospects of and deprived and marginalized communities with special reference to the PVTGs.

Text book recommended:

1. Dube SC. (1992). Indian Society. National Book Trust, India : New Delhi.
2. Malhotra K.C. (1978). Morphological Composition of people of India. J. Human Evolution.
3. Trautmann T.R (2011). India: Brief history of Civilization. Oxford University Press : Delhi

Suggested Reading

1. Nichola,s D. (2001). Castes of Mind: Colonialism and the Making of Modern India. Princeton University Press.
 2. Bernard C.S. (2000). India: The Social Anthropology of Civilization. Delhi: Oxford University Press.
 3. Bhasin M.K, Watter H and Danker-Hopfe H. (1994). People of India – An Investigation of Biological variability in Ecological, Ethno-economic and Linguistic Groups. Kamla Raj Enterprises, Delhi
 4. Lopez D.S. (1995). Religions of India in Practice. Princeton University Press
 5. Gupta D. Social Stratification. Delhi: Oxford University Press.
 6. Karve I. (1961). Hindu Society: An Interpretation. Poona : Deccan College
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7. Guha BS. (1931). The racial attributes of people of India. In: Census of India, 1931, vol I, Part III (BPO, Simla)
8. Vidyarthi L.P and Rai B.K.. (1976). The tribal culture of India. Concept Publishing Co, Delhi.
9. Haddon AC. (1929). Races of man. Cambridge University, London.
10. Kapoor A.K. (1992). Genetic Diversity among Himalayan Human Populations. M/S Vinod Publishers, Jammu
11. Majumdar, D.N. (1901). Races and Culture of India. Asia Publishing House, Bombay
12. Dumont, L. (1980). Homo Hierachicus. University of Chicagon Press.
13. Guha B.S. (1931). The racial attributes of people of India. In : Census of India, 1931, vol I, Part III (BPO, Simla)

+3 THIRD YEAR SIXTH SEMESTER

DSE - 4

MUSEUM AND MUSEOLOGY

Time : 3 Hrs.
Credit : 04

End Semester Theory : 60 Marks
Mid Semester Theory : 15 Marks

THEORY

A report will be prepared by visiting an Anthropological Museum and doing empirical study on ethnographic specimens of material cultures of tribal, rural communities of Odisha. The museum visit is to be conducted for a minimum period of 10 days in semester V guidance of a teacher or teachers. Two copies of report are to be submitted for examination on the basis of museum visit. The Examination of Report shall be conducted by an internal and an external examiner.

Mid- term Examination

(Each student has to answer one elective question of **15 marks** from the two units

On Museum and Museology given below for the Mid Term Examination) =15 marks

End – term Examination=85 marks

Report* on 10 days Museum visit of anthropological /tribal/cultural museums=**60 marks**

Practical Record on ethnographic Specimens of material culture **=15 marks**

Viva- Voce **= 10 marks**

The Report on 10 days Museum visit of an Anthropological Museum has to be submitted by the student positively before the end semester examination. The Report* will be evaluated both by the internal and external examiners.

MUSEOLOGY:

The students are to be taught on the following aspects **Museum and of Museology** pertaining to perspectives of Museology and the basic principles of museum:

Unit – I : Museums :

Meaning and scope; History and development of museums in India; Types of Museums in India; Role of Anthropological museums in education.

Unit –II: Museology and Basic Principles of Museum:

Modes and ways of acquisition of museum specimens; Principles of display and arrangement in museum; Basic principles of museum, Documentation, labeling, display of the museum specimens of material cultures of tribal and rural people.

Each student has to answer one elective question of **15 marks** from the above aspects of Museum and Museology in the Mid Term Examination.

The students are required to learn the basic principles of museum, documentation, labelling and display of the museum specimens of material cultures of tribal and rural people. Each student has to apply the above methods, whichever is applicable, on specimens of following materials.

- a. Plant remains: Wood, Bamboo
- b. Fibre remains: Cloth/ Linen
- c. Metal remains: iron,brass, copper, silvers.
- d. Animal remains: Bone, antler, horn, leather/hide

Maintaining proper **Laboratory Record** is compulsory. Each student has to submit a proper and complete Laboratory Record is compulsory. Each student has to submit a proper and complete laboratory record duly signed by the teacher who is assigned to teach this aspect. The students are required to submit their Laboratory Records at least five days before the conduct of practical examination. Defaulters of the same are neither allowed to appear the practical examination nor entitled to get the marks assigned to Practical Records.

Course outcomes

- * It gives idea about different types of Museum in India and their history and development.
- * The students learn the basic principles of museum, documentation, labelling and display of the museum specimens of material cultures of tribal and rural people

Books Recommended:

1. Basa K.K., Md. Rehan, R.K. Gupta 2007, *Museology A Comprehensive Bibliography and Webliography* , Serial Publications, New Delhi.
2. Behera B.K. and S.K. Mohanty, 2007 *Museology and Museum Management in India*, Mayur Publications, Bhubaneswar, Odisha
3. Bhatnagar, A. 1999, *Museum, Museology and new Museology*, Sandeep Prakashan, New Delhi.

Suggested Readings:

1. Aiyappan, A. and S.T. Satyamurti (Ed), 1960, *Handbook of Museum Technique*, Government Museum ,Madras.
 2. Diwvedi ,V.P. and G.N Pant (Ed) 1980 ,*Museum and Museology :New Horizon*, Agam Kala Prakashan, New Delhi.
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3. Ghoshmaulik, and S.K Mishra 1987 ,*Practical Anthropology* ,SAAS, Orissa.
4. Ghoshmaulik,S.K and K.K Basa (Ed)2001 ,*Understanding Heritage ;Role of Museum* ,*Academic staff college*, Utkal University ,Bhubaneswar, India.
5. Nair,S.M.,*Bio-Deteriorations of Museum Materials*, Agam Kala Prakashan, New Delhi.
6. Nigam,M.L.1985 *Fundamentals of Museology*, Deva Publications, Hyderabad.
7. Renfraw,C. and P.Bahn *Archaeology; Theories ,Methods and Practice*
8. Shankalia, H.D. *Stone Age Tools and Techniques*, Deccan college Poona .India

ECONOMICS

+3 FIRST YEAR FIRST SEMESTER

Core Paper - 1

INTRODUCTORY MICROECONOMICS

Time : 3 Hrs.

Credit : 06

End Semester Theory : 80 Marks

Mid Semester Theory : 20 Marks

Course Outcome

To have an understanding of basic reasoning in Economics and to understand the consumption, production and cost concept in an analytical way.

This course is designed to expose the students to the basic principles of microeconomic theory. The emphasis will be on thinking like an economist and the course will illustrate how microeconomic concepts can be applied to analyze real-life situations.

Unit I: Exploring the Subject Matter of Economics, Markets and Welfare

The Ten Principles of Economics: How people make decisions; Working of the economy as a whole; Thinking Like an Economist: The economist as Scientist - The scientific method: Observation, Theory and more observation; Role of Assumptions; Economic Models; Why economists disagree; Graphs in Economics. The Market Forces; Markets and Competition; The Demand and Supply curves - Market vs Individual curves, Shifts in Demand and Supply Curves; Market Equilibrium and changes there in; Price Elasticity of Demand - determinants and computation; Income and Cross Elasticity of Demand; The Price Elasticity of Supply determinants and computation; Consumer and Producer Surplus.

Unit II: Theory of Consumer Choice

The Budget Constraint; Preferences - representing preferences with indifference curves; Properties of Indifference Curves; Two extreme examples of indifference curves; Optimization - Equilibrium; Change in equilibrium due to changes in income, changes in price; Income and Substitution Effect; Derivation of Demand Curve; Three applications - Demand for Giffen goods, Wages and Labour Supply, Interest rate and Household saving.

Unit III: The Firm and Market Structures

Cost concepts; Production and Costs; The various measures of cost - Fixed and Variable cost, Average and Marginal cost; Cost curves and their shapes; Costs in the short run and in the long run; Economies and diseconomies of scale. Firms in Competitive Markets - What is a competitive market; Profit maximization and the competitive firm's supply curve; The marginal cost curve and the firm's supply decision; Firm's short-run decision to shut down; Firm's long-run decision to exit or enter a market; The supply curve in a competitive market - short run and long run.

Unit IV: The Input Markets

The Demand for Labour - The production function and the marginal product of labour; Value of the marginal product of labour and demand for labour; Shifts in labour demand curve; The supply of labour - the trade-off between work and leisure; Shifts in the labour supply

curve; Equilibrium in the Labour Market; Other factors of production: Land and Capital; Linkages among factors of production.

Text Book:

Principles of Economics, Gregory N Mankiw, 6e Cengage Learning India Private Limited, New Delhi.

Reference Book:

- 1) Karl E. Case and Ray C. Fair (2007): Principles of Economics, 8th Edition, Pearson Education Inc.
- 2) Pindyck, Robert and Daniel Rubinfeld (2018): Microeconomics, 9th Edition, Pearson Education Inc.

+3 FIRST YEAR FIRST SEMESTER

Core Paper - 2

MATHEMATICAL METHODS FOR ECONOMICS-I

Time : 3 Hrs.
Credit : 06

End Semester Theory : 80 Marks
Mid Semester Theory : 20 Marks

Course Outcome

To learn about the classical techniques involving functions and calculus to understand and analyse economic problem.

This is the first of a compulsory two-course sequence. The objective of this sequence is to transmit the body of basic mathematics that enables the study of economic theory at the undergraduate level, specifically the courses on microeconomic theory, macroeconomic theory, statistics and econometrics set out in this syllabus. In this course, particular economic models are not the ends, but the means for illustrating the method of applying mathematical techniques to economic theory in general. The level of sophistication at which the material is to be taught is indicated by the contents of the prescribed textbook.

Unit I: Preliminaries and Functions of one Real Variable

Sets and set operations; Cartesian product; relations; functions and their properties; Number systems, Types of Functions- constant, polynomial, rational, exponential, logarithmic; Graphs and graphs of functions; Limit and Continuity of functions; Limit theorems

Unit II: Derivative of a Function

Rate of change and derivative; Derivative and slope of a curve; Continuity and differentiability of a function; Rules of differentiation for a function of one variable; Application - Relationship between total, average and marginal functions

Unit III: Functions of two or more Independent Variables

Partial differentiation techniques; Geometric interpretation of partial derivatives; Partial derivatives in Economics; Elasticity of a function - demand and cost elasticity, cross and partial elasticity.

Unit IV: Matrices and Determinants

Matrices: concept, types, matrix algebra, transpose, inverse, rank; Determinants: concept, properties, solving problems using properties of determinants, solution to a system of equations- Cramer's rule and matrix inversion method.

Text Book:

A. C. Chiang and K. Wainwright (2005): Fundamental Methods of Mathematical Economics, McGraw Hill International Edition.

Reference Book:

K. Sydsaeter and P. J. Hammond (2002): Mathematics for Economic Analysis. Pearson Educational Asia.

+3 FIRST YEAR SECOND SEMESTER

Core Paper - 3

INTRODUCTORY MACROECONOMICS

Time : 3 Hrs.

Credit : 06

End Semester Theory : 80 Marks

Mid Semester Theory : 20 Marks

Course Outcome

To educate students on different concept in macroeconomics like consumption function, investment function, national income accounting.

This course aims to introduce the students to the basic concepts of Macroeconomics. Macroeconomics deals with the aggregate economy. This course discusses the preliminary concepts associated with the determination and measurement of aggregate macroeconomic variable like savings, investment, GDP, money, inflation, and the balance of payments.

Unit I: Basic Concepts in Macroeconomics

Macro vs. Micro Economics; Limitations of Macroeconomics; Stock and Flow variables, Equilibrium and Disequilibrium, Partial and General Equilibrium Statics - Comparative Statics and Dynamics; National Income Concepts - GDP, GNP, NDP and NNP at market price, factor cost, real and nominal; Disposable personal Income;

Unit II: Measurement of Macroeconomic Variables

Output, Income and Expenditure Approaches; Difficulties of Estimating National Income; National Income Identities in a simple 2-sector economy and with government and foreign trade sectors; Circular Flows of Income in 2, 3 and 4-sector economies; National Income and Economic Welfare; Green Accounting.

Unit III: Money and Changes in its Value

Evolution and Functions of Money, Quantity Theory of Money - Cash Transactions, Cash Balances and Keynesian Approaches, Value of Money and Index Number of Prices, Inflation - Meaning, Causes, and Anti-Inflationary Measures; Classical, Keynesian, Monetarist and Modern Theories of Inflation, Inflationary Gap, Deflation- Meaning, Causes, and Anti-Deflationary Measures, Depression and Stagflation; Inflation vs. Deflation

Unit IV: Determination of National Income

The Classical Approach - Say's Law, Theory of Determination of Income and Employment with and without saving and Investment; Basics of Aggregate Demand and Aggregate Supply and Consumption- Saving - Investment Functions, Basics ideals about aggregate demand, aggregate supply. The Keynesian Approach - Basics of Aggregate Demand and Aggregate Supply and Consumption, Saving, Investment Functions; The Principle of Effective Demand; Income Determination in a Simple 2-Sector Model; Changes in Aggregate Demand and Income- The Simple Investment Multiplier.

Text Book:

N. Gregory Mankiw (2010): Macroeconomics, 7th edition, Cengage Learning India Private Limited, New Delhi.

Reference Book:

Richard T. Froyen (2005): Macroeconomics, 2nd Edition, Pearson Education Asia, New Delhi.

+3 FIRST YEAR SECOND SEMESTER**Core Paper - 4****MATHEMATICAL METHODS FOR ECONOMICS II**

Time : 3 Hrs.

Credit : 06

End Semester Theory : 80 Marks

Mid Semester Theory : 20 Marks

Course Outcome

To express relationship between economic variables mathematically, analyse, optimise and interpret them.

This course is the second part of a compulsory two-course sequence. This part is to be taught in Semester II following the first part in Semester I. The objective of this sequence is to transmit the body of basic mathematics that enables the study of economic theory at the undergraduate level, specifically the courses on microeconomic theory, macroeconomic theory, statistics and econometrics set out in this Syllabus. In this course, particular economic models are not the ends, but the means for illustrating the method of applying mathematical techniques to economic theory in general. The level of sophistication at which the material is to be taught is indicated by the contents of the prescribed textbook.

Unit I: Linear models:

Input- Output Model: Basic concepts and structure of Leontief's open and static Input-Output model; Solution for equilibrium output in a three-industry model; The closed model

Unit II: Second and Higher Order Derivatives and Integration:

Technique of higher order differentiation; Interpretation of second derivative; Second order derivative and curvature of a function; Concavity and convexity of functions; Points of inflection, Derivative of Implicit Function; Higher Order Partial Derivative Indefinite Integrals; Rules of Integration; Techniques of Integration: Substitution Rule, Integration by parts, and Partial Fractions; Definite Integral - Area Interpretation.

Unit III: Single and Multivariable Optimization:

Optimum values and extreme values; Relative maximum and minimum; Necessary versus sufficient conditions- First and Second derivative tests (using Hessian Determinants); Economic applications thereof, First and second order condition for extrema of multivariable functions; Convex functions and convex sets

Unit IV: Optimization with Equality Constraints:

Effects of a constraint; Finding stationary value - Lagrange-Multiplier method (Two variable single constraint case only): First and second order condition; The Bordered Hessian determinant.

Text Book:

A. C. Chiang and K. Wainwright (2005): Fundamental Methods of Mathematical Economics, McGraw Hill International Edition.

Reference Book:

K. Sydsaeter and P. J. Hammond (2002): Mathematics for Economic Analysis. Pearson Educational Asia.

+3 SECOND YEAR THIRD SEMESTER

Core Paper - 5 MICROECONOMICS I

Time : 3 Hrs.

Credit : 06

End Semester Theory : 80 Marks

Mid Semester Theory : 20 Marks

Course Outcome

To learn about theory of demand utility function, consumer choices involving risk and uncertainty, production function.

The course is designed to provide a sound training in microeconomic theory to formally analyze the behavior of individual agents. Since students are already familiar with the quantitative techniques in the previous semesters, mathematical tools are used to facilitate understanding of the basic concepts; this course looks at the behavior of the consumer and the producer and also covers the behavior of a competitive firm.

Unit I: Consumer Theory I

Preferences and Utility, Axioms of Rational Choice, Utility, Trades and Substitutions, Indifference curves; Mathematics of Indifference curves, Utility functions for specific preferences, the many good case; Utility Maximization and choice: the 2-good case (graphical analysis), the n-good case, Indirect utility function, the Lump sum principle, Expenditure minimization, properties of expenditure function

Unit II: Consumer Theory II

The Income and Substitution Effects: Demand function, changes in income, changes in a goods price-Direct and Indirect Approaches (Slutsky), the Individual's Demand Curve, compensated (Hicksian) demand curves and functions, demand elasticity, Consumer Surplus, Demand relationships among goods, the 2-good case, substitutes and complements, Net (Hicksian) substitutes, and Complements, Substitutability with many goods

Unit III: Production Theory and Costs

Production Functions: Marginal productivity, Production with One Variable Input (labour) and with Two- Variable Inputs, Isoquant Maps and the Rate of Technical Substitution, Returns to Scale, Elasticity of Substitution, Some Simple Production Functions: Linear, Fixed Proportions, Cobb-Douglas; Technical Progress Definition of Cost and its properties, Cost minimizing input choices (Optimization principles, Expansion Path), Cost Functions and Shift in Cost Curves, Long-Run versus Short-Run Cost Curves.

Unit IV: Profit Maximization

The Nature and Behavior of Firms, Marginal Revenue - Relationship between Average and marginal revenue, Short-Run Supply by a Price-Taking Firm, Profit Functions and its Properties, Profit maximization - General conditions, Input demands.

Text Book:

C. Snyder and W. Nicholson (2012): Microeconomic Theory: Basic Principles and Extensions, 11th Edition, Cengage Learning, Delhi, India.

Reference Books:

- 1) H. R. Varian (2010): Intermediate Microeconomics: A Modern Approach, 8 th Edition,
- 2) W.W. Norton and Company/Affiliated East-West Press (India). The workbook by Varian and Bergstrom may be used for problems.

+3 SECOND YEAR THIRD SEMESTER**Core Paper - 6
MICROECONOMICS I**

Time : 3 Hrs.

Credit : 06

End Semester Theory : 80 Marks

Mid Semester Theory : 20 Marks

Course Outcome

To apply macroeconomic knowledge in understanding the working of the economic as well as macroeconomic issues and policies.

This course introduces the students to formal modeling of a macro-economy in terms of analytical tools. It discusses various alternative theories of output and employment determination in a closed economy in the short run as well as medium run, and the role of policy in this context. It also introduces the students to various theoretical issues related to an open economy.

Unit I: Consumption and Investment

Consumption - Income Relationship, Propensities to Consume and the Fundamental Psychological Law of Consumption; Implications of Keynesian Consumption Function; Factors Influencing Consumption Function; Measures to Raise Consumption Function; Absolute, Relative, Permanent and Life

- Cycle Hypotheses Autonomous and Induced Investment, Residential and Inventory Investment, Determinants of Business Fixed Investment, Decision to Invest and MEC, Accelerator and MEI, Theories of Investment.

Unit II: Demand for and Supply of Money

Demand for Money - Classical, Neoclassical and Keynesian Approaches, The Keynesian Liquidity Trap and its Implications, Supply of Money, The Theory of Money Supply Determination and Money Multiplier, Measures of Money Supply in India

Unit III: Aggregate Demand and Aggregate Supply

Derivation of Aggregate Demand and Aggregate Supply Curves in the IS-LM Framework; Nature and Shape of IS and LM curves; Interaction of IS and LM curves and Determination of Employment, Output, Prices and Investment; Changes in IS and LM curves and their Implications for Equilibrium

Unit IV: Inflation, Unemployment and Expectations, and Trade Cycles

Inflation - Unemployment Trade off and the Phillips Curve - Short run and Long run Analysis; Adaptive and Rational Expectations; The Policy Ineffectiveness Debate; Meaning and Characteristics of Trade Cycles; Hawtrey's Monetary Theory, Hayek's Over-investment Theory and Keynes' views on Trade Cycles

Text Book:

N. Gregory Mankiw (2010): Macroeconomics, 7th edition, Cengage Learning India Private Limited, New Delhi

Reference Book:

Richard T. Froyen (2005): Macroeconomics, 2nd Edition, Pearson Education Asia, New Delhi.

+3 SECOND YEAR THIRD SEMESTER

Core Paper - 7

STATISTICAL METHODS FOR ECONOMICS II

Time : 3 Hrs.

Credit : 06

End Semester Theory : 80 Marks

Mid Semester Theory : 20 Marks

Course Outcome

To use the statistical analyses and techniques to solve economic problems.

This is a course on statistical methods for economics. It begins with some basic concepts and terminology that are fundamental to statistical analysis and inference. It is followed by a study and measure of relationship between variables, which are the core of economic analysis. This is followed by a basic discussion on index numbers and time series. The paper finally develops the notion of probability, followed by probability distributions of discrete and continuous random variables and introduces the most frequently used theoretical distribution, the Normal distribution.

Unit I: Data Collection and Measures of Central Tendency and Dispersion

Basic concepts: population and sample, parameter and statistic; Data Collection: primary and secondary data, methods of collection of primary data; Presentation of Data: frequency distribution; cumulative frequency; graphic and diagrammatic representation of data; Measures of Central Tendency: mean, median, mode, geometric mean, harmonic mean, their relative merits and demerits; Measures of Dispersion: absolute and relative - range,

mean deviation, standard deviation, coefficient of variation, quartile deviation, their merits and demerits; Measures of skewness and kurtosis.

Unit II: Correlation and Regression Analysis

Correlation: scatter diagram, sample correlation coefficient - Karl Pearson's correlation coefficient and its properties, probable error of correlation coefficient, Spearman's rank correlation coefficient. Two variable linear regression analysis - estimation of regression lines (Least square method) and regression coefficients - their interpretation and properties, standard error of estimate.

Unit III: Time Series and Index Number

Time Series: definition and components, measurement of trend- free hand method, methods of semi-average, moving average and method of least squares (equations of first and second degree only), measurement of seasonal component; Index Numbers: Concept, price relative, quantity relative and value relative; Laspeyer's and Fisher's index, family budget method, problems in construction and limitations of index numbers, test for ideal index number.

Unit IV: Probability Theory and Sampling

Probability: Basic concepts, addition and multiplication rules, conditional probability; Meaning of Sampling, Types of Sampling: Probability Sampling verses Non-Probability Sampling; Simple Random Sampling and its selection, Systematic Sampling, Multi-stage Sampling, Quota Sampling; Error: Sampling and Non-sampling.

Text books:

S. C. Gupta (2017): Fundamentals of Statistics, Himalaya Publishing House, Delhi

Reference Book:

Murray R. Spiegel (2017): Theory & Problems of Statistics, Schaum's publishing Series.

+3 SECOND YEAR FOURTH SEMESTER

Core Paper - 8 MICROECONOMICS II

Time : 3 Hrs.

Credit : 06

End Semester Theory : 80 Marks

Mid Semester Theory : 20 Marks

Course Outcome

Deeper knowledge in decision making under different market imperfection including oligopoly.

This course is a sequel to Microeconomics I. The emphasis will be on giving conceptual clarity to the student coupled with the use of mathematical tools and reasoning. It covers Market, general equilibrium and welfare, imperfect markets and topics under information economics.

Unit I: Firm Supply and Equilibrium

Market Environments; Pure competition; Supply decision of a competitive firm and Exceptions; Inverse Supply Function; Profits and Producer's Surplus; Long Run Supply Curve of a Firm; Long Run Average Costs; Short Run and Long Run Industry Supply; Industry Equilibrium in Short and Long Run; Meaning of Zero Profits; Economic Rent.

Unit II: General Equilibrium, Efficiency and Welfare

The Edgeworth Box; Trade; Pareto Efficient Allocations; Existence of equilibrium and efficiency; The Welfare Theorems and their implications; The Firm; Production and the Welfare Theorems; Production possibilities, comparative advantage and Pareto efficiency.

Unit III: Market Imperfections: Monopoly and Oligopoly

Barriers to Entry, Profit Maximization and Output Choice, Monopoly and resource Allocation, Monopoly, Product Quality and Durability, Price Discrimination, Second Degree Price Discrimination through Price Schedules, Regulation of Monopoly, Dynamic Views of Monopoly, Monopolistic competition; price output determination; excess capacity under monopolistic competition.

Unit IV: Game Theory

The Payoff Matrix of a Game; Nash Equilibrium; Mixed Strategies ;The Prisoner's Dilemma; Repeated Games; Enforcing a cartel; Sequential Games; A Game of entry deterrence. Oligopoly - Choosing a strategy; Quantity and price leadership; Simultaneous Quantity Setting; Example of Cournot Equilibrium; Simultaneous Price Setting; Collusion.

Text Book:

- 1) H. R. Varian (2010): Intermediate Microeconomics: A Modern Approach, 8 th Edition
- 2) W.W. Norton and Company/Affiliated East-West Press (India). The workbook by Varian and Bergstrom may be used for problems.

Reference Book:

- 1) C. Snyder and W. Nicholson (2012): Microeconomic Theory: Basic Principles and Extensions, 11th Edition Cengage Learning, Delhi, India.
- 2) Pindyck, Robert and Daniel Rubinfeld (2018): Microeconomics, 9th Edition, Pearson Education Inc.

+3 SECOND YEAR FOURTH SEMESTER

Core Paper - 9 MICROECONOMICS II

Time : 3 Hrs.

Credit : 06

End Semester Theory : 80 Marks

Mid Semester Theory : 20 Marks

Course Outcome

Application of subject knowledge in understanding the macroeconomics dynamics both in a closed and open economy.

This course is a sequel to Macroeconomics I. In this course, the students are introduced to the long run dynamic issues like growth and technical progress. It also provides the micro-foundations to the various aggregative concepts used in the previous course.

Unit I: Modeling Economic Growth

Accumulation of Capital in the basic Solow Model; supply and demand for goods, growth in the capital stock and the steady state, Golden rule level of capital: Comparing steady states, transition

to the golden rule steady state with too much and too little capital, Population Growth, Technological Progress- Solow version, Beyond Solow Model and Endogenous Growth

Unit II: Open Economy and Macroeconomic Policy

Balance of payments- concept; meaning of equilibrium and disequilibrium in balance of payments; Determination of foreign exchange rate- the balance of payments theory; Fixed versus flexible exchange rates; Short-run open economy model- the basic Mundell-Fleming model; Macroeconomic Policies - Fiscal policy, Crowding -out and Crowding - in; Monetary policy and instruments, the Transmission Mechanism; Effectiveness of macroeconomic policies in open and closed economies

Unit III: Classical and Keynesian Macroeconomics Thoughts

Keynes versus classics: Classical macroeconomics, Employment and output determination, Say's law, the quantity theory of money, Keynes's General theory: Keynes's main propositions; analysis of the labour market, Keynes's critique of Say's law and Quantity theory of money, the orthodox Keynesian school, underemployment equilibrium in the Keynesian model, the Phillips curve and orthodox Keynesian school.

Unit IV: Monetarist and New Classical Macroeconomic Thoughts

The orthodox monetarist school, the Quantity Theory of Money approach, the expectations augmented Phillips curve analysis, the orthodox monetarist school and stabilization policy New Classical Economics: The influence of Robert e Lucas Jr, the structure of new classical models: the Rational Expectations hypothesis; and policy implications

Text Book:

N. Gregory Mankiw (2010): Macroeconomics, 7th edition, Cengage Learning India Private Limited, New Delhi

Reference Book:

Brian Snowdon and Howard R Vane (2005): Modern Macroeconomics: Its Origins, Development and Current State, Edward Elgar.

+3 SECOND YEAR FOURTH SEMESTER

Core Paper - 10

RESEARCH METHODOLOGY

Time : 3 Hrs.

Credit : 06

End Semester Theory : 80 Marks

Mid Semester Theory : 20 Marks

Course Outcome

Develop acquaintance with fundamentals of research methods and use of sampling techniques.

The course is to develop a research orientation among the students and to acquaint them with fundamentals of research methods. Specifically, the course aims at introducing them to the basic concepts used in research and to scientific social research methods and their approach. It includes discussions on sampling techniques, research designs and techniques of analysis.

Unit I: Basics of Research

Introduction to Research: Meaning, Objectives, Motivation, Types, Approaches, Significance,

Research Process, Criteria of Good Research; Qualities of a Good Researcher, Research as a Career.

Unit II: Research Problem

Defining the Research Problem: What is a Research Problem? Selecting the Problem, Necessity of Defining the Problem, Technique Involved in Defining a Problem; Research Design: Meaning, Need, Features of a Good Design, Important Concepts Relating to Research Design, Different Research Designs, Basic Principles of Experimental Designs

Unit III: Issues in Research

Measurement in Research, Measurement Scales, Sources of Error in Measurement, Tests of Sound Measurement, Techniques of Measurement Tools, Scaling and Important Scaling Technique, Research Ethics: codes and ethics, permissions to research, responsibilities, confidentiality, feedback, participatory research; Research Proposal and literature review: research proposal, review of literature, levels of analysis, using the library and internet, abstracting, word processing, plagiarism, Concept of IPR

Unit IV: Actions in Research

English in report writing: words, sentences, paragraph, writing style; The Report: improving quality, sections, drawing conclusions, evaluation checklists, persistence; Common Citation Styles

Text Book:

Kothari, C. R. (2004): Research Methodology: Methods and Techniques, New Age International Private Limited Publishers, New Delhi.

Reference Books:

- 1) Guthrie, G. (2010): Basic Research Methods, Sage Publications India Private Limited, New Delhi.
- 2) Anderson Durston, Poole - Assignment and Thesis writing (Wiley Easter Limiting)

+3 THIRD YEAR FIFTH SEMESTER

Core Paper - 11 INDIAN ECONOMY I

Time : 3 Hrs.

Credit : 06

End Semester Theory : 80 Marks

Mid Semester Theory : 20 Marks

Course Outcome

Critically understand the Indian economic growth trajectory and sectoral contributions.

Using appropriate analytical frameworks, this course reviews major trends in economic indicators and policy debates in India in the post-Independence period, with particular emphasis on paradigm shifts and turning points. Given the rapid changes taking place in India, the reading list will have to be updated annually.

Unit I: Basic Characteristics of Indian Economy as a Developing Economy

Indian Economy in the Pre-British Period; The Structure and Organization of Villages and Towns; Industries and Handicrafts in Pre-British India; Colonialism; Economic Consequences of British

Rule; Decline of Handicrafts and Progressive Ruralization; The Land System and Commercialization of Agriculture; Industrial Transition; Colonial Exploitation and Impacts - Underdevelopment; Colonization and Modernization; State Policies and Economic Underdevelopment; The Current State of Indian Economy.

Unit II: Population and Human Development

Population Growth and Economic Development - size, growth and future of population; Causes of rapid population growth; Population and economic development; Population policy; Demographic issues - Sex and Age Composition of population; Demographic Dividend; Urbanization and Migration; Human Resource Development - Indicators and importance of Human Resource Development; Education policy; Health and nutrition.

Unit III: National Income in India - The Growth Story and Current Challenges

Trends in national and per capita income; Changes in sectoral composition of national income; Regional disparities in Growth and Income; Savings and Investment and Economic Growth - The Linkage; Poverty - Estimation and Trends, Poverty Alleviation Programs - MGNREGA, NRLM, SJSRY; Inequality - Measures and trends in India; Unemployment - Nature, Estimates, Trends, Causes and Employment Policy

Unit IV: Economic Planning in India

Rationale, Features, Objectives, Strategies, Achievements and Assessment of Planning in India; Eleventh Five Year Plan - Objectives, Targets and Achievements; Twelfth Five Year Plan - Vision and Strategy; From Planning to NITI - Transforming India's Development Agenda.

Text Book:

Misra, S. K. and Puri V. K. Indian Economy — Its Development Experience. Himalaya Publishing House, Mumbai

Reference Books:

- 1) Dutt R. and Sundharam K. P. M. Indian Economy -S. Chand & Company Ltd., New Delhi.
- 2) Dutt and Sundharam, Gaurav Datt and Ashwani Mahajan, Indian Economy- S Chand Publications, 7th Revised Edition.
- 3) Indian Economy Since Independence, ed by Uma Kapila, Academic Foundation, Revised Nineteenth Edition 2008-09
- 4) Government of India (Current Year): Economic Survey, Ministry of Finance, New Delhi

+3 THIRD YEAR FIFTH SEMESTER

Core Paper - 12

DEVELOPMENT ECONOMY I

Time : 3 Hrs.

Credit : 06

End Semester Theory : 80 Marks

Mid Semester Theory : 20 Marks

Course Outcome

In brings out an axiomatic basis for inequality measurement, concept of development and various growth models.

This is the first part of a two-part course on economic development. The course begins with a discussion of alternative conceptions of development and their justification. It then proceeds to aggregate models of growth and cross-national comparisons of the growth experience that can help evaluate these models. The axiomatic basis for inequality measurement is used to develop measures of inequality and connections between growth and inequality are explored. The course ends by linking political institutions to growth and inequality by discussing the role of the state in economic development and the informational and incentive problems that affect state governance.

Unit I: Study of Economic Development

Development Economics as a subject; economic growth and economic development; Characteristics of underdeveloped countries - vicious cycle of poverty and cumulative causation; obstacles to economic development; measures of economic development - national and per capita income, basic needs approach, capabilities approach, three core values of development, PQLI, HDI, HPI, MDPI, GDI; capital formation and economic development.

Unit II: Theories of Economic Growth and Development

Classical theory, Marxian theory; Schumpeterian theory; Rostow's stages of economic growth; Solow model and convergence with population growth and technical progress, Harrod Domar Model.

Unit III: Poverty, Inequality, Agriculture, Industry and Development:

Measuring poverty: Head Count Ratio, Poverty Gap Ratio, Squared Poverty Ratio, FGT Ratio; Measuring Inequality - Lorenz curve and Kuznets' inverted U hypothesis; Growth, poverty and inequality; Policy options- some basic considerations Agriculture, Industry and Economic Development: Role of agriculture; Transforming traditional agriculture; Barriers to agricultural development; Role of industrialization; Interdependence between agriculture and industries - A model of complementarities between agriculture and industry; terms of trade between agriculture and industry; functioning of markets in agrarian societies; interlinked agrarian markets.

Unit IV: Institutions and Economic Development:

Role of institutions in economic development; Characteristics of good institutions and quality of institutions; The pre-requisites of a sound institutional structure; Different measures of institutions-aggregate governance index, property rights and risk of expropriation; The role of democracy in economic development; Role of markets and market failure; Institutional and cultural requirements for operation of effective private markets; Market facilitating conditions; Limitations of markets in LDCs; Corruption and economic development - tackling the problem of corruption.

Text book:

Todaro, Michael P and Stephen C Smith (2006): Economic Development, 8th Edition, Pearson

Reference Books:

- 1) Debraj Ray (2009): Development Economics, Oxford University Press.
 - 2) Thirlwall, A P (2011): Economics of Development, 9th Edition, Palgrave Macmillan.
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+3 THIRD YEAR SIXTH SEMESTER

Core Paper - 13 INDIAN ECONOMY II

Time : 3 Hrs.

Credit : 06

End Semester Theory : 80 Marks

Mid Semester Theory : 20 Marks

Course Outcome

Evaluating the rapid changes in India, empirical evidence and familiarise with different environmental protection acts and policies.

This course examines sector-specific policies and their impact in shaping trends in key economic indicators in India. It highlights major policy debates and evaluates the Indian empirical evidence. Given the rapid changes taking place in the country, the reading list will have to be updated annually.

Unit I: Agricultural Development in India

Indian Agriculture: nature, importance, trends in agricultural production and productivity, factors determining production, land reforms, new agricultural strategies and green revolution, rural credit; Agricultural marketing and warehousing.

Unit II: Industrial Development in India

Trends in industrial output and productivities; Industrial Policies of 1948, 1956, 1977 and 1991; Industrial Licensing Policies - MRTP Act, FERA and FEMA; Growth and problems of SIs, Industrial sickness; Industrial finance; Industrial labour.

Unit III: Tertiary Sector, HRD and the External Sector

Tertiary Sector: growth and contribution of service sector to GDP of India, share of services in employment; Human development - concept, evolution, measurement; HRD: indication, importance, education in India, Indian educational policy; Health and Nutrition. Foreign Trade: role, composition and direction of India's foreign trade, trends of export and import in India, export promotion versus import substitution; Balance of Payments of India; India's Trade Policies; Foreign Capital - FDI, Aid and MNCs.

Unit IV: Indian Economy and Environment

Environmental Policies in India: The Environment (Protection) Act 1986, The Environment (Protection) Rules 1986, The National Forest Policy 1988, Policy statement for Abatement of Pollution 1992, National Conservation Strategy and Policy Statement on Environment and Development 1992, The National Environment Appellate Authority Act 1997, National Environmental Policy 2006; Global deal with Climate Change: Introduction, Intergovernmental Panel for Climate Change (IPCC), Impact of Climate Change on India, Global Response on Climate Change, Possible Role of India.

Text Book:

Misra, S. K. and Puri V. K. Indian Economy — Its Development Experience. Himalaya Publishing House, Mumbai.

Reference Books:

- 1) Dutt R. and Sundharam K. P. M. Indian Economy, S. Chand & Company Ltd., New Delhi.
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- 2) Dutt and Sundharam, Gaurav Datt and Ashwani Mahajan, Indian Economy, S Chand Publications, 7th Revised Edition
- 3) Indian Economy Since Independence, ed by Uma Kapila, Academic Foundation, Revised Nineteenth Edition 2008-09
- 4) Government of India (Current Year): Economic Survey, Ministry of Finance, New Delhi.

+3 THIRD YEAR SIXTH SEMESTER

Core Paper - 14

DEVELOPMENT ECONOMY II

Time : 3 Hrs.

Credit : 06

End Semester Theory : 80 Marks

Mid Semester Theory : 20 Marks

Course Outcome

It enlightens about the raised demographic evaluation in the processes of development. It reflects on the international dependence as well as internal dependence on climate issues, Sustainability and growth and development of nations.

This is the second unit of the economic development sequence. It begins with basic demographic concepts and their evolution during the process of development. The structure of markets and contracts is linked to the particular problems of enforcement experienced in poor countries. The governance of communities and organizations is studied and this is then linked to questions of sustainable growth. The course ends with reflections on the role of globalization and increased international dependence on the process of development.

Unit I: Population and Development

Demographic concepts: birth and death rates, age structure, fertility and its determinants, the Malthusian population trap and the microeconomic household theory of fertility; costs and benefits of population growth and the model of low-level equilibrium trap; rural-urban migration - the Harris Todaro migration model and policy implications.

Unit II: Dualism and Economic Development

Dualism - geographic, social and technological; the theory of cumulative causation (Myrdal); the regional inequalities in the context of economic development; the inverted U relationship; international inequality and the centre periphery thesis; dependency, exploitation and unequal exchange; the dualistic development thesis and its implications

Unit III: Environment and Development

Basic issues of environment and development - Development and environment inter-linkage; Poverty, environmental degradation and externalities; common property resources, renewable and non-renewable resources; concept of sustainable development; basics of climate change.

Unit IV: International Trade and Economic Development and Financing Economic Development

Trade and economic development; export led growth; terms of trade and economic growth - the Prebisch- Singer Hypothesis; trade strategies for development - import substitution vs.

export promotion; international commodity agreements; trade vs aid. Saving, capital formation and economic development; financial sector and economic development; taxation, public borrowing and economic development; inflation, foreign finance, investment and foreign aid - controversies and opportunities.

Text Book:

Todaro, Michael P and Stephen C Smith (2006): Economic Development, 8th Edition, Pearson

Reference Book:

Thirlwall, A P (2011): Economics of Development, 9th Edition, Palgrave Macmillan.

+3 THIRD YEAR FIFTH SEMESTER

DSE - 1

INTRODUCTORY ECONOMETRICS

Time : 3 Hrs.

End Semester Theory : 80 Marks

Credit : 06

Mid Semester Theory : 20 Marks

Course Outcome

A comprehensive introduction to basic econometrics concept and technique to help students understand the regression models and its applications in daily lives.

This course provides a comprehensive introduction to basic econometric concepts and techniques. It covers statistical concepts of hypothesis testing, estimation and diagnostic testing of simple and multiple regression models. The course also covers the consequences of and tests for misspecification of regression models.

Unit I: Introduction

Definition, Nature and scope of econometrics; Theoretical Probability Distributions: Binomial, Poisson and Normal distributions: their properties Theory of Estimation: Estimation of parameters; properties of estimators - small sample and asymptotic properties; point and interval estimation

Unit II: Hypothesis Testing

Testing of hypotheses: defining statistical hypotheses; Simple and composite hypotheses; Null and alternative hypothesis; Type I and Type II errors, Critical region; Neyman-Pearson lemma; Power of a test; Test statistics: z, chi square, t and F

Unit III: Linear Regression Analysis

Two variable linear regression model - Assumptions; Least square estimates, Variance and co-variance between Least square estimates; BLUE properties; Standard errors of estimates; Co-efficient of determination; Inference in a two variable linear regression model; ANOVA; Forecasting. Introduction to multiple regression models.

Unit IV: Violation of Classical Assumptions

Heteroscedasticity, Multicollinearity and Auto-correlation: Meaning, consequences, tests and remedies.

Text Book:

Gujarati, D & Sangeetha (2007); "Basic Econometrics", McGraw Hill Book Co.

+3 THIRD YEAR FIFTH SEMESTER

DSE - 2

PUBLIC ECONOMICS

Time : 3 Hrs.

Credit : 06

End Semester Theory : 80 Marks

Mid Semester Theory : 20 Marks

Course Outcome

Familiarises the nature of government intervention to attain economic equity and efficiency.

Public economics is the study of government policy from the points of view of economic efficiency and equity. The paper deals with the nature of government intervention and its implications for allocation, distribution and stabilization. Inherently, this study involves a formal analysis of government taxation and expenditures. The subject encompasses a host of topics including public goods, market failures and externalities.

Unit I: Introduction to Public Finance and Public Budgets

Public Finance: meaning and scope, distinction between public and private finance; public good versus private good; Principle of maximum social advantage; Market failure and role of government; Public Budget: kinds of budget, economic and functional classification of the budget; Balanced and unbalanced budget; Balanced budget multiplier; Budget as an instrument of economic policy

Unit II: Public Expenditure

Meaning, classification, principles, cannons and effects, causes of growth of public expenditure, Wagner's law of increasing state activities, Peacock-Wiseman hypotheses

Unit III: Public Revenue

Sources of Public Revenue; Taxation - meaning, cannons and classification of taxes, impact and incidence of taxes, division of tax burden, the benefit and ability to pay approaches, taxable capacity, effects of taxation, characteristics of a good tax system, major trends in tax revenue of central and state governments in India.

Unit IV: Public Debt

Sources, effects, debt burden - Classical/ Ricardian views, Keynesian and post -Keynesian views; shifting - intergenerational equity, methods of debt redemption, debt management, tax versus debt.

Text Books:

J. Hindriks and G. Myles (2006): Intermediate Public Economics, MIT Press.

Reference Book:

- 1) Bhatia H L (2018): Public Finance. Vikas Publishing House
 - 2) R. A. Musgrave and P. B. Musgrave(1989): Public Finance in Theory and Practices. McGraw Hill
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+3 THIRD YEAR FIFTH SEMESTER

DSE - 3

INTERNATIONAL ECONOMICS

Time : 3 Hrs.

Credit : 06

End Semester Theory : 80 Marks

Mid Semester Theory : 20 Marks

Course Outcome

Develops an insight in to trade policies and international financial system.

This course introduces the students to international trade and finance to understand the theories of international trade and develop insights into trade policy and balance of payments. The course also develops insight into international financial system and the trade policy of India.

UNIT I: Importance of Trade and Trade Theories

Importance of the study of International Economics; Inter -regional and international trade; Theories of Trade- absolute advantage (Adam Smith), comparative advantage (David Ricardo) and opportunity cost (Haberler); Heckscher-Ohlin theory of trade — its main features, assumptions and limitations (Leontief Paradox) Factor Price Equalization theorem.

UNIT II: Trade Policy and International Economic Institutions

Concepts of terms of trade and their importance; Doctrine of reciprocal demand - Offer curve technique; Gains from trade ;Trade as an Engine of Growth and Concept of immiserizing growth, Tariffs and quotas - their impact in partial equilibrium analysis; General Equilibrium analysis of tariff and the concept of optimum tariff, Functions of IMF (Conditional Clause), Role of IMF in international liquidity, Reforms for the emergence of international monetary system; World Bank and WTO; Their achievements and failures; Their Role from the point of view of India.

UNIT III: Exchange Rate

Concept and Types of Exchange Rate (bilateral vs. trade-weighted exchange rate, cross exchange rate, spot, forward, futures), Demand for and Supply of foreign exchange, Exchange Rate Determination: Mint Parity Theory, Purchasing-Power Parity Theory, Fixed versus Flexible exchange rate.

UNIT IV: Balance of Trade and Payments

Concepts and components of balance of trade and balance of payments; Disequilibrium in balance of payments; Various measures to correct deficit in BOPs (Expenditure switching and expenditure reducing policies, Direct control), Depreciation Vs. Devaluation; Elasticity approach to devaluation, Foreign trade multiplier- Concept and implications.

Text Book:

Mannur H. G (Recent Edition) International Economics, Vikash Publishing

Reference Books:

- 1) Salvatore Dominick, International Economics, Wile India.
 - 2) Sodersten Bo and Reed J, International Economics, McMillan Publisher
-

+3 THIRD YEAR SIXTH SEMESTER

DSE - 4

DISSERTATION / RESEARCH PROJECT

Time : 3 Hrs.

Credit : 06

End Semester Theory : 80 Marks

Mid Semester Theory : 20 Marks

Course Outcome

A research project enriches the knowledge base through application of theoretical knowledge in preparing exhaustive report on chosen areas of study and analyses the outcomes thereof.

The project is intended to establish the connection between Economics as confined to the text books and class rooms and Economics at play in the ground. It is expected to give an empirical content to the subject. Economics is defined as the study of mankind in the ordinary business of life. It studies individual as well as group behavior.

Project work at the undergraduate level is an in-depth study on a topic chosen by the student. The objective of the project work for the students at undergraduate level is to expose students to the social and real-world contexts in which the subjects taught in the classroom have applications. Therefore, the topic must be related to the field of study the student is enrolled. It is undertaken with the guidance of a faculty supervisor, and involves a prolonged period of investigation and writing. The supervisor is supposed to help the student and mentor him/her throughout, from selection of the topic to submission of the project report.

The project output will be a project report written on the topic, chosen by the student and approved by the guide, in about 10000 words.

The process of project preparation typically comprises of an investigation of a particular topic, based on the application of philosophical and theoretical knowledge available in the already existing scientific literature and other published sources of information. The student may use already available data (texts, documents, artworks or existing data sets) or she may go for collection of data from the field. The final report should ideally have the following sections.

- (1) Abstract (in about 500 words) containing a summary of the entire report.
- (2) Introduction of the topic, arguments for choosing such a topic and the key investigation propositions.
- (3) A review of the existing knowledge on the topic
- (4) Information on the data and data treatment tools used in the study
- (5) An analysis of data and findings
- (6) Conclusions
- (7) References

A good research project requires sincere efforts and honest dedication from students. Moreover, it requires an engagement of the student with an issue under probe for a fairly long period of time compared to their preparations of subjects for the examination.

A successful completion of the project report has several positive learning outcomes for the student. It empowers the student with the life skill of patience and persistence. It also helps the student to locate her theoretical understandings in the context of socio-economic and political realities.

+3 SECOND YEAR THIRD SEMESTER

GE - 3 (ARTS)

INDIAN ECONOMY I

Time : 3 Hrs.

Credit : 06

End Semester Theory : 80 Marks

Mid Semester Theory : 20 Marks

This paper introduces the students to the essentials of Indian economy with an intention of understanding the basic feature of the Indian economy and its planning process. It also aids in developing an insight into the agricultural and industrial development of India. The students will understand the problems and policies relating to the agricultural and industrial sectors of India and current challenges of Indian economy.

Unit I: Introduction to Indian Economy and Current Challenges

Colonialism & British Rule: Exploitation and under-development in India; Basic features of India Economy; Indian Economy as a developing economy; Demographic trends in India - Size and growth of population, Occupational structure, Sex composition, Age structure and demographic dividend; Causes of population growth and population policy; The problem of unemployment and recent policies for employment generation; The problem of inequality in income distribution and its causes, Policies to address inequality.

Unit II: Indian Agriculture

Role of Agriculture in Indian Economy; Causes of low productivity, Green Revolution and Land Reforms, Agricultural Finance-Sources and Problems; Agricultural Marketing in India

Unit III: Industrial Development in India

Role of Industrialization in Indian Economy; Small Scale & Cottage Industries: Meaning, Role, Problems and Remedies; Industrial Policies of 1948, 1956, 1977 and 1991; Problems of Industrial Development in India; Industrial Sickness

Unit IV: Service Sector in India

Growth & Contribution to GDP; Composition and relative importance of service sector; Factors determining growth of the sector; ICT and IT - Spread and Policy; Sustainability of services led growth.

Text Book:

Misra, S. K. and Puri V. K. Indian Economy — Its Development Experience. Himalaya Publishing House, Mumbai

Reference Book:

Dutt R. and Sundharam K. P. M. Indian Economy. S. Chand & Company Ltd., New Delhi.

+3 SECOND YEAR FOURTH SEMESTER

GE - 4 (ARTS)

INDIAN ECONOMY-II

Time : 3 Hrs.

Credit : 06

End Semester Theory : 80 Marks

Mid Semester Theory : 20 Marks

This paper is the part II of Indian economy deals with the external sector, financial markets in India, Indian Public Finances and Economic Reforms. This paper also throws some light on current challenges of Indian Economy.

Unit I: External Sector in India

Trends, Composition & Direction in exports from and imports of India; Problems of Balance of Payment: Causes of deficit in BOP & measures to correct it; Trade Policy- Export Promotion Vs Import Substitution; Foreign Trade Policy of India; WTO and India.

Unit II: Financial Markets in India

Commercial Banking in India- Nationalization of Banks; Lead bank scheme and branch expansion; RBI - Functions, Monetary Policy; Development Banking - IFCI, IDBI, SIDBI and NABARD.

Unit III: Indian Public Finance

Public Expenditure-Growth and Composition, Causes of Growth of Public Expenditure in India: Tax Revenue of Central and State Governments; Concept of VAT; Deficit Financing in India - Revenue, Budget, Fiscal and Primary Deficits; Purpose and Effects of Deficit Financing; India's Fiscal Policy-Objectives

Unit IV: Current Challenges Facing Indian Economy

Inflation - Causes, Consequences and Anti-inflationary Policy; Poverty - Poverty line and Estimates, Major Poverty Alleviation Programmes; Environmental Degradation - Growth and Environment; Population Growth and Environment; Environment Policy; Economic Reforms- Globalization, Macroeconomic Stabilization, Structural Reforms, and their impact on the Indian Economy; Foreign capital and MNCs-Role and consequences

Text Book :

Misra, S. K. and Puri V. K. Indian Economy — Its Development Experience. Himalaya Publishing House, Mumbai

Reference Book :

- 1) Dutt R. and Sundharam K. P. M. Indian Economy. S. Chand & Company Ltd., New Delhi.
- 2) Basu, Kaushik (2016): An Economist in the Real World: The Art of Policy Making in India, Penguin.

+3 FIRST YEAR FIRST SEMESTER**GE - 1 (Commerce)****MICRO ECONOMY**

Time : 3 Hrs.

Credit : 06

End Semester Theory : 80 Marks

Mid Semester Theory : 20 Marks

Objective of the course is to acquaint the students with the concepts of micro-economics dealing with consumer behavior. The course also makes the student understand the supply side of the market through the production and cost behavior of firms.

Unit - I : Demand and Consumer Behavior

Concept of demand: demand function, law of demand, derivation of individual and market demand curves, shifting of the demand curve, elasticity of demand, Consumer behavior, Marshallian utility approach and Indifference Curve approach; utility maximization conditions. Income- Consumption Curve (ICC) and Price-Consumption Curve (PCC).

Unit - II: Production and Cost

Production function: Short-run and Long-run; Total Product, Average Product and Marginal Product, Law of returns to a variable factor, Law of Returns to Scale; Concepts of Iso-quant and

iso-cost line; Cost: Accounting and Economic Costs; Social and Private Costs; Short-run and Long-run Costs; Relation between Average and Marginal.

Unit - III: Perfect Competition

Concept of Perfectly Competitive market: Assumptions, Profit maximization conditions; Related concepts of Total Revenue, Average Revenue and Marginal Revenue, Short-run and Long-run equilibrium of a firm; determination of short-run supply curve of a firm, measuring producer surplus under perfect competition.

Unit - IV: Imperfect Competition Monopoly

Concept of Monopoly: Sources of monopoly power; Short-run and Long-run equilibrium of a monopoly firm; Price discrimination; Social Cost of Monopoly (concept only).

Monopolistic Competition

Concept of Imperfectly Competitive market; Monopolistic Competition: Features and examples; Oligopoly: Non-Collusive Oligopoly: Sweezy's Kinked demand Curve Model, Collusive Oligopoly: Cartel (concept with example).

Learning Outcomes:

The students would be able to apply tools of consumer behaviour and firm theory to business situations.

Text Books Recommended:

- Ahuja, H. L, Micro Economics, S.Chand
- Dash, M. K C.M icro Economics- - Himalaya Publishing House

Suggested Readings:

- Browning, E.K. and J.M. Browning; Microeconomic Theory and Applications, Kalyani Publishers
- Das & Sengupta; Microeconomics I and Statistics, Oxford University Press
- Dwivedi, D.N. Micro Economics, Vikash Publication
- Mehta P.K, Singh M. – Micro Economics – Taxmann Publication
- Maddala G.S.and E.Miller; Microeconomics: Theory and Applications, MCGraw-Hill International
- N. Gregory Mankiw, Principles of Micro Economics, Cengage Learning
- Pindyck, R.S., D. L. Rubinfeld and P. L. Mehta; Microeconomics, Pearson Education
- T.R. Jain, B.D. Majhi, Micro Economics- V.K. Global

+3 FIRST YEAR SECOND SEMESTER

GE - 2 (Commerce)

MICRO & INDIAN ECONOMY

Time : 3 Hrs.

Credit : 06

End Semester Theory : 80 Marks

Mid Semester Theory : 20 Marks

Objectives:

The course aims at providing the student with knowledge of basic concepts of the macroeconomics. The modern tools of macro-economic analysis are discussed and the policy framework is elaborated, including the open economy.

Unit - I - Introduction to Macro Economics

Introduction: Meaning and definition of Microeconomics and macroeconomics, Difference between Microeconomics and macroeconomics, macro-economic goals, components of Macroeconomics, Economic Systems: Mixed economy, Socialism economy, Capitalism economy and Islamic economy (only meaning and characteristics)

Unit - II: National Income Accounting

Definition of National Income, Concepts of National Income, GDP and GNP, Methods of Measuring National Income, Uses of National Income, Difficulties in calculating National Income, Real Income, Per Capita Income and Growth Rate

Unit - III: National Income Equilibrium

I Concepts of Equilibrium, Consumptions & Savings, Investment Theory, Government Sector, Foreign Sector, Determination of Equilibrium, Multiplier Concept, Inflationary Gap and Deflationary Gap, Summary of Two, Three and Four-sector Economies

Unit - IV: Role of Government

Economic functions of Government, Types of Budgets, Government Revenue, Government Expenditure, Public Debt, and Government Policy, Macroeconomic Problems-Introduction, Business cycle, Unemployment, Inflation, Deflation, Depression, RBI and monetary policy.

Learning Outcomes:

Students would be able to apply the modern tools of macro-economic analysis so as to minimize the adverse impact of macro-economic factors on business.

Text Books Recommended

- Ahuja H.L. – Macro Economics – S.Chand
- M. Treheran, T Treheran- Macro & Indian Economy, , V.K. Global publishing Pvt. Ltd., New Delhi

Suggested Readings

- Bhattacharyya- Macroeconomics & Indian Economy, Oxford University Press.
- Dornbusch, Rudiger., Stanley. Fischer and Richard Startz, Macroeconomics. Irwin/McGraw-Hill
- P.K. Dhar, Kalyani Publishers Macro and Indian economy
- Mankiw, N. Gregory. Principles Macroeconomics-Cengage Learning
- V K Puri- Macro and Indian Economy- Himalaya Publishing House
- Vaish, M.C. – Macro Economics – Vikash Publication

+3 SECOND YEAR THIRD SEMESTER**GE - 3 (Commerce)
BUSINESS STATISTICS**

Time : 3 Hrs.

Credit : 06

End Semester Theory : 80 Marks

Mid Semester Theory : 20 Marks

Objective:

The objective of this course is to familiarize students with the basic statistical tools used for managerial decision-making.

Unit - I: Statistical Data and Descriptive Statistics (With the use of Excel and other

statistical software)

Nature and Classification of data: Univariate, Bivariate and multivariate data; time-series and cross-sectional data: Measures of Central Tendency- a) Mathematical averages including arithmetic mean, geometric mean and harmonic mean. Properties and applications, b) Positional Averages Mode and Median and other partition values including quartiles, deciles, and percentiles.

Unit - II: Measures of Variation (With the use of Excel and other statistical software)

Absolute and relative, Range, quartile deviation, mean deviation, standard deviation, and their coefficients, Properties of standard deviation/variance Skewness: Meaning, Measurement using Karl Pearson and Bowley's measures; Concept of Kurtosis.

Unit - III: Simple Correlation and Regression Analysis (With the use of Excel and other latest software)

Correlation Analysis: Meaning of Correlation: simple, multiple and partial; linear and non-linear, Correlation and Causation, Scatter diagram, Pearson's co-efficient of correlation; calculation and properties (proofs not required). Correlation and Probable error; Rank Correlation Regression Analysis: Principle of least squares and regression lines, Regression equations and estimation; Properties of regression coefficients; Relationship between Correlation and Regression coefficients; Standard Error of Estimate.

Unit - IV : Index Numbers (With the use of Excel and other latest software)

Meaning and uses of index numbers: Construction of index numbers: fixed and chain base: univariate and composite. Aggregative and average of relatives – simple and weighted Tests of adequacy of index numbers, Base shifting, splicing and deflating. Problems in the construction of index numbers Construction of consumer price indices, important share price indices.

Time Series Analysis (With the use of Excel and other latest software)

Components of time series, Additive and multiplicative models Trend analysis, Fitting of trend line using principle of least squares – linear, second-degree parabola and exponential, Conversion of annual linear trend equation to quarterly/monthly basis and vice-versa; Moving averages Seasonal variations- Calculation of Seasonal Indices using Simple averages, Ratio-to-trend, and Ratio-to-moving averages methods. Uses of Seasonal Indices.

Learning Outcomes:

Students would be armed with the knowledge of using different statistical tools very much required in the decision-making process in any business as well as business research.

Text Books Recommended

- Gupta, S.P., and Archana Gupta. Statistical Methods. Sultan Chand and Sons, New Delhi
- Levine and Viswanathan. Business Statistics, Pearson Publication

Suggested Readings:

- Agarwal, S.C. Business statistics, , V.K. Global Pub. Pvt. Ltd, New Delhi.
- Das & Sengupta, Microeconomics I and Statistics: Oxford University Press
- Gupta, S.C. Fundamentals of Statistics. Himalaya Publishing House
- Keller G, and Arora H, B STAT, Cengage Learning
- Patri and Patri, Business statistics, Kalyani Publishers New Delhi
- Sharma J K, Fundamentals of Business Statistics – Vikash Publication
- S K Sahoo, P K Prusty, Business Statistics–Vrinda Publications (P) Ltd
- Vohra N. D., Business Statistics, McGraw Hill

EDUCATION

+ 3 FIRST YEAR FIRST SEMESTER

Core Paper - 1 EDUCATIONAL PHILOSOPHY

Time : 3 Hrs.
Credit: 04

End Semester Theory : 60 Marks
Mid-Semester Theory : 15 Marks

Learning Objectives :

On completion of this course, the learners shall be able to:

- * state and analyze the meaning of education and form own concept on education
- * explain philosophy as the foundation of education
- * analyze aims of education
- * describe the essence of different formal philosophies and draw educational implications
- * compare and contrast Indian and western philosophies of education.

UNIT 1: Education in Philosophical Perspective

- (i) Etymological meaning of education
- (ii) Narrower and broader meaning of education, Lifelong Education
- (iii) Aims of Education- Individual and Social Aims of Education
- (iv) Meaning and nature of philosophy
- (v) Branches of Philosophy- Metaphysics, Epistemology and Axiology, and its educational implications
- (vi) Functions of Philosophy in relation to education

UNIT 2 : Formal Schools of Philosophy and their Educational Implications

- (i) Idealism, Naturalism, Pragmatism with reference to: Aims of Education, Curriculum, Methods of Teaching, Role of Teacher, Discipline

UNIT 3 : Indian Schools of Philosophy and their Educational Implications

- (i) Common Characteristics of Indian Philosophy
- (ii) Sankhya, Vedanta, , Buddhism, Jainism with reference to: Philosophical tenets, Aims of education, Curriculum, Methods of Teaching, Role of Teacher

UNIT 4 : Educational Thought of Western and Indian Thinkers

- (i) Plato
- (ii) Dewey
- (iii) Gopabandhu Das
- (iv) Gandhi
- (v) Tagore
- (vi) Aurobindo

PRACTICAL

Credit: 02

25 Marks

- * Preparation of a report on relevance of Educational Thoughts of any one great educator for modern India based on unit - 4.

NB : It will be evaluated by both the Internal and External examiners.

Text Books

- * Safaya, R.N. & Shaida B.D. (2010). *Modern Theory and Principles of Education*. New Delhi: Dhanpatrai Publishing Company Pvt. Ltd. Nayak, B.K. (2018).
- * Ravi, Samuel S. (2015). *A Comprehensive Study of Education*. Delhi: PHI Learning Pvt. Ltd.
- * Taneja, VR. (2000). *Educational thought and practice*. New Delhi: Sterling Publishers Pvt. Ltd.

Reference Books

- * Aggrawal, J.C. (2013). *Theory and principle of education*. New Delhi: Vikash Publishing House Pvt. Ltd.
 - * Anand, C.L. *et al.* (1983). *Teacher and education in emerging in Indian society*, New Delhi: NCERT
 - * Brubacher, John S. (1969). *Modern philosophies of education*. New York: McGraw Hill Co.
 - * Clarke, P. (2001). *Teaching and learning: The Culture of pedagogy*. New Delhi: Sage Publication.
 - * Dash, B.N. (2011) *Foundation of education*, New Delhi; Kalyani Publishers.
 - * Dewey, John (1916/1977). *Democracy and education*. New York: MacMillan.
 - * Dewey, John (1956). *The Child and the curriculum, school and society*. Chicago, Illinois: University of Chicago Press.
 - * Dewey, John (1997). *Experience and education*. New York: Touchstone.
 - * Ganesh, Kamala & Thakkar, Usha (Ed.) (2005). *Culture and making of identity in India* Nae Delhi: Sage Publications.
 - * Govt. of India (1986/92). *National policy on education*. New Delhi: MHRD.
 - * Krishnamurthy, J. (1953). *Education and significance of life*. New Delhi: B.I. Publications
 - * Kumar Krishna (1996). *Learning from conflict*. New Delhi: Orient Longman.
 - * Ministry of Education (1966). *Education and national development*. New Delhi: Ministry of Education, Government of India.
 - * Omstein, Allan C. & Levine, Daniel U. (1989). *Foundations of education (4th Edn.)*. Boston Houghton Mifflin Co.
 - * Pathak, R. P. (2012). *Philosophical and sociological principles of education*. Delhi: Pearson Pathak, Avijit (2002). *Social implications of schooling*. New Delhi: Rainbow Publishers.
 - * Peters, R.S. (1967). *The Concept of education*. London: Routledge Kegan & Paul. Radhakrishnan, S. *Indian philosophy Vol. I and Vol. II*
 - * Ross, James S.(1981). *Ground work of educational theory*.Delhi: Oxford University Press Rusk, Robert R., *Philosophical bases of education*, London: Oxford University Press.
 - * Salamatullah, (1979). *Education in social context*. New Delhi: NCERT.
 - * Srinivas, M.N., (1986). *Social changes in modern India*. Bombay: Allied Publishers.
 - * Wingo, G. Max (1975). *Philosophies of education*. New Delhi: Sterling Publisher Pvt. Limited.
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+ 3 FIRST YEAR FIRST SEMESTER

Core Paper - 2

EDUCATIONAL PSYCHOLOGY

Time : 3 Hrs.

Credit: 04

End Semester Theory : 60 Marks

Mid-Semester Theory : 15 Marks

Learning Objectives :

On completion of this course, the learners shall be able to:

- * Explain the concept of educational psychology and its relationship with psychology.
- * Understand different methods of educational psychology,
- * Describe the theoretical perspectives of educational psychology.
- * Explain the concept of growth and development of child and adolescence and underline general principles of growth and development.
- * Describe briefly the periods and the typical characteristics of growth and development during childhood and adolescence.
- * Specify the contexts and factors influencing development.
- * Explain the theory of cognitive development and its educational implications.
- * State the different forms and characteristics of individual differences and the ways of meeting the classroom issues arising out of the differences.
- * Identify the learning needs during the different stages of development and adopt appropriate strategies in and out of school to meet the learning needs.

UNIT 1 : Educational Psychology in Developmental Perspective

- (i) Meaning, nature, scope and relevance of educational psychology
- (ii) Methods of educational psychology- observation, experimentation, and case study
- (iii) Application of educational psychology in understanding learner
- (iv) Growth and Development-Concept, difference between growth and development, and principles of growth and development
- (v) Characteristics of development during adolescence in different areas: Physical, social, emotional and intellectual (with reference to Piaget)

UNIT 2: Intelligence, Creativity and Individual difference

- (i) Individual difference-concept, nature, factors and role of education
- (ii) Intelligence- meaning and nature of intelligence, concept of I.Q, theories of intelligence- Two factor theories, Guilford's structure of intelligence (SI) model, Gardner's multiple theory of intelligence.
- (iii) Measurement of intelligence- individual and group test, verbal, non-verbal test
- (iv) Creativity- meaning, nature and stages of creative thinking, strategies for fostering creativity

UNIT 3 : Learning and Motivation

- (i) Learning- meaning, nature and factors of learning
 - (ii) Theories of learning with experiment and educational implications
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- (iii) Classical conditioning, operant conditioning, insightful learning and constructivist approach to learning
- (iv) Motivation - concepts, types, and techniques of motivation

UNIT 4 : Personality and Mental health

- (i) Personality- meaning and nature of personality
- (ii) Theories- type theory and trait theory
- (iii) Assessment of personality- subjective, objective and projective techniques
- (iv) Mental health-concept, factors affecting mental health and role of teacher, mental health of teacher.
- (v) Adjustment mechanism: Concept and Types

PRACTICAL

Credit: **02**

25 Marks

- * Administration and interpretation of any psychological test relating to intelligence or personality.
N.B: It will be evaluated by both the Internal and External examiners.

Text Books

- * Woolfolk, A. (2015). *Educational psychology (9th Ed.)*. New Delhi. Pearson Publication.
- * Chauhan, S.S. (2010). *Advanced educational psychology*. New Delhi: Vikas Publishing House Pvt. Ltd.
- * Mangal, S.K. (2002). *Advanced educational psychology*. New Delhi: Prentice Hall of India

Reference Books

- * Arnett, J. (2007). *Adolescence and emerging adulthood: A cultural approach (3rd Edn.)* Upper Saddle River, NJ.: Pearson
- * Berk, Laura E. (2011). *Child development (9th Edn.)*. New Delhi: Prentice Hall of India
- * Flavell, J.H. (1963). *The developmental psychology of Jean Piaget*. New York: Van Nostrand
- * Hurlock, E. B. (1980). *Developmental psychology: All span approach*. New York: McGraw Hill Book.
- * Hurlock, E.B. (1980). *Child development (6th Edn.)*. Tokyo: McGraw-Hill, Kogakusha Ltd
- * Hurlock, E.B. (2007). *Child growth and development*. New York: McGraw Hill.
- * Kail, Robert V (2011). *Children and their development (6th Edition)*. Englewood Cliffs N.J. Prentice Hall.
- * Stephens, J. M.; Evans, E. D.(1973). *Development and classroom learning: An introduction to educational psychology*. New York: Holt, Rinehart and Winston.

+3 FIRST YEAR SECOND SEMESTER

Core Paper - 3 EDUCATIONAL SOCIOLOGY

Time : 3 Hrs.
Credit: 04

End Semester Theory : 60 Marks
Mid-Semester Theory : 15 Marks

Learning Objectives:

On completion of this course, the students shall :

- * State the relationship between education and society.
- * Understand the meaning of Educational Sociology and function of education as a social system.
- * State different agencies of education and their functions.
- * Justify the importance of education for social change.
- * Describe the role of education in modernization and globalization.
- * Describe the function of education to ensure equality and equity.

UNIT 1: Education and Society

- (i) Relationship between education and society, school as a miniature society
- (ii) Educational Sociology- Concept, nature, scope and importance;
- (iii) Relationship between education and sociology.
- (iv) Education as a process of Socialization.
- (v) Education and Politics, Education and Economic Development

UNIT 2: Agencies of Education

- (i) Family-Importance, functions and role for education and socialization of the children
- (ii) School - Importance, functions and role for education and socialization of the children
- (iii) Society- Importance, functions and role for education and socialization of the children
- (iv) Mass Media- Importance functions and role for education and socialization of the children

UNIT 3 : Education, Social change and Modernization

- (i) Concept of social change and factors affecting Social Change
- (ii) Education as an instrument of social change and social control
- (iii) Concept and Attributes of modernization
- (iv) Education for accelerating the process of modernization
- (v) Impact of Globalization on Education

UNIT 4: Equalization of Educational opportunities for ensuring equity and Inclusion

- (i) Concept of equality, equity and inclusion: its educational implication
 - (ii) Ensuring equality in the Education of SC and ST
 - (iii) Education for Women Empowerment
 - (iv) Inclusive Education with reference to children with special needs(CWSN)
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PRACTICALCredit: **02****25** Marks

Field Visit: Study of a social unit (Home/School Village/slum) and reporting.

NB : It will be evaluated by both the internal and external examiners

Text Books

- * Mathur, S. S. (2000). A sociological approach to Indian education. Agra : Vinod Pustak Mandir.
- * Pathak, R. P. (2012). Philosophical and sociological principles of education. Delhi: Pearson.
- * Bahttacharya, S. (2006). Sociological Foundation of Education. New Delhi: Atlantic

Reference Books

- * Ravi, Samuel.S.(2015). A Comprehensive Study of Education. Delhi: PHI Learning Pvt. Ltd.
 - * Safaya, R.N. & Shaida, B.D. (2010), Modern theory and principles of education. New Delhi: Dhanpati Publising Company Pvt. Ltd.
 - * Aggrawal, J.C.(2013). Theory and principle of education. New Delhi: Vikash Publishing House Pvt Ltd.
 - * Anand, C.L. et.al. (1983). Teacher and education in emerging in Indian society, New Delhi: NCERT. Brubacher, John. S.(1969). Modern philosophies of education. New York: McGraw Hill Co.
 - * Clarke, P. (2001). Teaching and learning: The Culture of pedagogy. New Delhi: Sage Publication.
 - * Dewey, John (1916/1977). Democracy and education. New York: MacMillan.
 - * Dewey, John (1956). The Child and the curriculum, school and society. Chicago, Illinois: University of Chicago Press.
 - * Dewey, John (1997). Experience and education. New York: Touchstone.
 - * Ganesh, Kamala & Thakkar, Usha (Ed.) (2005). Culture and making of identity in India. New Delhi: Sage Publications.
 - * Govt. of India (1986/'92). National policy on education. New Delhi: MHRD. Ministry of Education (1966). Education and national development. New Delhi: Ministry of Education, Government of India.
 - * Ornstein, Allan C. & Levine, Daniel U. (1989).Foundations of education (4th Edn.). Boston: Houghton Mifflin Co.
 - * Pathak, Avijit (2002). Social implications of schooling. New Delhi: Rainbow Publishers.
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+3 FIRST YEAR SECOND SEMESTER

Core Paper - 4

CHANGING PEDAGOGICAL PERSPECTIVE

Time : 3 Hrs.

Credit: 04

End Semester Theory : 60 Marks

Mid-Semester Theory : 15 Marks

Learning Objectives:

On completion of this course, the students shall

- * Explain the concept of pedagogy
- * Differentiate pedagogy from other allied concepts
- * Explain different teaching task with example
- * Establish relationship between teaching and learning
- * List out different approaches and methods of teaching
- * Prepare a lesson plan following different designs

UNIT 1 : Concept of Teaching and Learning

- (i) Meaning and definition of teaching and learning
- (ii) Relationship between teaching and learning
- (iii) Variables involved in teaching task: independent, dependent and intervening
- (iv) Phases of teaching: Pre-active, inter-active and post-active
- (v) Levels of teaching: memory, understanding and reflective
- (vi) Lesson plan design- The Herbartian steps, 5 E and ICON design model

UNIT 2: Theories of Teaching

- (i) Meaning and nature of teaching theory
- (ii) Types of teaching theories:
- (iii) Formal theories of teaching-communication theory of teaching
- (iv) Descriptive theories of teaching-Gagne's hierarchical theory of instruction and Bruner's cognitive theory of instruction
- (v) Normative theories of teaching - Mitra's psychological theory of teaching and Clarke's general theory of teaching

UNIT 3: Principles and maxims of teaching

- (i) General principles of teaching
- (ii) Psychological principles of teaching
- (iii) Maxims of teaching
- (iv) Core teaching skills: Introducing the lesson, explaining, illustrating with examples, stimulus variation, and reinforcement, questioning, probing questions, closure.

UNIT 4: Approaches and methods of Teaching

- (i) Concept of approach, method, strategy and techniques
 - (ii) Methods of teaching: inductive-deductive, analytic-synthetic, problem solving and project
 - (iii) Shift in focus from teaching to learning-constructivist approach to learning
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PRACTICALCredit: **02****25 Marks**

- * Preparation of rating scale/ checklist /observation schedule to evaluate classroom teaching and reporting

NB : It will be evaluated by both the internal and external examiners

Text Books

- * Kochar, S.K.(2011). *Methods and Techniques of teaching*, Sterling Publisher Pvt. Ltd., New Delhi
- * Chauhan, S.S.(1995). *Innovations of teaching learning process*. Vikash Publishing House, New Delhi
- * Sharma, R.A.(1986). *Technology of Teaching*, International Publishing House, Meerut.

Reference Books

- * Aggarwal, J.C. (1995). *Essentials of Educational Technology*. Vikash Publishing House, New Delhi
- * Walia, J.S. (2013). *Educational Technology*. Jalandhar, Punjab: Ahim Publications.
- * Mangal, S.K. and Mangal, U.(2010) *Essentials of Educational Technology*, New Delhi, PHI Learning Pvt. Limited
- * Mangal, S.K.(1988) *Foundations of Educational Technology*, Ludhiana, Tandan Publications
- * Nageswar Rao, S., Sreedhar, P. & Rao, B.(2007). *Methods and techniques of teaching*, Sonali Publications, New Delhi
- * Oliver, R.A. (1963) *Effective teaching*, JM Dent & Sons
- * Pathak, R.P. & Chaudhary, J. (2012) *Educational Technology*, Pearson, New Delhi
- * Ryburn, W.M.(1955) *Principles of Teaching*, Geoffrey Cembidge, OUP
- * Sampath, K, Pannir Salvam, A., & Santhanam, S. (1981) *Introduction to Educational Technology*, Sterling Publisher, New Delhi

+3 SECOND YEAR THIRD SEMESTER**Core Paper - 5****EDUCATIONAL ASSESSMENT AND EVALUATION**Time : **3 Hrs.**Credit: **04**End Semester Theory : **60 Marks**Mid-Semester Theory : **15 Marks****Learning Objectives:**

On completion of this course, the students will.

- * State the nature, purpose and types of educational assessment and evaluation.
- * Develop and use different types of tools and techniques for continuous and comprehensive assessment of learning in the school situation.
- * Explain the importance of assessment for learning and its processes for enhancing the quality of learning and teaching.
- * Describe the characteristic of a good test.

- * Analyze the trends and issues in learning and learner assessment.
- * Analyze and interpret results of the assessment using standard score.
- * Illustrate the principles of test construction in education

UNIT 1: Assessment and Evaluation in Education

- (i) Understanding the meaning and purpose of test, measurement, assessment and evaluation
- (ii) Scales of measurement nominal, ordinal, interval and ratio
- (iii) Types of test-teacher made and standardized
- (iv) Approaches to evaluation-placement, formative, diagnostic and summative
- (v) Types of evaluation- norm referenced and criterion referenced
- (vi) Concept and nature continuous and compressive evaluation

UNIT 2: Instructional Learning Objectives

- (i) Taxonomy of instructional Learning Objectives with special reference to cognitive domain
- (ii) Criteria of selecting appropriate Learning Objectives, and stating of general and specific instructional Learning Objectives
- (iii) Relationship of evaluation procedure with Learning Objectives
- (iv) Difference between objective based objective type test and objective based essay type test

UNIT 3: Tools and Techniques of Assessment and construction of Test

- (i) Steps of test construction: planning, preparing, trying out and evaluation
- (ii) Principles of construction of objective type test items- matching, multiple choice, completion and true false
- (iii) Principles of construction of essay type test
- (iv) Non-standardized tools: Observation schedule, interview schedule, rating scale, check list portfolio and rubrics

UNIT 4: Characteristics of a good Test

- (i) Validity-concept, types and methods of validation
- (ii) Reliability-concept and methods of estimating reliability
- (iii) Objectivity- concept and methods of estimating objectivity
- (iv) Usability- concept and factors ensuring usability

PRACTICAL

Credit: **02**

25 Marks

* Construction of Unit test on a school subject based on blueprint and reporting.

NB: It will be evaluated by both Internal and External examiners.

Text Books

- * Aggrawal, J.C. (1997). *Essentials of examination system, evaluation, tests and measurement*. New Delhi: Vikas Publishing House Pvt Ltd.
 - * Goswami. M. (2011). *Measurement and evaluation in psychology and education*, Hyderabad. Neelkamal Publishers, Gromund, N.C. (2005). *Assessment of student Achievement*. Boston. Allyn & Bacon
-

- * Singh, A. K. (2016). *Tests, measurements and research methods in behavioural sciences*. New Delhi: Bharati Bhawan Publishers.

Reference Books

- * Anastasi, A.(1976). *Psychological testing*, New York: Macmillan Publishing Co.
- * Anderson, L.W. (2003). *Classroom assessment: Enhancing the quality of teacher decision making*.
- * Banks, S.R. (2005). *Classroom assessment issues and PRACTICES*. Boston: Allyn & Bacon
- * Blooms, B.S.(1956). *Taxonomy of educational Learning Objectives*. New York: Longman Green and Company
- * Cohen, R.J., Swerdlik, M.E., & Phillips, S.M. (1996). *Psychological testing and assessment, an introduction to the tests and measurement*. California: Mayfield Publishing Co.
- * Earl, L.M. (2006). *Assessment as learning: using classroom assessment to maximize student learning*. Thousand Oaks, California: Corwin Press
- * Hopkins, D. (1998). *Educational and psychological measurement and evaluation*. Boston: Allyn and Bacon.
- * Linn, R.L. & Gronlund, N.E. (2000). *Measurement and assessment in teaching*, London: Merrill Prentice Hall.
- * Macmillan, J.H. (1997). *Classroom assessment, principles and practice for effective instruction*. Boston: Allyn and Bacon
- * Mohan. R. (2016). *Measurement evaluation and assessment in education*. Delhi: PHI Learning Pvt. Ltd.
- * National Council of Educational Research and Training (2006). *Position paper: Examination Reforms*. New Delhi: NCERT
- * Noll, N.H. S cannell, D.P. & Craig, RC. (1979). *Introduction to educational measurement*. Boston: Houghton Mifflin.

+3 SECOND YEAR THIRD SEMESTER

Core Paper - 6 EDUCATIONAL RESEARCH

Time : 3 Hrs.

Credit: 04

End Semester Theory : 60 Marks

Mid-Semester Theory : 15 Marks

Learning Objectives:

On completion of this course, the student will:

- Describe nature, scope and limitation of educational research.
- Understand different types and methods of educational research.
- Explain sources from where knowledge could be obtained.
- Describe the process of research in education.
- Analyze research design in education.
- Illustrate procedure of collecting and analyzing data.
- Prepare the research report.

UNIT 1: Concept and Types of Educational Research

- (i) Concept and nature of research
- (ii) Meaning, nature and scope of educational research
- (iii) Types of research by purpose- Fundamental, Applied and Action
- (iv) Types of research by approach- Quantitative and Qualitative

UNIT 2 : Design of Research Design of Research and preparation of research proposal

- (i) Steps of Research
- (ii) Review of Related Literature, and identification of problem
- (iii) Hypothesis: Meaning, Types, Sources and Characteristics of hypothesis \
- (iv) Concept of population and sample
- (v) Sampling procedures- Probability and Non-Probability
- (vi) Tools and techniques for data collection(i,e, questionnaire, interview, observation and p of data collection, Preparation of research proposal

UNIT 3: Methods of Research

Meaning nature and steps of:

- (i) Survey method
- (ii) Case-study method
- (iii) Historical research
- (iv) Experimental research

UNIT 4: Writing Research Report

- (i) Data analysis and interpretation in research.
- (ii) Steps for reporting research
- (iii) Reporting style (APA Style)
- (iv) Plagiarism checking
- (v) Referencing Style (APA Style): Bibliography, Webliography

PRACTICAL

Credit: **02**

25 Marks

- * Preparation of a Research Proposal on any Educational Topic (Issues/ Trends/ Problems, Psychological Topics)

NB: It will be evaluated by both Internal and External examiners. -

Text Books

- * Best J. W. and Kahn, J. V. (2006). Research in education (9th Ed.) New Delhi: Pearson Education Inc.
 - * Kaul, L. (1984). Methodology of educational research. New Delhi: Vikas Publication
 - * Singh, A.K. (2016). Tests, measurements and research methods in behavioural sciences. New Delhi: Bharati Bhawan Publishers.
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Reference Books

- * Nanda, G.C. & Khatoj, P.K. (2012). *Fundamentals of Educational Research and Statistics*. New Delhi: Ludhiana.
- * Gay, L.R. (1990). *Educational research-competencies for analysis and application* (3rd Ed.), Macmillan Publishing Company, New York Ary, D., Jacobs, L. C., & Razavieh, A. (2002). *Introduction to research in education* (6th Ed.). Belmont, CA: Wadsworth/Thomson Learning.
- * Bhandarkar, P.L. and Wilkinson, T.S. (2010). *Methodology and techniques of social research*. Himalaya Publishing House, New Delhi.
- * Creswell, J. W. (2014). *Educational research-planning, conducting and evaluating quantitative and qualitative research* (4th Ed.). New Jersey, USA: Pearson Education Inc. (Indian Reprint available at PHI Learning Pvt.Ptd.)
- * Kerlinger, F.N. (1973). *Foundation of behavioral research*. New York: Holt Rinehart & Winston.
- * Rao, U. (2007) *Action research*. Himalaya Publishing House, New Delhi.
- * Borg, W.R. & Gall, M.D. (1989) *Educational research: An introduction*. New York. Longman.
- * Corey, S.M. (1953), *Action research to improve school practice*, New York: Teachers College Press.
- * Johnson, B. & Christensen, L. (2008). *Educational research: quantitative, qualitative, and mixed approaches*. London: Sage Publication
- * MCMilan, J.M. & Schumacher, S. (1989). *Research in Education-a Conceptual Introduction*, New York: Harper Collins.
- * Menier, C.A. (2006). *Action research: teachers as researchers in the classroom* : London Sage Publication

+3 SECOND YEAR THIRD SEMESTER

Core Paper - 7 STATISTICS IN EDUCATION

Time : 3 Hrs.
Credit: 04

End Semester Theory : 60 Marks
Mid-Semester Theory : 15 Marks

Learning Objectives:

On completion of this course, the students will:

- * Describe the importance of statistics in education.
 - * Organise and represent educational data in tabular and graphical form.
 - * Compute and use various statistical measures of average, variation and bi-variate distribution in analysis and interpretation of educational data.
 - * Describe the concept and importance of normal probability curve and interpret test scores in using normal probability curve.
 - * Understand the divergence of data from normality.
-

UNIT 1: Educational Statistics

- (i) Educational Statistics-Meaning, Nature, Scope and Uses
- (ii) Organization of Data: Frequency Distribution, Cumulative Frequency Distribution
- (iii) Graphical Representation of Data (Histogram, Frequency polygon , Ogive and Pie-Diagram)

UNIT 2: Measures of Central Tendency and Variability

- (i) Mean, Median and Mode-concept, computational process, uses and limitations
- (ii) Range, Average Deviation, Quartile Deviation and Standard Deviation- Concept, computational process, uses and limitations

UNIT 3: Co-relational Statistics

- (i) Meaning and types of Correlation
- (ii) Computation of Coefficient of Correlation by Rank Difference Method; Product Moment Method

UNIT 4: Normal Probability Curve and Divergence from Normality

- (i) Normal Probability Curve- concept, properties and applications
- (ii) Skewness and Kurtosis
- (iii) Interpretation of Derived scores: Z-score and T-score

PRACTICALCredit: **02****25** Marks

- * Analysis of Achievement Data of a particular class and Reporting

NB : It will be evaluated by both Internal and External examiners.

Text Books

- * Aggarwal, Y.P. (2009). *Statistical methods: concepts, application and computation*. New Dehli : Sterling Publishers Pvt. Ltd.
- * Garrett, H.E. (1971). *Statistics in psychology and education*. New Delhi: Paragon International Publisher
- * Mangal, S.K. (2008). *Statistics in education and psychology*. New Delhi: Prentice-Hall. of India Private Limited

Reference Books

- * Ferguson, GA.(1971). *Statistical analysis in psychology and education*. Kogakusha, Tokyo McGraw-Hill
 - * Guilford, J.P. &Fruchter, B. (1981). *Fundamental statistics in psychology and education*. New York: McGraw Hill
 - * McCall, R. (1993). *Fundamental statistics for the behavioral Science*. New York: Harcourt, Brace.
 - * Ravid, Ruth. (2000). *Practical statistics for education*. New York: University Press of America.
 - * Seigel. S. & Castel Ian N.J. (1988). *Non-parametric statistics for the Behavioral Science* Singapore: Graw-Hill Book Co.
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+3 SECOND YEAR FOURTH SEMESTER

Core Paper - 8 HISTORY OF EDUCATION IN INDIA

Time : 3 Hrs.
Credit: 04

End Semester Theory : 60 Marks
Mid-Semester Theory : 15 Marks

Learning Objectives:

On completion of this course, the student will

- * Understand the development of education in India during ancient period, medieval period and pre-independence period.
- * Describe the development of education in India during post-independence period.
- * Describe major recommendations of different policies and committee reports on education in India.

UNIT 1: Education during Ancient Period

- (i) Features of Vedic period with special reference to aims, curriculum and methods of teaching
- (ii) Features of Buddhist period with special reference to aims, curriculum and methods of teaching
- (iii) Relevance of Gurukul system and Buddhist centers of learning
- (iv) Ancient seats of Learning

UNIT 2: Education during Medieval Period

- (i) Features of education during Medieval Period with special reference to aims, curriculum and methods of teaching
- (ii) Educational institutions during Muslim period important centers of education.
- (iii) Relevance of Islamic period

UNIT 3: Education during pre-independence period

- (i) Charter's Act(1813)
- (ii) Maculay's Minute(1835)
- (iii) Wood's Despatch (1854)
- (iv) Indian Education Commission(1882)
- (v) Calcutta University Commission(1917)
- (vi) Hartog committee(1929)

UNIT 4: Education during post-independence period

Major recommendations of the following commissions and committees relating to the aims of education and curriculum:

- (i) University Education Commission (1948)
 - (ii) Major recommendations of Secondary Education Commission (1954)
 - (iii) Major recommendations of Education Commission (1966)
 - (iv) National Policy on Education (1986), revised formulation 1992
-

PRACTICALCredit: **02****25 Marks**

- * Study on implementation of NPE(1986) in respect of recommendations for elementary level

NB: It will be evaluated by both Internal and External examiners.

Text Books:

- * Aggrawal, J.C.(2010). *Landmarks in the history of modern Indian education*. New Delhi: Vikash Publishing Pvt Ltd.
- * Dash, B.N. (1911). *Development of education in India*. New Delhi: Ajanta Prakashan
- * Das, K.K. (1993). *Development of education in India*. New Delhi: Kalyani Publishers.

Reference Books:

- * Naik, J.P. & Narullah, S. (1996). *A student's history of education in India*, New Delhi: Mc Millan India Ltd. Rawat, P.L. (1989). *History of Indian education* New Delhi: Ram Prasad & Sons.
- * Govt. of India. (1992, 1998). *National policy on education, 1986* (As modified in 1992). Retrieved from http://mhrd.gov.in/sites/upload_files/mhrd/files/NPE86-mod92.pdf
- * Keay, F.E. & Mitra, Sukumar (1978). *A history of education in India*. New Delhi: Oxford University Press.
- * Ministry of Education (1966). *Education and national development*. New Delhi: Ministry of Education, Government of India.
- * Ministry of Human Resource Development (2004). *Learning without Burden: Report of the National Advisory Committee*. New Delhi: Min. of HRD.
- * Mookharjee, R.K. (1989). *The Gupta Empire*. Delhi: Motilal Banarsi Dass Publishers Pvt Ltd. Mukherji, S.M., (1966). *History of education in India*. Vadodara: Acharya Book Depot.
- * Naik, J.P. and Syed, N., (1974). *A student's history of education in India*. New Delhi: MacMillan.
- * Rawat, P.L.(1989). *History of Indian education*. New Delhi: Ram Prasad & Sons. Website, www.mhrd.gov.in

+3 SECOND YEAR FOURTH SEMESTER**Core Paper - 9****CURRICULUM DEVELOPMENT**Time : **3 Hrs.**Credit: **04**End Semester Theory : **60 Marks**Mid-Semester Theory : **15 Marks****Learning Objectives:**

On completion of this course, the students will

- * Differentiate curriculum from courses of study, text book.
- * Analyse bases and sources of curriculum.

- * Describe different types of curriculum.
- * Critically examine National curriculum framework- 2000 and 2005.
- * Describe process of curriculum development and differentiate different models of curriculum development.
- * Evaluate curriculum using different evaluation models.

UNIT 1 : Curriculum

- (i) Concept of syllabus, courses of study, text book and curriculum
- (ii) Bases of curriculum-philosophical, sociological and psychological
- (iii) Components of curriculum: Learning Objectives, Contents, Methods and Evaluation
- (iv) Concept of Curriculum design

UNIT 2 : Types of Curriculum

- (i) Subject centered curriculum
- (ii) Learner centered curriculum
- (iii) Experience centered curriculum
- (iv) Core curriculum

UNIT 3 : Curriculum Organization

- (i) Principles of curriculum construction
- (ii) Selection and organization of content
- (iii) Selection and Organization of learning experiences
- (iv) National curriculum framework- 2005 and its guiding principles

UNIT 4: Curriculum Development and Evaluation

- (i) Curriculum development- its process, role of local authority, state level agencies like SCERT, BSE and National Agencies like CBSE, NCERT
- (ii) Tyler and Taba Model of curriculum development
- (iii) Meaning and nature of curriculum evaluation

PRACTICAL

Credit: **02**

25 Marks

- * Content Analysis of any text book of elementary level

NB : It will be evaluated by both Internal and External examiners.

Text Books

- * Ornstein, A.C. & Hunkins, E (1998). *Curriculum. Foundations, Principles and Issues*. Boston: Allyn & Bacon, Boston.
- * Oliva, P.F. (2001). *Developing the curriculum* (Fifth Ed.). New York, NY. Longman.
- * Talla, M. (2012). *Curriculum Development Perspectives, Principles and Issues*. New Delhi: Pearson Publications.

Reference Books

- * Beane, J.A. Conrad, E.P. Jr. and Samuel JA, Jr. (1986). *Curriculum planning and development*, Boston:

- * Brady, L. (1995). Curriculum development, New Delhi: Prentice Hall.
- * Doll, R.. (1996). Curriculum development: decision-making and process, Boston: Allyn & Bacon.
- * Krug, EA.(1956). Curriculum planning. New York: Harper and Row Publishers.
- * Oliva, P.F. (2001). *Developing the curriculum* (Fifth Ed.). New York, NY: Longman.
- * Pratt, D. (1980). *Curriculum design and development*. New York: Macmillan Publishing Co. Inc.
- * Popham, W.J. (1993). Modern educational measurement. Englewood Cliffs, N.J.: Prentice Hall.
- * Saylor, J.G., Alexander, W.M. and Lewis, A.J.(1981). Curriculum planning for better teaching and learning. New York: Holt Rinehart & Winston.
- * Taba, H. (1962). Curriculum development-theory and practice. New York: Harcourt Brace, Jovanoich. Tanner, D. and Tanner, L. (1975) Curriculum development- theory and practice. New York: Macmillan Publishing Co. Inc.
- * Tyler, R.W.(1941). Basic principles of curriculum and instruction.Chicago: University of Chicago Press.

+3 SECOND YEAR FOURTH SEMESTER

Core Paper - 10 GUIDANCE AND COUNSELLING

Time : 3 Hrs.
Credit: 04

End Semester Theory : 60 Marks
Mid-Semester Theory : 15 Marks

Learning Objectives:

On completion of this course, the students will

- * State the concept, need, principles and bases of guidance.
- * Use various tools and techniques of guidance in appropriate contexts.
- * Explain the role of school in organizing different guidance programmes.
- * State the concept, scope and type of counseling.
- * Narrate the process, tools and techniques of counseling.
- * Explain the qualities and role of a counselor.
- * Describe different programmes for differently abled children.
- * Explain the role of teacher and head master in organizing different guidance programmes.

UNIT 1 : CONCEPT OF GUIDANCE

- (i) Meaning, nature and scope of guidance
- (ii) Philosophical, psychological and sociological bases of guidance
- (iii) Need, importance, purpose and scope of educational guidance in schools
- (iv) Need, importance, purpose and scope of vocational guidance

UNIT 2: EDUCATIONAL GUIDANCE

- (i) Basic data necessary for educational guidance
-

- (ii) Basic principles and main types of pupil personal records
- (iii) Cumulative records in a guidance programme
- (iv) Case study procedure in guidance

UNIT 3: CONCEPT OF COUNSELLING

- (i) Meaning, nature and scope of counseling
- (ii) Relationship between Guidance and Counselling
- (iii) Different types of counseling
- (iv) Steps and techniques of counseling
- (v) Necessary qualities of a good counselor
- (vi) Role of a counselor in secondary schools

UNIT 4: ORGANISATION OF GUIDANCE SERVICE

- (i) Placement Service
- (ii) Follow-up service
- (iii) Individual inventory service
- (iv) Occupational information service
- (v) Launching school guidance programme

PRACTICAL

Credit: **02**

25 Marks

- * Case Study of a Child with Special Needs or a child coming from socially disadvantaged background

NB : It will be evaluated by both Internal and External examiners.

Text Books

- * Goswami, Marami (2016). *Essentials of Guidance and Counseling*. New Delhi: Lakshi Publishers and Distributors.
- * Kochhar. S.K. (2017). *Educational and Vocational Guidance in Secondary Schools*. New Delhi: Sterling Publishers
- * Siddiqui, M.H. (2009). *Guidance And Counseling*. New Delhi: APH Publishing Corporation

Reference Books

- * Sharma, R. N., & Sharma, R. (2013). *Guidance and counselling in India*. New Delhi: Atlantic Publishers and Distributors (P) Ltd.
 - * Bhatnagar, Asha Gupta, Nirmala (Eds) (1999). *Guidance and counseling: A theoretical perspective (Vol.I)*. New Delhi: Vikas
 - * Bhatnagar, Asha and Gupta, Nirmala (Eds) (1999). *Guidance and counseling: A practical approach (Vol. II)*. New Delhi: Vikas.
 - * Dave. Indu (1984). *The basic essentials of counseling*. New Delhi: Sterling Pvt. Ltd.
 - * Gazda George R.M.(1989). *Group counseling: A development approach*. London: Allyn and Bacon Gibson, R.L. & Mitchell, M.H. (1986). *Introduction to guidance*. New York: McMillan.
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- * Nugent, Frank A. (1990). An Introduction to the profession of counseling. Columbus: Merrim publishing Co.
- * Pietrofesa, J.J., Bernstein, B. and Stanford S (1980). Guidance: An introduction Chicago Rand McNally
- * Rao, S.N (1981). Counseling psychology New Delhi Tata McGraw Hill.
- * Saraswat, R. & Gaur, J.S.(1994). Manual for guidance counselors. New Delhi: NCERT

+3 THIRD YEAR FIFTH SEMESTER

Core Paper - 11

DEVELOPMENT OF EDUCATION IN ODISHA

Time : 3 Hrs.
Credit: 04

End Semester Theory : 60 Marks
Mid-Semester Theory : 15 Marks

On completion of the course the students will:

- * Grasp the structure of educational system of Odisha.
- * State the function of institutions/units at the state and district levels.
- * Appreciate the contribution of Utkalmani Gopabandhu Das to the thoughts and
- * Practices of Indian Education narrate the Learning Objectives and implementation process of the major education.
- * Schemes of central as well as state government being implemented in the state of Odisha
- * Explain the role of various state and district level institutions in education.
- * Analyze the scenario of higher and technical education of Odisha
- * Establish linkage between higher education and development of the state

UNIT 1: Status of Elementary Education

- (i) History of primary education in Odisha
- (ii) Efforts to Universalize Elementary Education: DPEP, SSA and Right to Education Act, 2009
- (iii) Indicator wise position in terms of provision, enrolment, retention and achievement for elementary level programmes: NPEGEL and KGBV.
- (iv) Problem and issues in elementary education.

UNIT 2: Status of Secondary and Higher Secondary Education

- (i) History of secondary education in Odisha
- (ii) Rashtriya Madhyamik Shiksha Abhiyan (RMSA) and its implementation in Odisha.
- (iii) Role of BSE, Odisha- Problems and issues
- (iv) Status of Higher Secondary Education and Role of CHSE; Problems and Issues
- (v) Status of Higher Secondary Vocational Education-Problems and Issues

UNIT 3 : Status of Higher Education

- (i) History of Collegiate Education
 - (ii) Organization of higher education at the under graduation level and University level-Present status
-

- (iii) RUSA and its implementation
- (iv) Autonomous colleges and their functioning
- (v) Problems and issues relating to higher education

UNIT 4 : Status of Teacher Education

- (i) History of Teacher Education in Odisha
- (ii) Pre-service and In-service-service and In-service teacher education for elementary schools teachers
- (iii) Pre-service and In-service teacher education for secondary school teachers
- (iv) Role of DIET, CTE, IASE and SCERT.
- (V) Problems and issues in teacher education

PRACTICAL

Credit: **02**

25 Marks

- * Seminar Presentation (Each student has to present minimum two papers during this semester related to themes based on Core-11)

NB : It will be evaluated by both the Internal and External Examiners.

Text & Reference Books

- * Govt. of Odisha, Department of S & ME (2011). School Education at a Glance-2011.40 Bhubaneswar
- * Samal, J.K.(1984). History of Education in Odisha: 1905-1936, Sankar Bhattacharya, Punth: Pustak, 136/4B, Bidhan Sarani, Calcutta -700004;P-171
- * Samal, J.K.(1989). History of Modern Orissa, Firma KLM private limited, 257B,B.B. Ganguly Street, Calcutta;p-188

Websites to be visited:

- * www.shodhganga.inflibnet.ac.in/bitstream/10603/.../08_chapter%202.pdf Education in Odisha 1850-1900: Retrieved on dt.25.07.2012
- * www.en.wikipedia.org/wiki/Odisha: Odisha - Wikipedia, the free encyclopedia/Retrieved on dt 25.07.2012
- * www.newkerala.com/states-of-india/Odisha.php: Odisha: Info on geography, history, government. districts, business ... Retrieved on dt.25.07.2012
- * www.Odisha.gov.in/e-magazine/OdishaReview/2011/Jan/engpdf/57-61.pdf:
- * Gopabandhu Das:The National Education Planner of Odisha: Retrieved ondt.25.07.2012
- * www.dhe Odisha.in/ Higher Education Department - Online Admission - e-Admission for ...: Retrieved on dt.25.07.2012
- * www.Odisha.gov.in/highereducation/index.htm: Higher Education Department.... Government of Odisha: Retrieved on dt.25.07.2012
- * www.Odisha2020.org/home/Odisha-higher-education-task-force:Odisha Higher Education Vision 2020: Retrieved on dt.25.07.2012
- * <http://www.scertodisha.nic.in/>
- * <http://www.chseodisha.nic.in>
- * <http://www.bseodisha.nic.in>
- * <http://www.mhrd.gov.in/rmsa>

+3 THIRD YEAR FIFTH SEMESTER

Core Paper - 12 INFORMATION AND COMMUNICATION TECHNOLOGY IN EDUCATION

Time : 3 Hrs.
Credit: 04

End Semester Theory : 60 Marks
Mid-Semester Theory : 15 Marks

Learning Objectives

On completion of this course, the student will:

- * Explain the concept, nature and scope of ICT in education
- * Explore ICT resources for Teaching and learning.
- * Differentiate between Web1.0 and Web2.0
- * Describe the importance of free and open source software in education
- * Demonstrate the use of various application software in education.
- * Develop the ability to use various tools connect the world
- * Explain the content by using various subject tools.
- * Explore tools and techniques of ICT for evaluation.

UNIT 1: Educational technology

- (i) Meaning, nature and scope
- (ii) Approaches to educational Technology: Hardware, Software and System Approach
- (iii) Innovations in Educational Technology: Open Educational Resources (OER), Massive Open Online Course (MOOC) Learning Management System (LMS)
- (iv) Importance of Educational Technology for the teacher and the student.

UNIT 2: ICT in Education

- (i) Conceptual Understanding: Information Technology; Communication Technology; and Information and Communication Technology (ICT)
- (ii) Relevance of ICT in Education
- (iii) Nature and Scope of ICT in Education.
- (iv) Content, Pedagogy and Technology Integration
- (v) Challenges in Integrating ICT in Education
- (vi) Use of Computers in Education- Computer Aided Learning

UNIT 3: Application of software and ICT assessment Tools in Education

- (i) Word Processing Application
 - (ii) Spread sheet Application
 - (iii) Presentation Application
 - (iv) Free and Open Source Software (FOSS)
 - (v) Subject Tools: Digital Storytelling, Concept Map Software (C-Map)
 - (vi) Assessment Tools : Rubistar, Hot potatoes, E- portfolios
-

UNIT 4 : Connecting with the World

- (i) Use of browsers and search engines; choosing appropriate sites; search and retrieval of information and resources, Downloading, uploading and sharing information and resources;
- (ii) Use and importance of Web 2.0 Tools: E-mail, Wikis, Social networking (WhatsApp, Twitter, Facebook and Blogging)
- (iii) Use and importance of e-library, e-books, e-journals, Inflightnet.

PRACTICALCredit: **02****25 Marks**

- * Development of an Objective Test using any assessment tool or development of a Rubric/Rubistar.

NB : It will be evaluated by both Internal and External examiners.

Text Books :

- * UNESCO (2002). *Information and communication technology in education. A curricula schools and programme of teacher development*. Paris: UNESCO
- * Kanvaria, VK. (2014). *A Comprehension on Educational Technology and ICT for Education*, New Delhi: GBO.
- * Vanaja and Rajasekar, S. (2016). *Information & Communication Technology (ICT) In Education*, New Delhi: Neelkamal

Reference books :

- * Senapaty, H.K. (2011). *Pedagogy-Technology Integration for the Professional Development of Teacher Educators*. Bhubaneswar Regional Institute of Education, NCERT (Monograph).
- * NCERT (2006). National Curriculum Framework 2005 Position Paper National Focus Group on Educational Technology. New Delhi: Author.
- * Senapaty, H.K. (2009). *ICT Integrated Learning Materials on Basic School Subjects from Constructivist Perspectives*. Bhubaneswar: Regional Institute of Education, NCERT (Monograph).
- * Singh, L. C. (Ed.) (2010). *Educational Technology for Teachers and Educators*. New Delhi Vasunandi Publication. UNESCO (2008). *ICT Competency Standards for Teachers: Policy Framework*. Retrieved from [http /portal.unesco.org](http://portal.unesco.org). UNESCO (2002). *Information and Communication Technologies in Teacher Education A Planning Guide*. Paris: Author UNESCO (2005). *How ICT can create new, open learning environments: Information and communication technologies in schools: A handbook for teachers*. Paris: UNESCO. Mishra, S. (2008). *Developing E-Learning Materials: Some Pedagogical Concerns*. Indian Journal of Open Learning, 17 (2).

+3 THIRD YEAR SIXTH SEMESTER

Core Paper - 13

CONTEMPORARY TRENDS AND ISSUES IN INDIAN EDUCATION

Time : 3 Hrs.

Credit: 04

End Semester Theory : 60 Marks

Mid-Semester Theory : 15 Marks

Learning Objectives

On completion of this course the students will:

- * Understand the importance of pre-school and elementary school education. Analyze various problems and issues for ensuring quality education.
- * State the importance of secondary education and analyze various problems and issues Tol ensuring quality in secondary education.
- * Enumerate the importance of higher education and analyze various problems and issues to ensuring quality in higher education.
- * Justify the importance of teacher education and analyze various problems and issues for ensuring quality in teacher education.
- * Analyze emerging concerns in Indian education.

UNIT 1: Pre-school and Elementary School Education

- (i) Meaning, nature and importance of ECCE, problems and issues with regard to ECCE (Universalisation of Elementary Education: efforts to achieve UEE, SSA
 - * Problems and issues in implementing Right to Education Act 2009.
 - * Problems and issues in bringing the community to school, role of SMC (V) ensuring equity and quality of elementary education

UNIT 2: Secondary and Higher Secondary Education

- (i) Rashtriya Madhyamik Shiksha Abhiyan (RMSA) and ensuring secondary education to Role of School Management and Development Committee (SMDC)
- (ii) Shifting the teaching learning process from teacher centered to learner centered and activity based classroom -problems and issues
- (iii) Problems and issues with regard to vocationalisation of secondary and higher secondary education
- (iv) Examination reforms at the secondary level
- (v) Widening the access to secondary education through National Open School

UNIT 3: Higher Education and Teacher Education

- (i) Challenges in Higher education- expansion, quality and inclusion
 - (ii) Role of RUSA and NAAC for quality assurance in Higher education
 - (iii) Higher education through open and distance learning mode
 - (iv) Elementary level pre-service teacher education- problems, issues and reforms with reference to National Curriculum Framework for Teacher Education-2009
 - (v) Secondary level pre-service teacher education-problems, issues and reforms with reference to National Curriculum Framework for Teacher Education-2009
-

UNIT 4: Emerging Concerns

- (i) Examination system : defects and reforms for making examination system flexible (internal assessment and semester system, grading, open book examination, online examination)
- (ii) Choice Based Credits System (CBCS): Concept, Learning Objectives, importance, problems and issues.
- (iii) Human Rights Education: Concept, Learning Objectives, importance, problems and issues.
- (iv) Life-Skill Education: Concept, Learning Objectives, importance, problems and issues.
- (v) Peace Education: Concept, Learning Objectives, importance, problems and issues.

PRACTICALCredit: **02****25** Marks

- * Study of perception of Stakeholder's of Education on any of the current issues and concerns and reporting.

NB: It will be evaluated both by the Internal and External Examiners.

Text Books

- * Kumar, Chanchal & Sachedeva, M.S. (2017). *Vision of Secondary Education In India in the context of 21st century*. Twentyfirst Century Publications; First Edition edition (2015)
- * Pathak, IK, KR (2007). *Education in the Emerging India*. New Delhi: Atlantic Publisher.
- * Sexena, V (2011) *Contemporary tronds in education. A handbook for educators*, New Delhi. Pearson.

Reference Books

- * Broudy, H.S. (1977) *Types of knowledge and purposes of education*. In R.C. Anderson. R.J., Spiro and WE Montanaque (Eds.) *Schooling and the acquisition of knowledge* (PP. Hillsdale, NJ : Eribaum.
- * Bruner, J.S. (1996). *The culture of education*. Cambridge, MA: Harvard University Press.
- * Butchvarov, P. (1970). *The concept of knowledge*. Evanston, Illinois, North Western University Press.
- * Dearden R. F. (1984). *Theory and practice in Education*. Routledge K Kegan & Paul.
- * Delors, Jacques, et al; (1996). *Learning: the Treasure within report of the international commission on education for 21st century*, UNESCO.
- * Illich, I. (1996). *Deschooling society*. Marion Boyers, London.
- * Matheson, David (2004). *An Introduction to the study of education* (2 Ed.). David Fulton Publish.
- * MHRD (2008). *Framework for implementation of Rashtriya Madhyamik Shiksha Abhiyan : A scheme for universalisation of access to and improvement of quality at the secondary stage*. New Delhi: Department of School Education and Literacy.
- * MHRD (2011). *Sarva Shiksha Abhiyan: Framework for implementation based on the Righ Children to Free and Compulsory Education Act, 2009*. New Delhi: Department of Scho Education and Literacy.
- * MHRD, (1992). *Programme of action. Govt. of India*, New Delhi.
- * MHRD, Gov. of India (1992). *National policy on education* (revised) New Delhi: MHRD.
- * Ministry of Law and Justice (2009). *Right to education Act 2009*. New Delhi: Govt of India.

- * Naik, J.P. (1975). *Equality, quality and quantity: The elusive triangle of Indian education*. Allied Publications, Bombay.
- * NCERT (2005). *National curriculum framework 2005*. New Delhi:
- * NCERT. NCERT (2005). *National curriculum framework*, New Delhi: NCERT.
- * Slattery, P. and Dana R. (2002). *Ethics and the foundations of education-Teaching Convictions in a postmodern world*. Allyn & Bacon.
- * UN (2015). *The sustainable development goals (SDGs) – UNDP*. United Nations
- * NESCO (1998). *Educating for a sustainable future: A transdisciplinary vision for concerted action*. Paris: UNESCO.
- * UNICEF (2000). *Defining quality in education*. New York: Programme Division (Education), Unicef.
- * Wall, Edmund (2001). *Educational theory: philosophical and political Perspectives*. Prometheus Books.
- * WHO (1991). *Comprehensive school health programme*. New Delhi: World Health Organization Regional Office.
- * Winch, C. (1996). *Key concepts in the philosophy of education*. Routledge.
- * Yadav, M. S. & Lakshmi, T. K. S. (1995). Education: Its disciplinary identity. *Journal of Indian Education*, XXI (1), 01-21.

+3 THIRD YEAR SIXTH SEMESTER

Core Paper - 14

EDUCATIONAL MANAGEMENT AND LEADERSHIP

Time : 3 Hrs.

Credit: 04

End Semester Theory : 60 Marks

Mid-Semester Theory : 15 Marks

Learning Objectives

On completion of this course, the students will

- * Describe the concept, types and importance of educational management
- * Spell out the structure of educational management at different levels - from national to institution level
- * Describe different aspects and importance of educational management.
- * Describe the concept, theories and style of leadership in educational management.
- * Analyze the concept, principles and structures of total quality management approach in education.

UNIT 1: Educational Management

- (i) Concept of educational Management- meaning, nature, scope and principles
 - (ii) Process of educational Management- planning, execution, staffing, control, supervision, monitoring, evaluation and feedback
 - (iii) Types of Management:
 - (iv) Centralized and decentralized
 - (v) Authoritarian, democratic, dynamic/creative and laissez-faire
 - (vi) Educational Management in Odisha-structure and function with reference to school and mass education, and Higher education
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UNIT 2: Aspects of Institutional Management

- (i) Human, material and financial resource management
- (ii) Management of curricular and co curricular programmes
- (iii) Management of students' welfare, auxiliary services including students' health services
- (iv) School development plan
- (v) Working with SMC and SMDC

UNIT 3: Leadership in Education

- (i) Leadership- meaning, nature and importance in education
- (ii) Leadership : Functions and skills
- (iii) Theories of leadership- Redden's 3-D theory, and Hersey and Blanchard's situational theory
- (iv) Styles of leadership-participating style, delegating style, selling style and telling style, Hersey and Blanchard)

UNIT 4: Total Quality Management

- (i) Total Quality Management(TQM)- meaning, nature and importance
- (ii) Principles of TQM- Demming's and Jurana's
- (iii) Planning for TQM in school and higher education
- (iv) Quality Assurance in Higher Education

PRACTICALCredit: **02****25 Marks**

- * Studying the role of SMC/SMDC in school management and reporting

NB : It will be evaluated by both Internal and External examiners.

Text Books

- * Kochar, S.K (2011). School Administration and Management. New Delhi: Sterling F Private Limited.
- * Bhatnagar, R. P. & Aggrawal V (2015). Educational Administration, Supervision, Planning and financing. Meerut: R Lal Book Depot.
- * Mukhopadhyay, M. (2005). i. New Delhi: Sage

Reference Books

- Adolph and Turner Harold, E. *Supervision for change & Innovation*. Houghton Mifflin Company.
- Anderson, C.A & Bowman, M.J (1971). *Educational management*, London, U.K: Frankas
- Ashima V, Deshmukh & Naik A.P (2010). *Educational management*. Girgaon, Mumbai: Himala Publishing House.
- Bhatnagar, R.P & Verma, I.B (1978). *Educational administration*. Meerut, India: Loyal Book.
- Chau, Ta-Ngoc (2003): *Demographic aspects of educational planning*. Paris: International Institute for Educational Planning.
- Hariss, B. M (1963). *Supervisory behaviour in education*. USA: Englewood Cliffs.

- Kimbrough, S.Ralph, Michall & Nunnery. *Educational administration*. New York: Mc Millan Company
 - Livack, et al (1998). *Rethinking Decentralization in developing countries*. Washington, DC USA: World Bank.
 - Mukerji, S.N. *Administration of educational planning and finance*. Baroda, India: Acharya Book Depot.
 - Naik, J.P. (1965): *Educational planning in India*. New Delhi, India: Allied.
 - Naik, J.P. (1982): *The educational commission & after*. New Delhi, India: Allied.
 - Newman and summer. *The process of management: concept, behaviour and practice*. New Delhi, India: Prentice Hall of India Pvt. Ltd.
 - Oliva, O (1976). *Supervision for today's school*. New York, USA: Harper & Row.
 - Ramani, K.V (2004). *A text book of educational management*. New Delhi, India: Dominant Publisher
 - Safya, R & Saida, B.D (1964). *School administration and organisation*. Jalandhar, India: Dhanpat Rai & Sons
 - Shukia, P.O (1983). *Administration in India*. New Delhi, India: Vikas Publication.
 - Simon, Herbart A. *Administrative behaviour*. New York, USA :McMillan Company.
 - Tilak. J.B.G. (1992). *Educational planning at grassroots*. New Delhi: India.
 - Waber, Clarence A. *Fundamentals of educational leadership*. New York ,USA: Exposition Press.Buch, T. et al. (1980). *Approaches to school management*. London: Harper and Row. Publications Pvt. Ltd.
 - Chandrasekharan P. (1997): *Educational Planning and Management*. New Delhi: Sterling Publishers Pvt. Ltd.
 - Deshmukh, A.V. & Naik, A.P.(2010). *School administration and management*. Mumbai.
 - Glasser, William (1990). *The quality school*. New York, NY Harper Collins Publishers, Inc.
 - Government of India (1986/92). *National policy on education*. New Delhi: MHRD.
 - Gupta, S.K. & Gupta, (S. 91991). *Educational administration and management*. Indore: Manorama Prakashan
 - Hallak, J.(1990). *Investing in the future Setting educational priorities in the developing world*. Paris: UNESCO.
 - Kalra, Alka (1977). *Efficient school management and role of principals* New Delhi: APH Publishing Corporation
 - Kochar, S.K. (2011). *School administration and management*. New Delhi: Sterling
 - Mukhopadhyay, M. (2001). *Total quality management in education* New Delhi: NIEPA.
 - Shaeffer, S. (1991). *Collaborating for educational change: The role of parents and the community in school improvement*. Paris: UNESCO.
 - Tyagi R.S. and Mahapatra P.C. (2000). *Educational Administration in Orissa*. New Delhi, National Institute of Educational Planning and Administration (NIEPA)
 - Vashist, Savita(ed.) (1998). *Encyclopaedia of school education and management*. New Delhi : Kamal Publishing House.
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+3 THIRD YEAR FIFTH SEMESTER

Discipline Specific Elective Paper - 1 (DSE - 1) (A student has to choose any one from Pedagogy of English and Odia under DSE-1)

A.PEDAGOGY OF LANGUAGE (ENGLISH)

Time : 3 Hrs.
Credit: 04

End Semester Theory : 60 Marks
Mid-Semester Theory : 15 Marks

Learning Objectives

On completion of this course, the student will

- * Analyze the issues relating to place of English in school curriculum, acquisition of skills in English, realization of aims and Learning Objectives of learning English and language policy as conceived in NPE, 1986 and NCF - 2005.
- * Use various methods, approaches and strategies for teaching-learning English and transact various types of lesson plans covering all aspects of English language following different approaches.
- * Develop test items to assess learning in English and provide feedback as well as prepare enrichment materials.
- * Use the understanding of phonetics for facilitating students' speaking in English.
- * Plan appropriate pedagogical treatment of the prescribed contents for effective classroom transaction.

UNIT 1: English in School Curriculum

- (i) Language policy in India with reference to NPE 1986 and NCF 2005
- (ii) Place of English as a compulsory subject in school curriculum (both at elementary and secondary levels)
- (iii) Learning Objectives of learning English at elementary and secondary levels
- (iv) English language skills -components, their independence and interdependence

UNIT 2: Approaches, Methods and Strategies of Teaching English

- (i) Understanding of different methods and strategies: Bi-lingual Method, Translation Method, Direct Method, Structural Approach, Communicative Approach.
- (ii) Listening Skill: Tasks for developing Listening Comprehension
- (iii) Speaking Skill: Tasks for developing Speaking skills
- (iv) Reading skill: Types of Reading, Strategies to develop reading comprehension
- (v) Writing Skill: Strategies to improve writing skill, Qualities of good writing (simplicity, logic and organization in writing)

UNIT 3 : Transaction of Contents

- (i) Teaching of Prose (detailed and non-detailed), poetry, grammar and composition-A Methods and Strategies
- (ii) Pedagogic analysis Content analysis- analysis of topics of English text book for identification of language items (new vocabulary, structural words, grammar components), learning

- Objectives, methods and strategies, teaching learning materials including ICT materials
- (iii) Preparing Lesson Plan following 5E and Interpretation Construction Design Model (ICON)
 - (iv) Preparation of Lesson Plans following Herbartian approach.

UNIT 4 : Lesson Delivery Strategies and Assessment

- (i) Lesson Delivery Strategies: Lecturing, Role play and Dramatization, Collaborative Approach, Ability Grouping, Group Work; Learning through Narratives and Discourses, Concept Mapping and Brain Storming.
- (ii) Techniques of Assessment in English : Continuous Assessment of Learners performance English, preparation of different types of objective-based test items (Extended Response Type, Restrictive, Response type and objective type).

PRACTICAL

Credit: **02**

25 Marks

- * School Internship (Delivery of 5 Lessons following Herbartian/5E/ICON model)

NB: It will be evaluated by both Internal and External examiners,

Text Books

- * Kohli, A.L (2010) *Techniques of teaching english*. New Delhi: Dhanpat Rai publishing Company Jain, RK (1994). *Essentials of English teaching*, Agra: Vinod Pustak Mandir
- * Sharma, K.L(1970). *Methods of teaching English in India*. Agra : Laxmi Narayan Agrawal

Reference Books

- * Agnihotri R.K. and Khanna A. L. (1994). *Second language acquisition: socio-cultural and linguistic aspects of English in India*. New Delhi: Sage Publications.
- * Allen, H.B. (1965). *Teaching English as a second language: A book of readings*. New York. McGraw-Hill.
- * Baruah, T.C (1984). *The English teacher's handbook*. New Delhi: Sterling Publishers Pvt.Ltd,
- * Billows, F. L. (1975). *The techniques of language teaching*. London: Longman
- * Bista, A.R(1965). *Teaching of English (Sixth Edition)*. Agra: Vinod Pustak Mandir
- * Bright, J.A(1976). *Teaching English as second language*. London: Long Man Group
- * Catarby, E. V (1986) *Teaching English as a foreign language in school curriculum India*, New Delhi: NCERT
- * Hudelson, Sarah. (1995). *English as a second language teacher resource handbook. A practica guide for K-12 ESL programs*. California.: Corwin Press, Inc.
- * Joyce , Bruco and Weil, Marsha (2003). *Models of teaching*. New Delhi : Prentice Hall of India Pvt. Ltd.
- * Krishna Swamy, N. and Sri Raman, I. (1994), *English teaching in India Madras* : T.R. Publication. Mukaloi, Joseph C. (2009). *Approaches to English language teaching*. New Delhi : Discovery Publishing House Pvt Ltd.
- * Pal, HR and Pal, R(2006). *Curriculum - yesterday, today and tomorrow*, New Delhi : Shipra Publication.
- * Sachdeva, M.S. (1973). *A new approach to teaching of english in India*. Ludhiana : Prakash Brothers
- * Shrivastava, B.D(1968), *Structural approach to the teaching of English*. Agra. Ramprasad and Sons.

+3 THIRD YEAR FIFTH SEMESTER

DSE-1

B. PEDAGOGY OF LANGUAGE (ODIA)

Time : 3 Hrs.

End Semester Theory : 60 Marks

Credit: 04

Mid-Semester Theory : 15 Marks

(A student has to choose ANY ONE from Pedagogy of English and Odia under DSE-1)

Learning Objectives

On completion of this course, the student will:

- * State the importance and place of Odia as mother tongue in school curriculum.
- * Develop the strategies to address the problems of Odia language acquisition in multilingual context.
- * Use various strategies for facilitating the acquisition of language skills in Odia.
- * Decide appropriate pedagogic approaches to transact different types of lessons in Odia.
- * Prepare appropriate tools for comprehensive assessment of learning in Odia.
- * Explain the fundamentals of Odia linguistics and their relevance in teaching learning Odia.
- * Plan appropriate pedagogic treatment of the prescribed textual contents (in Odia) of classes IX and X.

UNIT 1: Odia as Mother Tongue in School Curriculum

- (i) Importance of mother tongue in the life and education of an individual
- (ii) Place of Odia as mother tongue in school curriculum in Odisha (both at elementary and secondary levels) in the context of language policy recommended by NPE, 1986 (three language formula) and NCF-2005
- (iii) Learning Objectives of teaching-learning Odia at elementary and secondary levels
- (iv) Inter-dependence of language skills in Odia and Strategies for facilitating acquisition of four fold language skills in Odia.

UNIT 2 : Pedagogic Approaches to Teaching-Learning Odia

- (i) Psychology of language learning and acquisition with reference to Odia as mother tongue. Problems and issues related to acquisition of Odia language in multi-lingual context
- (ii) Traditional versus modern methods of teaching-learning Odia.
- (iii) Different approaches and strategies to the teaching-learning of : “ Odia prose (detailed and non- detailed), Odia poetry, Odia composition, Odia grammar.

UNIT 3: Curricular Activities in Odia

- (i) Pedagogic analysis :
- (ii) Content analysis. analysis of content of Odia text book for identification of language items (new vocabulary, structural words, grammar components), learning Learning Objectives,
- (iii) Methods and strategies, teaching learning materials Including ICT materials, assessment strategies.
- (iv) Preparing Lesson Plans following Herbartian, 5E and Interpretation Construction Model (ICON)

UNIT 4 : Assessment

- (i) Types of Assessment-self assessment, peer assessment, teacher assessment : internal assessment and external assessment
- (ii) Techniques of Assessment in Odia : Continuous Assessment of Learners performance in Odia preparation of different types of objective-based test items (Extended Response Type, Restrict Response Type and Objective Type), preparation of check list, rating scale and rubric. Portfolio assessment in Odia.

PRACTICALCredit: **02****25** Marks

- * School internship (delivery of 5 Lessons following Herbartian/5E/ICON model)

NB: It will be evaluated by both Internal and External examiners.

Text Books

- Barik, N. (2014). Odia shikshyadana paddhati. Cuttack: A.K. Mishra Publishers Pvt. Ltd.
- Kocchar, S.K. (2012). Teaching of Mother Tongue. Sterling Publishers, New Delhi.
- Mohanty, J., Barik, N. & Khandai, U. (1983). Odia sikshadana paddhati. Cuttack : Nalanda.
- Nayak, B.; Mohanty, J. (1999): Odia bhasa O Sahityara Bhitibhumi O Shikshyadan Padhati. Cuttack: Jagannath Process, Toni Road, Cutack-2.

Reference Books

- Daswani, C. J. Language Education in Multilingual India. New/Delhi (UNESCO)
- Dhal, G.B. (1974). Dhvani bijanana. Bhubaneswar : Odisha Rajya Pathya Pustaka Pranayana Sanstha.
- Dhal, G.B. (1972). English uchharana siksha. Cuttack : Friends Publisher.
- Mathur, S.A. Sociological Approach to Indian Education. Vinod Pustak Bhandar, Agra.
- Mohanty, B. (1970). Odia bhasara utpati O 65 arma bikasha. Cuttack : Friends Publishers.
- Mohapatra, D. (1976). Odia Dhvani tattwa O sabdha sambhar. Cuttack : Grantha Mandir.
- Mohapatra, N. & Das, S. (1943). Sarbasara vyakarana. Cuttack : New Student's Store
- Palmer, H.P. Principles of Language Teaching. George G. Harrep and Co. Ltd.
- Rybum, W.M.(1926). Suggestions for the Teaching of Mother Tongue. OUP.
- Saiyadain, K.G. Education and Social Order. Asia Publishing House, Bombay.

+3 THIRD YEAR FIFTH SEMESTER**DSE- 2****A. PEDAGOGY OF SOCIAL SCIENCES**Time : **3** Hrs.End Semester Theory : **60** MarksCredit: **04**Mid-Semester Theory : **15** Marks

(A student has to choose ANY ONE from Pedagogy of Social Science and Mathematics under DSE-2)

Learning Objectives

On completion of this course, the student will:

- * State the meaning, scope and importance of Social science.
- * Specify the skills and competencies to formulate specific LEARNING OBJECTIVE History and Political Science lessons
- * Identify the different methods and skills of teaching History and Political Science for transacting the contents effectively.
- * Explain the importance of time sense and prepare / utilize timelines for effecting teaching of History.
- * Prepare Unit Plans and Lesson Plans in History and Political science
- * Develop diagnostic achievement test, administer them and analyse the results for providing feedback

UNIT 1: Concept, Learning Objectives and Values Of Teaching Social Science

- (i) Meaning, Nature and Scope of Social Science as NCF-2005
- (ii) Learning Objectives of teaching Social Science at elementary and secondary levels
- (iii) Importance of teaching Social Science In School Education
- (iv) Identification of values/ competencies/ skills to be developed through Social Sciences

UNIT 2: Methods and Approaches to Teaching-Learning Social Science

- (i) Story-telling
- (ii) Narration-cum-discussion
- (iii) Dramatization
- (iv) Source Method
- (v) Project method
- (vi) Field Trips
- (vii) Observation

UNIT 3: Curricular Activities in Social Sciences**Pedagogic analysis:**

- (i) Content analysis- analysis of topics of social science text book.
- (ii) Learning Objectives,
- (iii) Methods and strategies,
- (iv) Teaching learning materials including ICT materials
- (v) Learning activities including student and teacher activities
- (vi) Assessment strategies
- (vii) Preparing lesson plan following Herbart, 5E and Interpretation Construction Design Model (ICON)

UNIT 4 : Development of Resource Materials and Assessment in Social Science

- (i) Teaching-learning materials - Maps, Atlas, Globes, Charts, Graphs, Models, Filmstrips, T.V. Video, OHP, and Computer
- (ii) Timeline - Concept, Aspects, Type and Use
- (iii) Types of Assessment-self assessment, peer assessment, teacher assessment, internal assessment and external assessment
- (iv) Techniques of Assessment in history and political science. Continuous Assessment of Learners performance in history and political science, preparation of different types of objective-based test.
- (v) Items Extended Response Type, Restrictive Response Type and Objective Type

PRACTICALCredit: **02****25** Marks

* School internship (delivery of 5 Lessons following Herbatian 15E/ ICON model)

NB : It will be evaluated by both Internal and External examiners.

Text Books

- * Kochhar, SK (1970). *Methods of Teaching Social Studies*, New Delhi, India: Sterling Publication
- * Mamgal, S.K & Mangal, U. (2008). *Teaching of Social Studies*. New Delhi: PHI Learning Pu Ltd.
- * Sharma, R.A. (2014). *Teaching of Sociaal Sceince*. Meerut: R Lal Book Depot.

Reference Books

- * Kochhar, S.K (1970). *Teaching of History*. New Delhi, India: Sterling Publishers Pvt. Ltd.
 - * Banks James, A. (1997). *Teaching Strategies for the Social Studies Enquiry, Valuing and Decision Making*. Maszsachusetts, USA: Addition- Westely Publishing Co. Reading.
 - * Bining & Binning (1
 - * Burston, W.H.(1963). *Principles of History Teaching*. New Fetter Lance : Methuen & Co. Ltd.II.
 - * Burton W.H. (1972). *Principles of history teaching*, London: Methuen.
 - * Carretero, Mario, & Voss, James F. (Eds.) (1994). *Cognitive and instructional processes in history and the social sciences*. Hillsdale: Lawrence Erlbaum Associate.
 - * Choudhury, K.P. (1975). *The effective Teaching of History*. New Delhi, India: NCERT.
 - * Dhamiaja Neelam.(1993). *Multimedia Approaches in Teaching Social Studies*. New Delhi, India:Harmer Publishing House.
 - * Drake, Frederick D. & Lynn, R. Nelson (2005). *Engagement in teaching history: Theory and practices for middle and secondary teachers*. Columbus, OH: Pearson.
 - * Ghate, V.D. (1956). *Teaching of history*. Bombay: Oxford University Press. Gunnin, Dennis (1978). *The teaching of history*. Goom Helm Ltd. London.
 - * James H. (1953). *The Teaching of Social Studies in Secondary Schools*. London, UK: Longman Green & Co.
 - * James, T. H., Arthur, J. and Hunt, M. (2001). *Learning to teach history in the secondary school: A companion to school experience*. London: Routledge Falme.
 - * Kochhar. S.K.(1970). *Teaching of political science*. New Delhi: Sterling Publishers
 - * NCERT. (1970). *Teaching of History of Secondary Schools*. New Delhi, India: Author.
 - * NCERT.(1966). *A Handbook for History Teachers*. Bombay:India: Allied Publishers.
 - * Taneia. V.R.(1970). *Fundamentals of Teaching Social Studies*. Mahendra Capital Publishers.
 - * Verma, O P (1984). New Delhi, India Sterling Publishers Pvt. Ltd.
 - * Verma, O.P. & Vedanayagam E.G *Geography Teaching* New Delhi, India Sterling Publishers Pvt. Ltd.
 - * Yagnik, K.S (1966). *The Teaching of Social Studies in India* Bombay, India: Orient Longman Ltd.
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+3 THIRD YEAR FIFTH SEMESTER

DSE - 2

B. PEDAGOGY OF MATHEMATICS

Time : 3 Hrs.
Credit: 04

End Semester Theory : 60 Marks
Mid-Semester Theory : 15 Marks

(A student has to choose ANY ONE from Pedagogy of Social Science and Mathematics under DSE-II)

Learning Objectives:

On completion of this course, the students will

- * Narrate the evolution and nature of Mathematics and its importance in the school curriculum in the context of the recent curricular reforms.
- * Use various methods and approaches of teaching and learning mathematics especially suitable for the secondary school classes.
- * Plan lessons in Mathematics using traditional and constructivist approaches for effective classroom transactions.
- * Develop and collect activities and resource materials for their use in enhancing the quality of learning Mathematics at the secondary level.
- * Conduct continuous and comprehensive assessment for enhancing the quality of Mathematics learning.
- * Explain the concepts in Mathematics included in the secondary school curriculum and make pedagogical analysis of those concepts

UNIT 1: Foundations of Mathematics Education

- (i) Nature and Scope of Mathematics,
- (ii) Learning of Mathematics: Importance of Mathematics at elementary and secondary level, Learning Objectives of teaching-learning Mathematics at the two levels,
- (iii) Curriculum Reforms in School Mathematics: Rationale, Learning Objectives, principles, designs and materials in Mathematics, recent curricular reforms at the National and State levels (NCF 2005).

UNIT 2: Methods of Teaching-learning Mathematics

- (i) Learning by Discovery: Nature and purpose of learning by discovery; guided discovery strategies in teaching Mathematical concepts.
- (ii) Teaching for Understanding Proof: Proof by induction and deduction; proof by analysis and synthesis.
- (iii) Problem Solving in Mathematics: Importance of problem solving in Mathematics, Steps of problem solving in Mathematics.
- (iv) Constructivist approaches: Self-learning and peer learning strategies, Collaborative strategies: 5E and ICON Models.

UNIT 3 : Curricular Activities in Mathematics

- (i) Pedagogic analysis :
 - (ii) Content analysis-analysis of topics of mathematics text book.
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- (iii) Learning Objectives,
- (iv) Methods and strategies,
- (v) Teaching learning materials including ICT materials
- (vi) Learning activities including student and teacher activities
- (vii) Assessment strategies
- (viii) Process of preparing lesson plan following Herbatian, 5E and Interpretation Construction Design Model (ICON)

UNIT 4 : Assessment In Mathematics

- (i) Assessment of Mathematics learning: Unit test-Designing blue print, item construction, marking, Schemes.
- (ii) Assessment for Mathematics Learning: Assignments, Projects and portfolios in Mathematics, group and collaborative assessment in Mathematics,
- (iii) Non-testing methods of assessment of/for Mathematics Learning: Observation of learners in action, rating of participation in various Mathematics tasks and activities,
- (iv) Diagnosis of difficulties in learning Mathematics concepts, Remediation of the difficulties enrichment programmes in Mathematics learning -National Mathematics Talent Search, Mathematics Olympiad.
- (v) Planning for continuous assessment of classroom learning in Mathematics.

PRACTICAL

Credit: **02**

25 Marks

- * School internship (Delivery of 5 Lessons following Herbatian/5E/ICON model)

NB: It will be evaluated by both Internal and External examiners.

Text Books

- * Sidhu, K.S (1985). *Teaching of mathematics*. New Delhi: Sterling publication.
- * James, A. (2003). *Teaching of mathematics*. Neel Kamal Publication: Hyderabad. NCERT (2011). *Pedagogy of mathematics for two year B.Ed. course*. New Delhi:

Reference Books

- * Cooney, Thomas J. et al. (1975). *Dynamics of Teaching Secondary School Mathematics*. Boston: Houghton Mifflin.
- * Cooper, B. (1985). *Renegotiating secondary school mathematics*. The Hamer Press: East Sussex.
- * Michel. (1982). *Teaching mathematics*. Nicholos Publication Co: New York.
- * NCF (2005). *National curriculum framework*. NCERT: New Delhi
- * NCERT (2006). *Position paper: National focus group (NFG) on teaching Mathematics*. NCERT: New Delhi.
- * NCERT (2005). *Position paper: national focus group (NFG) on examination reform*. NCERT: New Delhi. Scopes, P.G. (1973). *Mathematics in secondary schools- a teaching approach*. Cambridge: Cambridge University Press

- * Driscoll, M., Egan, M., Nikula, J., & DiMatteo, R.W. (2007). *Fostering geometric thinking: A guide for teachers, grades 6-10*. Portsmouth, NH : Heinemann.
- * Driscoll, M.(1999). *Fostering algebraic thinking: A guide for teachers, grades 5-10*. Portsmouth, NH: Heinemann.
- * Grouws, D.A. (ed) (1992). *Handbook of research on mathematics teaching and learning*. New York: Macmillan Publishing.
- * Malone, J. and Taylor, P. (eds) (1993). *Constructivist interpretations of teaching and learning mathematics*. Perth: Curtin University of Technology.
- * Marshall, S.P. (1995). *Schemes in problem-solving*. New York: Cambridge University Press.
- * Moon, B. & Mayes, A.S. (eds.) (1995). *Teaching and learning in secondary school*. London: Routledge.
- * NCERT (1998). *A textbook of content-cum-methodology of teaching mathematics*. New Delhi: NCERT.
- * NCERT (2005). *National curriculum framework 2005*. New Delhi: NCERT.
- * NCERT (2006). *Position paper: National focus group on teaching mathematics*. New Delhi: NCERT.
- * TESS India (2015). *Key resources*. The Open University U.K. (<http://creativecommons.org/licenses/> and <http://www.tess-india.edu.in/>)

+3 THIRD YEAR SIXTH SEMESTER

DSE - 3

POLICY AND PRACTICES IN SCHOOL EDUCATION IN INDIA

Time : 3 Hrs.

Credit: 04

End Semester Theory : 60 Marks

Mid-Semester Theory : 15 Marks

Learning Objectives

On completion of this course, the student will:

- Analyse various policies on education for school education in India
- Evaluate progress of schools education
- Examine the problems in implementation of the policies on school education
- Explore status of women education and education for SC, ST and Minorities in Indian

UNIT-1 : Policies in School Education

- (i) National education policy, 1986, revised in 1992 and its corresponding document Programme of Action with reference to Elementary Education and Secondary Education.
 - (ii) Implementation of Elementary Education with reference to RTE Act-2009 and Policy issues.
 - (iii) Implementation of Secondary Education with reference to Rashtriya Madhyamik Siksha Abhiyan (RMSA) and policy issues
 - (iv) Guiding principles of NCF-2005 and curriculum revision at the school level.
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UNIT 2: Policies for Vocationalisation of Education

- (i) Vocationalisation of education-A policy analysis with reference to the report of Patel Committee (1977), Adisheshia Committee (1978) and National Policy on Education (1986) revised NPE (1992)
- (ii) Vocational Education at Higher Secondary level: Policy challenges
- (iii) Work education in schools -concept to implementation.

UNIT 3. Policies for Inclusive Education

- (i) Education of Children with Special Needs (CWSN): Policy perspectives with reference to NPE, 1986, 1992, Mental Health Act, 1987, Persons with Disabilities Act, 1995. Rehabilitation Council of India Act, 1992, National Trust Act, 1999
- (ii) Inclusive education Policies, Progress and Problems,

UNIT 4 : Policies on Access and equity in Education

- (i) Women's education and empowerment of women with reference to National Policy on Empowerment,, NPE-1986
- (ii) Progress of Women Education and Problems.
- (iii) Access and Equity in Education with focus to SC, ST and Minorities
- (iv) Policy for SC children-Implementation, Progress and Problems.
- (v) Policy for ST children-Implementation, Progress and Problems with reference to Mother based Multilingual Education
- (vi) Policy for Minority Children-Implementation, Progress and Problems.

PRACTICALCredit: **02****25** Marks

- Analysis of any Policy documents being implemented at School Education level

NB : It will be evaluated by both Internal and External examiners

Text Books

- Aggarwal, J.C. (2010). Landmarks in the history of modern Indian education (7th Ed) New Delhi: Vikash Publishing Pvt. Ltd.
- Rawat, P.L. (1989). History of Indian education New Delhi: Ram Prasad & Sons,

Reference Books

- Das, K.K. (1993). *Development of education in India*, New Delhi: Kalyani Publishers
 - Dash, B.N. (1991). *Development of education in India*, New Delhi: Ajanta Prakashan
 - Keay, F. E. & Mitra, Sukumar (1978). A history of education in India. New Delhi: Oxford University Press
 - Mukherjee, R.K. (1988). Ancient Indian education. New Delhi: Motilal Banarsidass
 - Mukherjee, R.K. (1989). The Gupta Empire. New Delhi: Motilal Banarsidass
 - Naik, J.P. & Narullah, S. (1996). A student's history of education in India. New Delhi: Mc Millan India Ltd
 - Ghosh, S.C. (1989). Education policy in India since warren Hastings, Calcutta: N-Prakashan.
 - Altekar. A.S. (1934), Education in ancient India, Banaras: Indian book Shop.
-

- Das Gupta, S.N. (1988). A history of Indian philosophy. (5 Vols.) Delhi: Motilal Banarasi Dass.
- MHRD, GOI (1986). National policy on education. New Delhi: The Author MHRD, GOI (1993). Learning without burden. Yashpal Committee Report (1993). New Delhi: The Author Ministry of Education, GOI (1964-66).
- Education and national development. (Report of education commission (1964-66). New Delhi: The Author Sen. Bimal (1989).
- Development of technical education in India and state policy-a historical perspective. Indian Journal of History of Science, 24 (2): 224-248, Indian National Science Academy
- Sen, S.N. (1988). Education in ancient and medieval India Indian Journal of History of Science, 23 (1): 1-32
- Shanker, Uday (1984). Education of Indian teachers New Delhi Sterling Publishers Pvt. Ltd.
- Singh. R.P. (1970). Education in ancient and medieval India Delhi Arya Book Depot. Rao, K Sudha (Ed.) (2002). Educational policies in India: Analysis and review of promise and performance. New Delhi: NUEPA.
- NCERT (2005). *National curriculum framework*, New Delhi NCERT
- MHRD, Gov. of India (1986). *National policy on education* New Delhi: Gol.
- MHRD, Gov. of India (1992), *National policy on education* (revised) New Delhi : Gol, MHRD, (1992), *Programme of action.*, New Delhi: Govt. of India.
- NCTE (1998b). *Curriculum Framework for Quality Teacher Education*. New Delhi NCTE.
- NCTE (2009). *National Curriculum Framework for Teacher Education towards Preparing Professional and Humane Teacher*. New Delhi NCTE.
- Ministry of Law Justice (2009). The Right of Children to Free and Compulsory Education Act, 2009. *The Gazette of India*, Ministry of Law Justice, Govt. of India.
- Kurrien, J (1983). *Elementary Education in India*. New Delhi: Vikas. MHRD () *Report to the People on Education 2011-12*. New Delhi: Author. MHRD (1986): *National Policy on Eeducation*. New Delhi: MHRD.
- MHRD (2000). *Sarva Shiksha Abhiyan: A program for Universal Elementary Educalion A framework for implementation*. New Delhi: Author.
- Government of India, Ministry of Human Resource Development (2005), Report of the CABE Committee on Autonomy of Higher Education Institutions, Department of Secondary and Higher Education, New Delhi, June.

Websites to be referred:

- <http://www.rehabcouncil.nic.in/>
- writereaddata/RCI_Amendments_ACT.pdf
- <http://socialjustice.nic.in/pwdact1995.php>
- <http://mhrd.gov.in/rmsa>

+3 THIRD YEAR SIXTH SEMESTER

DSE - 4

DISSERTATION/ RESEARCH PROJECT

Credit: **06**Full Mark : **100** Marks

The students will select a research project on any Educational issue or problem or topic and prepare a report. The project will be prepared based on proposal already developed in Semester-III, Core-6. Distribution of Marks will be as follows:

Item Total

Report	80
Viva-voce	20
Total	100

The assessment of students' performance will be made jointly by the internal examiners.

+3 SECOND YEAR THIRD SEMESTER

GE - 3

EDUCATIONAL PHILOSOPHY

Time : **3** Hrs.End Semester Theory : **60** MarksCredit: **04**Mid-Semester Theory : **15** Marks

Learning Objectives:

On completion of this course, the learners shall be able to:

- State and analyse the meaning of education and form own concept on education
- Explain philosophy as the foundation of education
- Analyse aims of education
- Describe the essence of different formal philosophies and draw educational implications
- Compare and contrast Indian and western philosophies of education

UNIT 1: Education in Philosophical Perspective

- (i) Etymological meaning of education
- (ii) Narrower and broader meaning of education, Lifelong Education
- (iii) Aims of Education- Individual and Social Aims of Education
- (iv) Meaning and nature of philosophy
- (v) Branches of Philosophy- Metaphysics, Epistemology and Axiology, and its educational implications
- (vi) Functions of Philosophy in relation to education

UNIT 2: Formal Schools of Philosophy and their Educational Implications

- (i) Idealism, Naturalism, Pragmatism with reference to:
- (ii) Aims of Education, Curriculum, Methods of Teaching, Role of Teacher, Discipline

UNIT 3: Indian Schools of Philosophy and their Educational Implications

- (i) Common Characteristics of Indian Philosophy
- (ii) Sankhya, Vedanta, , Buddhism, Jainism with reference to:
- (iii) Philosophical tenets, Aims of education, Curriculum, Methods of Teaching, Role of Teacher

UNIT 4: Educational Thought of Western and Indian Thinkers

- | | |
|----------------------|----------------|
| (i) Plato | (ii) Dewey |
| (iii) Gopabandhu Das | (iv) Gandhi |
| (v) Tagore | (vi) Aurobindo |

PRACTICALCredit: **02****25 Marks**

- Preparing a term paper on any topic under GE-3.

NB: It will be evaluated by both the internal and External examiners.

Text Books

- Safaya, R.N. & Shaida, B.D. (2010). *Modern Theory and Principles of Education*. New Delhi : Dhanpatral Publishing Company Pvt. Ltd. Nayak, B.K. (2018).
- Ravi Samuel.S. (2015). *A Comprehensive Study of Education*. Delhi: PHI Learning Pvt. Ltd.
- Nayak, B.K. (ND). *Text Book of Foundation of Education*, Cuttack, Odisha: Kitab Mhal.

Reference Books

- Agrawal, J.C. (2013). *Theory and principle of education*. New Delhi: Vikash Publishing house Pvt Ltd.
- Anand. C.L. et al. (1983). *Teacher and education in emerging in Indian society*, NCERT.
- Brubacher, John. S.(1969). *Modern philosophies of education*. New York: McGraw Hill Co.
- Clarke, P. (2001). *Teaching and learning: The Culture of pedagogy*. New Delhi: Sage Publication.
- Dash, B.N. (2011) *Foundation of education*, New Delhi; Kalyani Publishers.
- Dewey, John (1956). *The Child and the curriculum, school and society*. Chicago, Illinois: University of Chicago Press.
- Dewey, John (1997). *Experience and education*. New York: Touchstone.
- Ganesh, Kamala & Thakkar, Usha (Ed.) (2005). *Culture and making of identity in India*. New Delhi: Sage Publications.
- Krishnamurthy, J. (1953). *Education and significance of life*. New Delhi: B.I. Publications
- Kumar Krishna (1996). *Learning from conflict*. New Delhi: Orient Longman.
- Ministry of Education (1966). *Education and national development*. New Delhi: Ministry of Education, Government of India.
- Ornstein, Allan C. & Levine, Daniel U. (1989). *Foundations of education (4th Edn.)*. Boston: Houghton Mifflin Co.
- Pathak, R. P. (2012). *Philosophical and sociological principles of education*. Delhi: Pearson.
- Pathak, Avijit (2002). *Social implications of schooling*. New Delhi: Rainbow Publishers.
- Peters, R.S. (1967). *The Concept of education*. London: Routledge Kegan & Paul.
- Radhakrishnan, S. *Indian philosophy Vol. I and Vol. II*
- Ross, James S. (1981). *Ground work of educational theory*. Delhi: Oxford University Press
- Rusk, Robert R., *Philosophical bases of education*, London: Oxford University Press.
- Salamatullah, (1979). *Education in social context*. New Delhi: NCERT.
- Srinivas, M.N., (1986). *Social changes in modern India*. Bombay: Allied Publishers.

- Taneja, V.R. (2000). Educational thought and practice, New Delhi: Sterling Publishers Pvt. Limited.
- Wingo, G. Max (1975). Philosophies of education. New Delhi: Sterling Publisher Pvt. Limited.

+3 SECOND YEAR FOURTH SEMESTER

GE - 4

EDUCATIONAL PSYCHOLOGY

Time : 3 Hrs.

Credit: 04

End Semester Theory : 60 Marks

Mid-Semester Theory : 15 Marks

Learning Objectives

On completion of this course, the students will:

- Explain the concept of educational psychology and its relationship with psychology.
- Understand different methods of educational psychology.
- Explain the concepts of growth and development of child adolescence, and underlined general principles of growth and development.
- Describe briefly the periods and the typical characteristics of growth and development during childhood and adolescence.
- Explain the theory of cognitive development and its educational implications.
- State the different forms and characteristics of individual differences and the ways of meeting the classroom issues arising out of the differences.
- Identify the learning needs during the different stages of development and adopt appropriate strategies in and out of school to meet the learning needs.

UNIT 1: Educational Psychology in Developmental Perspective

- (i) Meaning, nature, scope and relevance of educational psychology
- (ii) Methods of educational psychology- observation, experimentation, and case study
- (iii) Application of educational psychology in understanding learner
- (iv) Growth and Development-Concept, difference between growth and development, and principles of growth and development
- (v) Characteristics of development during adolescence in different areas:
- (vi) Physical, social, emotional and intellectual (with reference to Piaget)

UNIT 2: Intelligence, Creativity and Individual difference

- (i) Individual difference-concept, nature, factors and role of education
- (ii) Intelligence- meaning and nature of intelligence, concept of I.Q, theories of intelligence- Two factor theories, Guildford's structure of intelligence (SI) model, Gardner's multiple theory of intelligence.
- (iii) Measurement of intelligence- individual and group test, verbal, non-verbal test
- (iv) Creativity- meaning, nature and stages of creative thinking, strategies for fostering creativity

UNIT 3 : Learning and Motivation

- (i) Learning- meaning, nature and factors of learning
 - (ii) Theories of learning with experiment and educational implications
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- (iii) Classical conditioning, operant conditioning, insightful learning and constructivist approach to learning
- (iv) Motivation - concepts, types, and techniques of motivation.

UNIT 4 : Personality and Mental health

- (i) Personality- meaning and nature of personality
- (ii) Theories- type theory(Jung), trait theory(Allport)
- (iii) Assessment of personality- subjective, objective and projective techniques
- (iv) Mental health-concept, factors affecting mental health and role of teacher, mental health of teacher.
- (v) Adjustment mechanism: Concept and Types

PRACTICAL

Credit: **02**

25 Marks

- Case study of an exceptional child and reporting

N.B: It will be evaluated by both the Internal and External examiners.

Text Books

- Chauhan, S.S. (1978). *Advanced educational psychology*. New Delhi: Vikas Publishing House Pvt. Ltd.
- Mangal, S.K. (2002). *Advanced educational psychology*. New Delhi: Prentice Hall of India.
- Woolfolk, A. (2015). *Educational psychology (9th Ed.)*. New Delhi: Pearson Publication

Reference Books

- Aggarwal, J.C. (2014). *Essentials of Educational Psychology*. New Delhi: Vikas Publishing House Pvt. Ltd.
- Attri, A.K. (2015). *Psychology of development and learning*. New Delhi: APH Publishing Corporation.
- Bernard, P.H. (1970). *Mental Health in the class room*. New York: McGraw Hill.
- Biehler, R.F. & Snowman, J., (1997). *Psychology applied to teaching*. New York: Houghton Mifflin.
- Bigge, M.L., *Psychological foundations of education*, Harper and Row, New York, 1985.
- Chandraiah, K. (2011). *Emotional intelligence*. New Delhi: APH Publishing Corporation.
- Dececco, J.P. & Crawford, W.R. (1997). *Psychology of learning and institution*. New Delhi: Prentice Half of India.
- Good T., (1990). *Educational psychology*. Longman, New York, 1990.
- Lindgren, H.C. (1980). *Educational psychology in the classroom*. New York: Oxford University Press.
- Mouly, G.J. (1982). *Psychology for teaching*. Allyn & Bacon, Boston.
- Rothstein, P.R. (1990). *Educational psychology*. New York: McGraw Hill.
- Salvin, R. (1990). *Educational psychology: theory into practice*, N.J.: Prentice hall, Englewoon Cliffs,
- Snowman and Biehler (-). *Psychology applied to teaching.....*
- Sprint hall, RC. & Sprint hall, NA, (1990). *Educational psychology, development approach*, New York: McGraw Hill.

ENGLISH

+3 FIRST YEAR FIRST SEMESTER

Core Paper - 1

BRITISH POETRY AND DRAMA : 14TH TO 17TH CENTURIES

Time : 3 Hrs.

Credit : 06

End Semester Theory : 80 Marks

Mid Semester Theory : 20 Marks

COURSE OUTCOME

Students will be introduced to British poetry and drama from the 14th to the 17th century. It will help the students explore certain seminal texts from the early modern period, covering the genesis of modern English poetry and the Renaissance that set British poetry and drama on their glorious course to greatness.

UNIT 1 : Historical overview

The period is remarkable in many ways: 14th century poetry evokes an unmistakable sense of “modern” and the spirit of Renaissance is marked in the Elizabethan Drama. The Reformation brings about sweeping changes in religion and politics. A period of expansion of horizons : intellectual and geographical.

UNIT 2 : Geoffrey Chaucer

The Pardoner’s Tale

UNIT 3 :

- (i) Spenser: "Sonnet 34 (Amoretti)"
- (ii) Shakespeare : ‘That time of the year...’ (Sonnet 73)
- (iii) Ben Jonson : “Song to Celia”
- (iv) John Donne : “Sunne Rising”

UNIT 4 : Shakespeare

- (i) *Macbeth*

Text Books

- Texts as prescribed in Units 2, 3, 4.

Reference Books

- *The Pelican Guide to English Literature*. Ed. Boris Ford. Vol 1
 - *The Age of Chaucer English Literature in Context*. Paul Poplawski. Cambridge UP, 2008
 - *Routledge History of Literature in English*. Ronald Carter & John McRae. London : Routledge, 1997
 - Shakespeare for Beginners by Brandon Toropov
 - English Literature by Jonathan Bate (Ch.7 “Shakespeare and the Dramatic Literature”)
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+3 FIRST YEAR FIRST SEMESTER

Core Paper-2

BRITISH POETRY AND DRAMA : 17TH AND 18TH CENTURY

Time : 3 Hrs.

Credit : 06

End Semester Theory : 80 Marks

Mid Semester Theory : 20 Marks

COURSE OUTCOME:

Students will be acquainted with the Jacobean and the 18th century British poetry and drama, which will familiarize them with the form of satire, the comedy of humors and the comedy of manners.

UNIT 1 : Historical overview

- (i) 17th C : Period of the English Revolution (1640–60); the Jacobean period; metaphysical poetry; cavalier poetry; comedy of humors; masques and beast fables
- (ii) 18th C : Puritanism; Restoration; Neoclassicism; Heroic poetry; Restoration comedy; Comedy of manners

UNIT 2 : Milton : "Lycidas"

- (i) Andrew Marvell : 'To His Coy Mistress'
- (ii) Alexander Pope : "Ode On Solitude"
- (iii) Aphra Behn: "I Led my Silvia to a Grove"
- (iv) Robert Herrick : "His Return to London"

UNIT 3 : Ben Jonson

- (i) *Volpone*

UNIT 4 : Dryden

- (i) *All For Love*

Text Books

- Texts prescribed in units 2, 3, 4 (All the texts are freely available on the sites such as www.poetryfoundation.org, www.bartleby.com, <http://www.poemhunter.com> etc. In addition, the following anthologies may be consulted.)

Reference Books

- *Routledge History of Literature in English*. Ronald Carter & John McRae. London : Routledge, 1997
- Black, Joseph (Ed). : *The Broad view Anthology of British Literature* Concise Edition, Vol. A. Broad view Press, London, 2007.
- Corns, T N (ed.) *The Cambridge Companion to English Poetry*. Cambridge : University Press, 1973
- Ford, Borised. *The Pelican Guide to English Literature*. Vol 3. From *Donneto Marvell* in. Harmondsworth : Penguin Books, 1976.
- Parry, G. : *The Seventeenth Century : The Intellectual and Cultural Context of English Literature*. Harlow : Longman, 1989.
- Sherwood, T.G : *Fulfilling the Circle : A Study of John Donne's Thought*, Toronto, Toronto Press, 1984.

+3 FIRST YEAR SECOND SEMESTER

Core Paper - 3 BRITISH PROSE : 18TH CENTURY

Time : 3 Hrs.
Credit : 06

End Semester Theory : 80 Marks
Mid Semester Theory : 20 Marks

COURSE OUTCOME

Students will be acquainted with the period marked with an emphasis on reason and a newly evolved form of literature- 'the essay'.

UNIT 1 : Historical overview:

Restoration, Glorious Revolution, Neo-classicism & Enlightenment.

UNIT 2 : Mary Wollstonecraft

"The Rights and Involved Duties of Mankind Considered" (Chapter 1, *A Vindication of the Rights of Women*)

UNIT 3 : Joseph Addison : Essays

"Friendship," "Good Nature," "Six Papers on Wit" (From *Joseph Addison : Essays and Tales*, <<http://www.biblioteca.org.ar/libros/167707.pdf>>)

UNIT 4 : Samuel Johnson

"Narratives of Travellers Considered," and "Obstructions of Learning" from *Samuel Johnson's Essays* <<http://www.johnsonessays.com/>>

Text Books

- Texts prescribed in Units 2, 3, 4. Web sources are indicated against the texts in brackets.

Reference Books

- *Routledge History of Literature in English*. Ronald Carter & John McRae. London : Routledge, 1997
- Norton Anthology of English Literature. Vol 2 (Head notes on the periods and authors featured in the paper)
- *English Literature* by Jonathan Bate (Ch.4 "The Study of English")
- *Pelican Guide to English Literature*. Ed. Boris Ford. Vol 4. *From Dryden to Johnson* O.M. Myres, "Introduction" to *The Coverley Papers*

+3 FIRST YEAR SECOND SEMESTER

Core Paper - 4 INDIAN WRITING IN ENGLISH

Time : 3 Hrs.
Credit : 06

End Semester Theory : 80 Marks
Mid Semester Theory : 20 Marks

COURSE OUTCOME:

In this paper, the students will be introduced to various genres of Indian Writing in English from the colonial time to the present day through a selection of representative poems, novel and play.

UNIT 1 : Historical overview

Indian writing in English, the key points of which are East India Company's arrival in India, Macaulay's 1835 Minutes of Education, India's first war of independence and the establishment of colleges to promote Western education and the evolution of Indian writing in English in 20th century.

UNIT 2 :

- (i) Sarojini Naidu "The Bangle Sellers",
- (ii) A. K. Ramanujan "Obituary",
- (iii) Jayanta Mahapatra "Grandfather",
- (iv) Nissim Ezekiel "Night of the Scorpion"

UNIT 3 : R. K Narayan

The Guide

UNIT 4 : Mahesh Dattani

Final Solutions

Text Books

- Texts prescribed in Units 2, 3, 4.

Reference Books

- Mehrotra, Arvind Krishna. *Concise History of Indian Literature in English*, Permanent Black, 2010.
- K.Srinivas Ayenger. *A History of Indian Writing in English*
- M.K. Naik. *History of Indian Writing in English*
- Vinay Dharwadker. "The Historical Formation of Indian English Literature" in Sheldon Pollock(ed) *Literary Cultures in History*
- *Modern Indian Drama : Issues and Interventions*(ed) Lakshmi Subramanyam

+3 SECOND YEAR THIRD SEMESTER**Core Paper - 5****BRITISH ROMANTIC LITERATURE**

Time : 3 Hrs.

Credit : 06

End Semester Theory : 80 Marks

Mid Semester Theory : 20 Marks

COURSE OUTCOME:

The students are expected to be acquainted with the Romantic period in English literature and some of its representative writers. They will be able to sample some seminal works of the Romantic age which gave expression to the key ideas of the period such as return to nature, subjectivity, desire for personal freedom and the defiance of classicism-imposed restrictions on poetic form.

UNIT 1 : Historical overview

The period otherwise known as The Romantic Revival; The Age of Revolution as it owes its origin to the epoch-making French Revolution of 1789. The emphasis on the organic relationship between man and Nature, individual liberty and unbridled desire free from the shackles of classicism made this period unique-Romanticism vs Classicism

UNIT 2 :

- (i) Thomas Gray: "Elegy Written in a Country Churchyard,"
- (ii) William Blake: "A Poison Tree" and "Chimney Sweeper"

UNIT 3 :

- (i) William Wordsworth's "Tintern Abbey"
- (ii) S.T. Coleridge : "Kubla Khan,"
- (iii) John Keats : "Ode to a Nightingale,"
- (iv) P.B. Shelley : "Ode to the West Wind,"

UNIT 4 :

William Wordsworth's *Preface* to the 2nd edition of *Lyrical Ballads*

Text Books

- Texts prescribed in Units 2, 3, 4

Reference Books

- Paul Poplawski, *English Literature in Context*, "The Romantic Period"
- *Routledge History of Literature in English*. Ronald Carter & John McRae. London : Routledge, 1997
- Norton Anthology of English Literature. Vol 2 (Head notes on the periods and authors featured in the paper)
- *Pelican Guide to English Literature. Vol 5. From Blake to Byron*. Ed. Boris Ford
- Maurice Bowra, *The Romantic Imagination*
- *English Literature*. Jonathan Bate (Ch. 5 "Periods and Movements")

+3 SECOND YEAR THIRD SEMESTER

Core Paper - 6

BRITISH LITERATURE 19TH CENTURY

Time : 3 Hrs.

Credit : 06

End Semester Theory : 80 Marks

Mid Semester Theory : 20 Marks

COURSE OUTCOME:

The learners will be introduced to the exploits of the 19th century British Literature in prose, especially fiction and cultural criticism. They will also be exposed to samples of Victorian poetry.

UNIT 1 : Historical overview

The 19th century British literature though mainly famous for the Romantic Movement, was also a witness to major socio-political developments like industrialization, technological advancements and large scale mobilization of people from the rural to the urban centers.

UNIT 2 : Poetry

- (i) Tennyson; "Break, Break, Break", Robert Browning, "My Last Duchess"
- (ii) Criticism : Matthew Arnold: "The Study of Poetry"

UNIT 3 : Jane Austen*Pride and Prejudice***UNIT 4 : Charles Dickens***Hard Times***Text Books:**

- Texts prescribed in Units 2,3,4

Reference Books:

- *English Literature in Context*. Paul Poplawski. Cambridge UP, 2008
- *Routledge History of Literature in English*. Ronald Carter & John McRae. London : Routledge, 1997
- Norton Anthology of English Literature. Vol 2 (Head notes on the periods and authors featured in the paper)
- *English Literature*. Jonathan Bate (Ch.4 "The Study of English", Ch.5 "Periods and Movements")
- Terry Eagleton, *The English Novel*

+3 SECOND YEAR THIRD SEMESTER**Core Paper - 7****BRITISH LITERATURE : EARLY 20TH CENTURY**

Time : 3 Hrs.

Credit : 06

End Semester Theory : 80 Marks

Mid Semester Theory : 20 Marks

COURSE OUTCOME:

The students will be familiar with the literature of Britain in the early 20th century, focusing on the modernist canon in poetry, novel, drama and literary criticism.

UNIT 1 : Historical overview

Developments in society and economy, leading to a crisis in western society known as the First World War and the resultant change in the ways of knowing and perceiving. Marx's concept of class struggle, Freud's theory of the unconscious are to be discussed.

UNIT 2 : Poetry

- (i) T.S. Eliot "Love Song of J. Alfred Prufrock",
- (ii) Yeats : "Second Coming",
- (iii) Wilfred Owen : "Strange Meeting",
- (iv) Siegfried Sassoon, "Suicide in the Trenches"
- (v) Criticism : T.S. Eliot : "Tradition and the Individual Talent"

UNIT 3 :Virginia Woolf : *Mrs. Dalloway*

UNIT 4 :

JM Synge : *Ryders to the Sea*

Text Books

- Texts prescribed in Units 2, 3, 4

Reference Books :

- *Pelican Guide to English Literature : Vol.7. The Modern Age* (ed.) Boris Ford
- *Routledge History of Literature in English*. Ronald Carter & John McRae. London : Routledge, 1997
- *English Literature*. Jonathan Bate(Ch.5 “Periods and Movements”)
- *Modernism*. Critical Idiom. By Peter Faulkner
- *Modernism*. New Critical Idiom. By Peter Childs

+3 SECOND YEAR FOURTH SEMESTER

Core Paper - 8 AMERICAN LITERATURE

Time : 3 Hrs.

End Semester Theory : 80 Marks

Credit : 06

Mid Semester Theory : 20 Marks

COURSE OUTCOME:

The students will be introduced to the depth and diversity of American literature resulting in a thorough understanding of socio-cultural, political and philosophical contexts of the American spirit.

UNIT1: Historical overview

Genesis and evolution, and the defining myths of American Literature—city on a hill, the frontier spirit, the American Dream, manifest destiny, *e pluribus unum*

UNIT2:

- (i) Walt Whitman: “Out of the Cradle Endlessly Rocking”,
- (ii) Robert Frost: “Stopping by the Woods in a Snowy Evening”,
- (iii) Emily Dickinson: “Because I could not stop for death”
- (iv) Maya Angelou: “I Know Why the Caged Birds Sing”

UNIT3:

Arthur Miller : *The Death of a Salesman*

UNIT4:

Ernest Hemingway : *A Farewell to Arms*

Text Books

- Texts prescribed in Units 2, 3, 4 (All texts are available on the Internet.)

ReferenceBooks:

- *Pelican Guide to English Literature*. Vol.9. *American Literature*. Ed. Boris Ford
- *Highlights of American Literature*. Dr. Carl Bode (USIS)
- *A Short History of American Literature*, Krishna Sen and Ashok Sengupta. Orient Black Swan, 2017
- *The Story of American Literature*. By Ludwig Lewisohn
- *Norton Anthology of American Literature*. (Head notes on authors and periods to be read)

+3 SECOND YEAR FOURTH SEMESTER

Core Paper - 9
EUROPEAN CLASSICAL LITERATURE

Time : 3 Hrs.

Credit : 06

End Semester Theory : 80 Marks

Mid Semester Theory : 20 Marks

COURSE OUTCOME:

This paper seeks to introduce the students to European Classical literature, commonly considered to have begun in the 8th century BC in ancient Greece and continued until the decline of the Roman Empire in the 5th century AD. The paper seeks to acquaint the students with the founding texts of the European canon.

UNIT 1 : Historical Review

Classical Antiquity: ancient Greece, the rise and decline of the Roman Empire; Geographical space : cultural history of the Greco-Roman world centered on the Mediterranean Sea.

UNIT 2 : Epic poetry

Homer : *Odyssey* (Book I)

UNIT 3 : Tragedy:

Sophocles : *Oedipus the King*

UNIT 4 : Criticism:

Aristotle : *Poetics* (Chapters : 6, 7, 8)

TextBooks

- Texts prescribed in Units 2, 3, 4 (All texts are available for free access on Project Gutenberg <https://www.gutenberg.org/>)

Reference Books:

- H.D.F. Kitto, *Form and Meaning in Greek Drama*
- H.D.F. Kitto, *The Greeks*
- Eric Auerbach, *Mimesis : The Representation of Reality in Western Literature*
- Gilbert Murray, *A History of Ancient Greek Literature*, Andesite Press, 2017.
- *Classicism : A Very Short Introduction* OUP

+3 SECOND YEAR FOURTH SEMESTER

Core Paper - 10 WOMEN'S WRITING

Time : 3 Hrs.

End Semester Theory : 80 Marks

Credit : 06

Mid Semester Theory : 20 Marks

COURSE OUTCOME:

In this paper the students will be acquainted with the works of women writers from different cultures and nations in various genres which will help them to be critically aware of the issues relating to the workings of patriarchy, issues of gender, and relations of desire and power.

UNIT 1 : Virginia Woolf

“Chapter 1” from *A Room of One's Own*

UNIT 2 : Charlotte Bronte

Jane Eyre

UNIT 3 :

- (i) Kamala Das, 'An Introduction', 'The Sunshine Cat'
- (ii) Sylvia Plath, 'Mirror', 'Barren Woman'
- (iii) Eunicede Souza, 'Women in Dutch Painting', 'Remember Medusa'
- (iv) Shanta Acharya, 'Home coming', 'Shringara'

UNIT 4 :

Ashapura Devi, *The Distant Window*

Text Books

- Texts prescribed in Units 1, 2, 3, 4

Reference Books:

- Toril Moi, *Sexual/Textual Politics*
 - Elaine Showalter, *A Literature of Their Own*
 - Sandra Gilbert and Susan Gubar, *The Mad Woman in the Attic*
 - *The Distant Window*, Prachi Prakashan, Tr. Anima Bose, 1997
 - Helen Carr, 'A History of Women's Writing' in *A History of Feminist Literary Criticism* by Gill Plain and Susan Sellers
 - Mary Eagleton, 'Literary Representations of Women' in *A History of Feminist Literary Criticism* by Gill Plain and Susan Sellers
-

+3 THIRD YEAR FIFTH SEMESTER

Core Paper - 11 MODERN EUROPEAN DRAMA

Time : 3 Hrs.

Credit : 06

End Semester Theory : 80 Marks

Mid Semester Theory : 20 Marks

COURSE OUTCOME:

The students will be to introduced to the best of experimental and innovative dramatic literature of modern Europe.

UNIT 1 : Historical Review

Politics, social change and the stage; text and performance; European Drama : Realism and Beyond; Tragedy and Heroism in Modern European Drama; The Theatre of the Absurd

UNIT 2 : Henrik Ibsen

Ghosts

UNIT 3 : Eugene Ionesco

Chairs

UNIT 4 : Bertolt Brecht

Life of Galileo

Text Books

- Texts prescribed in Units 1, 2, 3, 4

Web Resources

- Ionesco : <http://www.kkoworld.com/kitablar/ejen-ionesko-kergedan-eng.pdf>
- Ibsen : <http://www.gutenberg.org/files/8121/8121-h/8121-h.htm>

Reference Books:

- Constant in Stanislavski, *An Actor Prepares*, Chap. 8,
- 'Faith and the Sense of Truth', tr. Elizabeth Reynolds Hapgood (Harmondsworth: Penguin, 1967) sections 1, 2, 7, 8, 9, pp.121-5, 137-46.
- Bertolt Brecht, 'The Street Scene', 'Theatre for Pleasure or Theatre for Instruction', and 'Dramatic Theatre vs Epic Theatre', in *Brecht on Theatre: The Development of an Aesthetic*, ed. And tr. John Willet (London : Methuen, 1992) pp. 68-76, 121-8.
- George Steiner, 'On Modern Tragedy', in *The Death of Tragedy* (London : Faber, 1995) pp. 303-24.
- Raymond Williams, *Drama from Ibsen to Brecht*
- Jean Genet, *Reflections on Theatre* (London: Faber & Faber) Chapter 2: "The Strange World Urb..." pp.63-74.
- *Theatre of Absurd*. Martin Esslin

+3 THIRD YEAR FIFTH SEMESTER

Core Paper - 12

INDIAN CLASSICAL LITERATURE

(Training of teachers essential for teaching this course)

Time : 3 Hrs.

Credit : 06

End Semester Theory : 80 Marks

Mid Semester Theory : 20 Marks

COURSE OUTCOME:

This paper seeks to create awareness among the students of the rich and diverse literary and aesthetic culture of ancient India.

UNIT 1: Introduction to the history and genesis of Indian Classical Literature

UNIT 2 : Sanskrit Drama –1

Kalidasa, *Abhijnanasakuntalam*, Act IV, tr. M. R Kale, Motilal Banarasi Dass, New Delhi

UNIT 3 : Sanskrit Drama-2

Mrcchakatika by Sudraka, Act I, tr.M.M. Ramachandra Kale (New Delhi : Motilal Banarasidass, 1962)

UNIT 4 : Aesthetics and Maxims

Bharata's *Natyasastra*, Chapter VI on Rasa theory

Text Books

- Texts prescribed in units II, III, IV

Reference Books:

- Kalidasa. Critical Edition. Sahitya Akademi
- Bharata's *Natyashastra*. English Translation by M.M. Ghosh. Vol 1. 2nd edition. Asiatic Society, Kolkata, 1950. Ch. 6 "Sentiments". Pp.158-95
- J.A.B. Van Buitenen, "Dharma and Moksa" in Roy W. Perrett. Ed. *Indian Philosophy*. Vol 5, *Theory of Value : A Collection of Readings*. New York : Garland, 2000. Pp.33-40
- Vinay Dharwadkar, "Orientalism and the Study of Indian Literature", *Orientalism and the Postcolonial Predicament: Perspectives on South Asia*. Ed. Carol A. Breckenridge and Peter Vander Veer. New Delhi : OUP, 1994. Pp.158-95
- Haldhar Panda, *Universals of Poetics*

+3 THIRD YEAR SIXTH SEMESTER

Core Paper - 13

POST COLONIAL LITERATURES

Time : 3 Hrs.

Credit : 06

End Semester Theory : 80 Marks

Mid Semester Theory : 20 Marks

COURSE OUTCOME:

In this paper, the students will be introduced to postcolonial literature – a body of literature that responds to European colonialism and empire in Asia, Africa, Middle East, the Pacific and elsewhere. The students will get the opportunity to think through the layered response – compliance, resistance, mimicry, subversion – that is involved in the production of post-independence literature.

UNIT 1 :

Postcolonialism : Elleke Boehmer (From *Literary Theory and Criticism* Ed. Patricia Waugh)

- (a) The post in Postcolonial,
- (b) Movements and theories against Empire
- (c) Leading Postcolonial Thinkers (Frantz Fanon, Edward Said, Gayatri Spivak, Homi Bhabha)

UNIT 2 : Raja Rao

Kanthapura

UNIT 3 : Jean Rhys

Wide Sargasso Sea

UNIT 4 : Athol Fugard

Blood Knot

Text Books

- Texts prescribed in Units 1,2,3,4

Reference Books:

- Chinua Achebe : "English and the African Writer" (Availableonline)
- Ngugiwa Thiong'o : "The Quest for Relevance" from *Decolonizing the Mind : The Politics of Language in African Literature*
- Leela Gandhi, *Postcolonial Theory : An Introduction*. OUP, 1998.
- Bill Ashcroft, Gareth Griffin, Helen Tiffin, *The Empire Writes Back : Theory and Practice of Post-Colonial Literature*.
- Edward Said. *Orientalism*.

+3 THIRD YEAR SIXTH SEMESTER

Core Paper - 14 POPULAR LITERATURE

Time : 3 Hrs.

Credit : 06

End Semester Theory : 80 Marks

Mid Semester Theory : 20 Marks

COURSE OUTCOME:

This paper seeks to introduce the students to genres such as children's literature, detective fiction and campus fiction, which have a "mass" appeal, and can help the students gain a better understanding of the popular and folkroots of literature.

UNIT 1 : Introduction to the concept

- (i) What is popular literature?
- (ii) Debate between popular and high cultures ('highbrow' v/s 'lowbrow')
- (iii) What is Genre fiction?
- (iv) Debate between genre fiction and literary fiction

Essays for discussion:

- Lev Grossman : "Literary Revolution in the Super market Aisle : Genre Fictionis Disruptive Technology" <http://entertainment.time.com/2012/05/23/genre-fiction-is-disruptive-technology/>

- Arthur Krystal : “Easy Writers : Guilty pleasures without guilt” <http://www.newyorker.com/magazine/2012/05/28/easy-writers>
- Joshua Rothman: “A Better Way to Think About the Genre Debate”<http://www.newyorker.com/books/joshua-rothman/better-way-think-genre-debate>
- Stephen Marche: How Genre Fiction Became More Important than Literary Fiction”<http://www.esquire.com/entertainment/books/a33599/genre-fiction-vs-literary-fiction/>

UNIT 2 : Children’s Literature

Lewis Carroll : *Alice in Wonderland*

UNIT 3 : Detective Fiction

Arthur Conan Doyle : *The Hound of the Baskervilles*

UNIT 4 : Campus Fiction

Chetan Bhagat : *Five Point Someone*

Text Books

- Essays given for discussion under unit-1 and Texts prescribed in Units 2, 3, 4

Reference Books

- Leslie Fiedler, “Towards a Definition of Popular Literature” in *Super Culture: American Popular Culture and Europe*. Ed. C.W.E. Bigs by.pp.29-38
- Leo Lowenthal, *Literature, Popular Culture and Society*
- Felicity Hughes, “Children’s Literature : Theory and Practice” in *English Literary History*. Vol.45, 1978. pp.542-61.
- Raymond Chandler, “The Simple Art of Murder”, *Atlantic Monthly*. Dec.1944 (available at <<http://www.en.utexas.edu/amlitprivate/scans/chandlerart.html>>
- *Popular Fiction : Essays in Literature and History* by Peter Humm, Paul Stigant, Peter Widdowson
- Sumathi Ramaswamy, “Introduction”, in *Beyond Appearances ? : Visual Practices and Ideologies in Modern India*. Pp.xiii-xxix

+3 THIRD YEAR FIFTH SEMESTER

DSE-1

LITERARY THEORY

Time : 3 Hrs.

Credit : 0

End Semester Theory : 80 Marks

Mid Semester Theory : 20 Marks

COURSE OUTCOME:

This paper seeks to expose the students to the basic premises and issues of major theoretical approaches to literary texts.

UNIT 1 :

New Criticism (“Language of Paradox” by Cleanth Brooks)

UNIT 2 :

Marxist Criticism (Terry Eagleton: “Literature and Ideology” from *Marxism and Literary Criticism*)

UNIT 3 :

Feminist Criticism (*Second Sex*, Vol 1 Introduction” Facts and Myths”)

UNIT 4 :

Structuralism (“The Nature of Linguistic Sign” by Saussure)

Text Books

- Texts prescribed in Units 1, 2, 3, 4

Reference Books:

- Peter Barry, *Beginning Theory*
- Terry Eagleton, *Literary Theory*
- David Lodge, ed. *Twentieth Century Criticism*
- David Lodge, ed. *Modern Criticism and Theory : A Reader*
- Jonathan Culler, “In Pursuit of Signs”
- Tony Bennett, *Formalism and Marxism* (New Accents)

+3 THIRD YEAR FIFTH SEMESTER

DSE - 2

WORLD LITERATURE

Time : 3 Hrs.

Credit : 06

End Semester Theory : 80 Marks

Mid Semester Theory : 20 Marks

COURSE OUTCOME:

The students will be introduced to the study of world literature through a representative selection of texts from a round the world. The idea is to read beyond the classic European canon by including defining literary texts from other major regions/countries—except the United States of America—written in languages other than English but made available to the readers in English translation.

UNIT 1 : European

Albert Camus : *The Outsider*

UNIT 2 : Caribbean

VS Naipaul : *A Bend in the River*

UNIT 3 : Canadian Short Fiction

Alice Munroe : “The Bear Came Over the Mountain”, “Face”

UNIT 4 : Latin American Poetry

(i) Pablo Neruda : “Tonight I can Write” and “Everyday you play”

(ii) Octavio Paz : “Between going and staying the day wavers” and “Motion”

Text Books

- Texts prescribed in Units 1, 2, 3, 4

Web Resources:

- Alice Munro’s short Stories <http://www.newyorker.com/magazine/2013/10/21/the-bear-came-over-the-mountain-2>, <http://www.newyorker.com/magazine/2008/09/08/face>
- Poems of Octavio Paz http://www.poetrysoup.com/famous/poems/best/octavio_paz

Reference Books:

- *Welt literatur*: John Wolfgang von Goethe in *Essays on Art and Literature* Goethe : The Collected Works Vol.3
- Rabindranath Tagore “World Literature” : *Selected Writings On Literature and Language* : Rabindranath Tagore Ed. Sisir Kumar Das and Sukanta Chaudhuri
- Goethe’s “World Literature Paradigm and Contemporary Cultural Globalization” by John Pizer “Something Will Happen to You Who Read” : Adrienne Rich, Eavan Boland’ by Victor Luftig. *JSTOR Comparative Literature* University of Oregon.
- “WLT and the Essay” *World Literature Today* Vol.74, No.3, 2000. *JSTOR Irish University Review*, Vol. 23 Spring 1, Spring-Summer.
- What is world Literature? (Introduction) David Damrosch <http://press.princeton.edu/chapters/i7545.html>
- Tagore’s comparative world literature [https://www.academia.edu/4630860/Rabindranath Tagore's-Comparative-World-Literature](https://www.academia.edu/4630860/Rabindranath_Tagore's-Comparative-World-Literature)

+3 THIRD YEAR SIXTH SEMESTER**DSE-3****PARTITION LITERATURE**

Time : 3 Hrs.

End Semester Theory : 80 Marks

Credit : 06

Mid Semester Theory : 20 Marks

COURSE OUTCOME:

The students will be exposed to some significant writings on Indian partition with the texts focusing on the issues of loss, trauma, communalism etc.

UNIT 1 : Defining partition literature

Ritu Menon and Kamla Bhasin, ‘Introduction’ from *Borders and Boundaries* (New Delhi : Kalifor Women, 1998)

UNIT 2 :

W.H. Auden “Partition”

Agha Shahid Ali, “Learning Urdu”

Faiz Ahmad Faiz “The Dawn of Freedom”

UNIT 3 : Bapsi Sidhwa

Ice-Candy-Man

UNIT 4 :

(i) Sadat Hassan Manto, ‘Toba Tek Singh’ (from *Mottled Dawn*, Penguin India)

(ii) Rajinder Singh Bedi, “Lajwanti” (Trans. Khushwant Singh)

(iii) Lalithambika Antharajanam, “A Leaf in the Storm”

Text Books

- Texts prescribed in Units 1, 2, 3, 4
- (*Mottled Dawn* for Manto and Bedi in Unit 4, Penguin India)
- *Borders and Boundaries*. New Delhi : Kalifor Women, 1998

ReferenceBooks:

- SukritaP.Kumar, "NarratingPartition"(Delhi:Indialog,2004)
- Urvashi Butalia, "The Other Side of Silence: Voices from the Partition of India" (Delhi: Kali for Women, 2000)
- Sigmund Freud, "Mourning and Melancholia" in *The Complete Psychological Works of Sigmund Freud*, tr. James Strachey (London : Hogarth Press, 1953) pp. 3041-53.

+3 THIRD YEAR SIXTH SEMESTER

DSE - 4

DISSERTATION / RESEARCH PROJECT

Credit : **06**

Full Mark : **100** Marks

INTRODUCTIONANDLEARNING OUTCOME:

A project is an individual or collaborative activity that is carefully planned to achieve a particular aim. An undergraduate project is individual research by students to (i) understand in-depth a particular topic or fact in their field of study, and (ii) strengthen their understanding of research processes and methods.

Undergraduate research is inquiry-based learning that involves practical work, and not just listening to class room teaching and personal reading. Students learn to apply what they study in their courses to appreciate different aspects of their field better by working independently on the projects. At the same time, they contribute something original to the courses they study.

An undergraduate research project is expected to explore specific topics within the field of study of the students. The project should make an original contribution to the discipline in some manner. The results of quality undergraduate research can be presented in seminars and conferences, and published in research journals dedicated specifically to such work or in traditional academic journals with the student as a co- author.

There are many benefits of undergraduate research including, but not limited to, real world applications, research and professional experience, and better relationships between faculty and students. The objective is to relate course work to out-of-class experiences, to train students to work and think independently, take responsibility for their own learning, and take initiative to solve problems on their own rather than relying on experts for answers. They also learn to work in collaboration in inter disciplinary research. Most of all, projects help students learn a variety of skill sets to make them confident and competent in their future career.

The research process

Typically, all research answer three questions : *what*, *why* and *how*. The *what* states the research question to be investigated in a project. The *why* explains the purpose of the research and also every step under taken to conduct the research. The *how* describes the stages of the research procedure. To understand the process of research and to practically conduct any requires a good background in research methodology. Students may study research methodology before undertaking their projects.

Pattern of examination MID-SEMESTER ASSESSMENT

Presentation of the project synopsis

Synopsis to include:

- i. Research statement / question and its rationale
- ii. Review of literature stating the validity of the project
- iii. Discussion of the research steps
- iv. Possible conclusion/s
- v. Contribution of the project to the existing body of research
- vi. References

Semester final examination

A project of at least 3000 words to be submitted in the following structure:

- Research question-a short statement
- Rationale of the research
- Introductions of the research
- Review of literature relating the reviews to the research question and the research Introductions
- Data collection and interpretation
- Discussion of the findings; conclusions drawn
- Contribution of the project to the existing body of research
- Directions for future research
- Works cited section

Reference Books

- John Creswell, *Research Design: Qualitative, Quantitative, and Mixed Methods Approaches*. Sage Publications. 2009
- K Samantray, *Academic and Research Writing*. Orient Blackswan. 2015
- Sword, H. *Stylish Academic Writing*. Harvard University Press. 2012
- Norman Denzin, *Sage Handbook of Qualitative Research*. Sage Publications. 2005
- Kothari & Garg, *Research Methodology*. New Age Publishers
- Deepak Chawla & Neena Sondhi. *Research methodology: Concepts & Cases*. Vikas Publishing

+3 FIRST YEAR FIRST SEMESTER

GE - 1

ACADEMIC WRITING AND COMPOSITION

Time : 3 Hrs.

Credit : 06

End Semester Theory : 80 Marks

Mid Semester Theory : 20 Marks

COURSE OUTCOME:

The students will be trained in the basic writing skills required for writing competently in the academic context.

UNIT 1 :

Introduction to the Writing Process with a focus on Academic Writing

UNIT 2 :

Writing in one's own words: Summarizing and Paraphrasing

UNIT 3 :

Critical Thinking: Synthesis, Analysis, And Evaluation

UNIT 4 :

Citing Resources: Editing, Book and Media Review

Reference Books:

- Liz Hamp-Lyons and Ben Heasley, *Study Writing: A Course in Writing Skills for Academic Purposes* (Cambridge UP, 2006)
- Ilona Leki, *Academic Writing: Exploring Processes and Strategies*. New York: CUP, 2nd edn, 1998
- Stanley Fish, *How to Write a Sentence and How to Read One*. Harpar Perennial. 2011.
- *Literature and the art of Communication*, Cambridge University Press
- Gerald Graff and Cathy Birkenstein, *They Say/I Say: The Moves That Matter in Academic Writing*. New York: Norton, 2009

+3 FIRST YEAR SECOND SEMESTER

GE - 2

GENDER AND HUMANRIGHTS

(Faculty training needed)

Time : 3 Hrs.

Credit : 06

End Semester Theory : 80 Marks

Mid Semester Theory : 20 Marks

COURSE OUTCOME:

The students will be familiarized with issues of inequality, and oppression of caste, race and gender.

UNIT 1 :

Unit I and II of *Gender Sensitivity* (UNESCO Module 5)

UNIT 2 :

“Castes in India”: Dr Babasaheb Ambedkar

UNIT 3 :

We Should All Be Feminists by Chimamanda Ngozi Adichie,

UNIT 4 :

Sultana's Dream (anovella) : Rokeya Sakhawat Hossain

Text Books

- Texts prescribed in Unit I, II, III, IV

Reference Books:

- Babasaheb Ambedkar, *Writings and Speeches*, Vol 1, Compiled by Vasant Moon. Ambedkar Foundation, 2014.
- Chimamanda Ngozi Adichi- *We Should All Be Feminists*. London: Fourth Estate, 2014.
- Rokeya Sakhawat Hossain- *Sultana's Dream*. Penguin Modern Classics, 2005. UNESCO-Gender Sensitivity, Zambia, 2000. http://www.unesco.org/education/mebam/module_5.pdf

GEOGRAPHY

Program Outcomes:

- The syllabus is designed to make students well versed in geographical knowledge and help them in different examinations like NET, JRF, Civil Service and Teacher education.
- Instil the feeling of love for nature, conservation and sustainable development of natural resources and protection and preservation of mother earth at the community and local level.

Program Specific Outcomes:

- Enhance the potential of the students to understand and think analytically about their immediate environment.

+3 FIRST YEAR FIRST SEMESTER

Core Paper - 1 GEOMORPHOLOGY

Time : 3 Hrs.

Credit : 04

End Semester Theory : 60 Marks

Mid Semester Theory : 15 Marks

Course Outcomes:

Geomorphology – Students are enlightened about the genesis of landforms at the local level and in the world and the impact in the day-to-day life.

Unit - I:

Meaning of Geomorphology/Origin and Evolution of Earth / Physical Condition of the Earth's interior/Isostasy- Airy and Pratt's view.

Unit - II:

Earth Movement - Epierogenic Earth Movement- Continental drifting plate tectonics, Cyclic Earth Movement - Mountain Building Theory, Rocks and their Types, Fold, Fault, Earthquake and Volcanoes.

Unit - III:

Geomorphic Processes - Weathering, Erosion, Mass Wasting, Cycle of Erosion-Davis and Penck Theory.

Unit - IV:

Evolution of Land forms and their Types, Erosional, Transportational and Depositional landforms associated with Fluvial, Karst, Aeolian, Glacial and Coastal landforms.

PRACTICAL

Credit: 0

25 Marks

1. Construction and use of Graphical scale RF Statement Scale, Diagonal Scale
 2. Drawing of Latitude and Longitude
 3. Calculation of Time of place with reference to GMT
 4. Practical Record and Viva-voce (10% of marks)
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Text Book

- Singh, S (2009); Bhautik; Bhugol ka Swaroop. Prayag Pustak. Allahabad

Reading List:

- Bloom A L20Q3. Geomorphology A Systematic Analysis of Late Cenozoic Landforms, PrenticeHall of India, New Delhi.
- Bridges E. M., 1990. World Geomorphology, Cambridge University Press, Cambridge
- Christopherson, Robert W., (2011). Geosystems. An Introduction to Physical Geography, 4th Ed, Macmillan Publishing Company
- Kale V.S. and Gupta A., 2001: Introduction to Geomorphology, Orient Longman Hyderabad
- Knighton A. D., 1984: Fluvial Forms and Processes. Edward Arnold Publishers. London
- Richards K. S., 1982 Rivers Form and Processes in Alluvial Channels, Methuen, London.
- Selby, M J., (2005), Earth's Changing Surface, Indian Edition, OUP
- Skinner. Brian J. and Stephen C. Porter (2000), The Dynamic Earth: An Introduction to physical Geology 4th Edition, John Wiley and Sons
- Thornbury W. D., 1968. Principles of Geomorphology, Wiley.
- Gautam, A (2010): Bhautik Bhugol, Rastogi Publications. Meerut
- Tikkaa, RN (1989): Bhautik Bhugol ka Swaroop, Kedarnath Ram Nath, Meerut
- Singh, S (2009): Geomorphology, Prayag Pustak Bhawan. Allahabad
- Steers, J A. - Unstable Earth, Kalyani Publisher.

+3 FIRST YEAR FIRST SEMESTER**Core Paper - 2
CARTOGRAPHY**

Time : 3 Hrs.
Credit: 04

End Semester Theory : 60 Marks
Mid-Semester Theory : 15 Marks

Course Outcomes:

Cartography - Students garner cartography knowledge and their uses and importance in geography.

Unit- 1: Cartography- History, Nature and Scope

- Scientific basis of Cartography, needs of map making, characteristics and types of maps,
- Cartography as a science of human communication
- Branches of Cartography. Scope of cartography

Unit -II: Basic: Geodesy, Scale -Concept and application

- Spherical Earth, Ellipsoidal Earth. Geoid Earth
- Geographical Coordinates (Latitude and Longitude), Graticules
- Scale, Construction of types of Scales (Plain, Comparative and Diagonal Scale)

Unit -III: Map Projections:

- (a) Meaning and Use, Brief Historical aspect.
- (b) Transformation of area, Distance and Direction.
- (c) Simple Cylindrical Projection, Conical Projection with one standard parallel.

Unit - IV: Remote Sensing Data Collection

- (a) Aerial Photography
- (b) Electronic Imaging Devices
- (c) Electromagnetic Radiation

PRACTICALCredit: **02****25 Marks**

1. Cartograms- Bar Diagram & their Types, Wheel Diagram, Sphere Diagram
2. Maps Drawing -Dot maps - Uniform & Multiple
3. Choropleth Maps
4. Practical Record and Viva-Voce

Text Book

1. Singh R Land Singh R. P. B ,1999. Elements of Pracbcial Geography. Katyani Publishers. Mishra R.P. and Ramesh.A , 1939: FundamenTalsot Cartography, Concept, New Delhi

Reference Books

- Anson R. and Orniellipg F. J., 1994 International Cartographic Association: Basic Cartographic Vol. Pregmen Press
- MonKhouse F J and Wilkinson H. R.h 1973: Maps and Diagrams, Methuen, London
- Roinson A H., 2009 Elements, of Cartography, John Wiley and Sons. New York
- Sarkar, A. (201 5) Practical geography A systematic approach. Orient Black Swan Private Ltd. New Delhi.

+3 FIRST YEAR SECOND SEMESTER**Core Paper-3
HUMAN GEOGRAPHY**Time : **3 Hrs.**Credit: **04**End Semester Theory : **60 Marks**Mid-Semester Theory : **15 Marks****Course Outcomes:**

Human Geography - Students learn about human being, human societies and the visible impacts on the environment / nature by their causal action.

Unit - I :

Introduction: Defining Human Geography and its Nature and Scope, Evolution of Human Geography, Man-Nature Relationship Areal Differentiation, Regional Synthesis.

Unit - II :

Society : Evolution of Man, Bases of Racial Classification, Classification of Race, Religion and Language of the World Cultural Regions of the World, Human Indicator.

Unit - III :

Population : Factors affecting population distribution, World population distribution, Determinants of population growth. Migration-Causes and consequences of Migration, Demographic Transition Theory, Population Composition and World Population Problems.

Unit - IV :

Settlement : Rural Settlement -Types and Patterns of Rural Settlement, Urban Settlement - Functional Classification of Towns, Sphere of Urban influence, Satellite Town, Problem of Urbanization, Rural-Urban Fringe, Umland. Central Place Theory-Christaller.

PRACTICALCredit: **02****25 Marks**

1. Drawing of age sex pyramid
2. Population distribution by circle method (district)
3. Pair Bar Diagram.
4. Enlargement and reduction of map by square method
5. Practical records and viva-voce

Text Book

- Hussain, Maiid (2G12) Human Geography Pav.'at Publications, Jaipur

Reference Books

- Human & Economic Geography-Go cheng leong
 - Johnston R.Gregory D, pratt G. et al. (2008)The Dictionary of Human Geography Blackwell Publiation.
 - Daniel, P.A. and Hopkinson, M.F. (1989). The Geography of Settlement, Oliver & Boyd, London, Human Geography, Rupa Publication.
 - Human Geography, B S. Negi.
 - Chandna, R.C. (2010) Populalion Geography, Kalyani Publisher.
 - Hassan, M.I. (2005) Population Geography, RawaE Publications, Jaipur.
 - Jordan-Bychkov et al. (2006) The Human Mosaic: A Thematic Introduction to Cultural Geography W.H. Freeman and Company, New York.
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+3 FIRST YEAR SECOND SEMESTER

Core Paper - 4 CLIMATOLOGY

Time : 3 Hrs.

Credit: 04

End Semester Theory : 60 Marks

Mid-Semester Theory: 15 Marks

Course Outcomes:

Climatology - Enable students to learn about the atmosphere, its dynamics, genesis of climate and weather.

Unit - I :

Atmospheric Composition and Structure - Insolation and Temperature Factors and Distribution Heat Budget Temperature Inversion /Global Warming, Pressure Bell of the World.

Unit - II :

Atmospheric Pressure and Winds -Planetary Winds, Forces affecting of wind, General Circulation, Jet Streams / Airmasses.

Unit - III :

Atmospheric Moisture Evaporation Humidity. Condensation. Fog and Clouds. Precipitation Types and Distribution, Stability and Instability, Climatic Regions (Koppen), Hydrological Cycle

Unit - IV :

Cyclones - Tropical Cyclones Extra Tropical Cyclones, Monsoon-Origin and Mechanism.

PRACTICAL

Credit: 02

25 Marks

1. Interpretation of weather map Weather forecasting.
2. Drawing of Climograph and Hythergraph. Wind rose diagram.
- 3 Drawing of Isotherm / Isobar.
4. Record & Viva-Voce carries 10% of marks.

Text Book

1. Lai, DS (2006): Jalvayu Vigyan, Prayag Pustak Bhavan, Allahabad.

Reading List-

- Barry R. G and Carleton A. M., 2001. *Synoptic and Dynamic Climatology*, Routledge UK.
- Barry R G and Corley R. J., 1998; . *Atmosphere, Weather and Climate*. Routledge, New York.
- Cntchfield H. J.,1987; General Climatology, Prentice-Hall of India, New Delhi.
- Lutgens F. K, Tarbuck E. J. and Tasa D., 2009: *The Atmosphere; An Introduction to Meteorology*, Prentice-Hall, Englewood Cliffs, New Jersey.
- Oliver J. E., and Hidore J. J., 2002: *Climatology; An Atmosphere Science*. Pearson Education, New Delhi.
- Trewartha G. T. and Home L. H., 1980: *An Introduction to Climate*, McGraw-Hill.
- Gupta L. S.,(2000): Jalvayu Vigyan, Hindi Madhyam Karyanvay Oidishalya, Delhi Vishwa Vidhyalaya, Delhi.
- Vatal. M (1986): Bhautik Bhugol, Central Book Depot, Allahabad.
- Singh, S (2009); Jalvayu Vigyan, Prayag Pustak Bhawan.Allahabad.

+3 SECOND YEAR THIRD SEMESTER

Core Paper-5 OCEANOGRAPHY

Time : 3 Hrs.

Credit: 04

End Semester Theory : 60 Marks

Mid-Semester Theory : 15 Marks

Course Outcomes:

Oceanography - Students garner the knowledge of oceans, its dynamics and its impact on the local and world environment.

Unit -I:

Bottom Relief of Ocean, Atlantic, Indian and Pacific

Unit -II:

Temperature and salinity of ocean- determinants and distribution-T-S Diagram.

Unit -III :

Movement of Ocean water-Waves, Currents (Atlantic, Pacific and Indian) Tides: Types and Theories

Unit -IV:

Ocean Deposits Types and Distribution, Coral Reefs Types, Theory of Origin (Darwin and Dana, Louis Agassiz and Murrey) / Marine Resource and their Utilization.

PRACTICAL

Credit: 02

25 Marks

1. Interpolation of Topographical Maps and Drawing of Profiles
2. Drawing of Gross-section from Geological Maps and interpretation.
3. Enlargement and reduction of maps,
4. Practical records and viva-voce

Text Book:

1. Sharma R. C. and M. Vital: Oceanography
2. Lai, D. S. - Oceanography.

Reference Book:

- King, LC.: Oceanography
Singh, S. - Physical Geography
-

+3 SECOND YEAR THIRD SEMESTER

Core Paper - 6

STATISTICAL METHODS IN GEOGRAPHY

Time : 3
Credit: 04

End Semester Theory : 60 Marks
Mid-Semester Theory : 15 Marks

Course Outcomes:

Statistical Methods in Geography – Aids students with statistical knowledge and techniques, its importance and application in social science.

Unit- I:

Use of Data in Geography. Geographical Data Matrix, Types and Sources of Data, Scales of Measurement (Nominal, Ordinal, Interval Ratio).

Unit -II:

Tabulation and Descriptive Statistics : Frequencies Distribution & measures of Central Tendency (Mean, Median and Mode)

Unit -III:

Measures of Dispersion (mean Deviation, Standard Deviation, Variance and Coefficient of Variation)

Unit-IV:

Measures of Association and Correlation. Rank correlation Product moment correlation and Simple linear Regression.

PRACTICAL

Credit : 02

35 Marks

1. Drawing of histogram, frequency curve, frequency polygon, ogive
2. Drawing of graphs showing mean, median, mode
3. Drawing of scatter diagram and Drawing of regression line.
4. Practical records and viva-voce

Class Record:

Each student will submit a record containing five exercises:

1. Tabular and graphical representation of frequency distribution
2. Exercise on mean, medium, mode in grouped Data.
3. Exercises on Drawing of scatter diagram, correlation and regression
4. Record & Viva-voce carries 10% of marks

Text Book :

1. Mahmood A., 1977: *Statistical Methods in Geographical Studies. Concept.*
2. Sarkar, A. (2013) *Quantitative geography techniques and presentations* Orient Black Swan Pnvate Lid., New Delhi

Reference Book:

- Hammond P. and McCullagh P S., 1978: *Quantitative Techniques in Geography An Introduction.* Oxford Umversrty Press.
 - Yeates M.,1974: *An introduction to Quantitative AfisSysis in Human Geography,* McGraw Hill, New York
-

- Silk J., 1979: *Statistical Concepts in Geography*. Allen and Unwin, London.
- King L. S., 1969: *Statistical Analysis in Geography*. Prentice-Hall
- Pal S. K., 1998: *Statistics for Geoscientists*. Tata McGraw Hill, New Delhi
- Ebdon D., 1977: *Statistics in Geography A Practical Approach*.

+3 SECOND YEAR THIRD SEMESTER

Core Paper-7 GEOGRAPHY OF ODISHA

Time: **3 Hrs.**

Credit: **04**

End Semester Theory: **60 Marks**

Mid-Semester Theory: **15 Marks**

Course Outcomes:

Geography Odisha- To train students in relevant topics of geography of Odisha.

Unit - I:

Physiography of Odisha, Drainage, Climate. Soil, Natural Vegetation

Unit - II:

Agriculture: (a) Production and Distribution of Rice, Cotton, Oil seeds; (b) Agricultural Problems and Prospects- White Revolution Agro Climatic Zone.

Unit - III:

Minerals and Power Resources and Industry

(a) Distribution of Iron Ore, Bauxite, Coal, Hydro Power. Biotic Resources.

(b) Iron and Steel Industry, Aluminium Industry, Cotton-Textile Industry, Handloom Industry, Hotel Industry.

(c) New Industrial Policy, Liberalization, Globalization

Unit - IV :

(a) Population: Distribution and Growth

(b) Transport : Roadways and Railways

PRACTICAL

Credit: **02**

25 Marks

1. Drawing of maps To show the relief, soil and vegetation.
2. Drawing of maps to show the amenities of the area
3. Representation of population data by small squares, proportionate circle, divided rectangle
4. Practical records and viva-voce

Text Book :

1. Sinha. B.N.- Geography of Odisha

Reading List:

- Roy. G.C.- Geography of Odisha

+3 SECOND YEAR FOURTH SEMESTER

Core Paper - 8

EVOLUTION OF GEOGRAPHICAL THOUGHT

Time : 3 Hrs,
Credit: 04

End Semester Theory : 60 Marks
Mid-Semester Theory : 15 Marks

Course Outcomes:

Evolution of Geographical Thought - Students are enlightened with the growth and development of Geography as a discipline; different schools of thought and dichotomy.

Unit-I:

Geographical concepts of ancient and classical period. Greek, Romans Indian.

Unit-II:

Founders of modern geographical thought Alexander Von Humboldt, Carl Ritter, Ratzel, Vidal

Unit-III:

Dichotomy in Geography, Environmental Determinism and Possibilism, Systematic and Regional. Ideographic and Nomenothetic.

Unit - IV:

Recent - Quantitative Revolution in Geography, Behavioural approach in Geography, radicalism in Geography, Feminism.

PRACTICAL

Credit: 02

25 Marks

1. Drawing of projection (Cylindrical- simple and cylindrical equal area)
2. Drawing of projection (simple Conical with one standard parallel and two standard parallel.
3. Drawing of projection (Gnomonic, Stereographic, Orthographic)
4. Practical records and viva -voce

Text Book :

1. Evaluation of Geographical Thought-Majid Hussain

Reference Books :

- Dikshit. R. D., 1997 Geographical Thought: A Contextual History of Ideas, Prentice-Hall India.
 - Hartshorn R., 1959 *Perspectives of Nature of Geography*. Rand MacNally and Co.
 - Martin Geoffrey J., 2005 *AH Possible Worlds. A History of Geographical Ideas*, Oxford.
 - Holt = Jensen A, 2011: *Geography: History and its Concepts. A Students Guide*. SAGE.
 - Kapur A. 2001 : *Indian Geography Voice of Concern*, Concept Publications
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+3 SECOND YEAR FOURTH SEMESTER

Core Paper - 9 ECONOMIC GEOGRAPHY

Time : 3 Hrs.

Credit: 04

End Semester Theory : 60 Marks

Mid-Semester Theory : 15 Marks

Course Outcomes:

Economic Geography – Students understand the importance of geography and its influence on the economic activities.

Unit- I:

Concept and classification of economic activity, Factors Affecting location of Economic activity with special reference to Agriculture, Location of Economic Activity: Von Thunen Theory and Weber's theory.

Unit- II:

Primary Activities Types and problems of agriculture, agricultural regions of the world-forestry and fishing.

Unit- III:

Secondary Activities Manufacturing (Cotton Textile, Iron and Steel), Industrial Regions of the world: with special reference to India, The Dragons.

Unit- IV:

Tertiary Activities Transport. Roads and Railways, Air and Water, Trade

PRACTICAL

Credit : 02

25 Marks

1. Drawing of maps to show crop production.
2. Drawing of Isotims and Isodapane,
3. Pie diagram showing occupational structure.
4. Practical records and viva-voce

Class Record : Each student will submit a record containing five exercises:

1. Determination of Agricultural efficiency-Bhatia & Kendal
2. Drawing of Traffic flow diagram, Isochrone.
3. Drawing of Isotim Isodapane
4. Practical record and viva-voce 10% of mark

Text Book

1. Roy Pritish: *Economic Geographs*
2. *Gautam. Alaka . Economic Geography.*

Reference Book

- Alexander J. W. 1963 : *Economic Geography*. Prentice Wheeler Inc., Englewood Cliffs, New Jersey.
- Wheeler J.O. 1998 : *Economic Geography*, Wiley.
- Durand L., 1961: *Economic Geography*, Husband Press.
- Clark, Gordon L., Feldman, M. P. and Gertler, M.S., eds 2000 : the Oxford

3 SECOND YEAR FOURTH SEMESTER

Core Paper - 10 ENVIRONMENTAL GEOGRAPHY

Time : 3 Hrs.

Credit: 04

End Semester Theory : 60 Marks

Mid-Semester Theory : 15 Marks

Course Outcomes:

Environmental Geography – Students learn about the relation between geography and various environment process.

Unit- I:

Environmental Geography - Concept and Scope, Environmental contrast (Biotic Abiotic, Global, Contiental, Local) Environmental control of (light, Temperature, Water, topography and edaphic factors)

Unit- II:

Ecosystem - Concept, Structure and Functions, Trophic level, Food Chain, Bio-geo-chemical Cycle (Nitrogen and Carbon), Energy flow in Ecosystem.

Unit- III:

Environmental Problems in Tropical, Temperate and Polar Ecosystems. Environmental pollution (water and air).

Unit- IV:

Environmental Programmes and Policies - Major Global & National Programme and policies, concept of spaceship earth, earth summit 1992, wildlife act of India 1972, water pollution control act of India 1974, National Environmental tribunal - 1995 of India.

PRACTICAL

Credit : 02

25 Marks

(Project)

Submission of report on any environmental problem of global, national and local level by individual student.

Text Book :

1. Santra, S.C *Environmental Science*
2. Singh S., 1997: *Environmental Geography*, Prayag Pustak Bhawan. Allahabad.

Reference Book:

- Chandna R. C-, 2002. *Environmental Geography*, Kalyani, Ludhiana.
 - Cunnmghum W P. and CunnInghium M.A..2004, Princi
 - Goudie A., 2001 : *The Nature of the Environment*, Blackwell Oxford
 - Miller G.T., 2004 '*Environmental Science: Working with the Earth*. Thomson Brooks Cole, Singapore,
 - Odum, E P. etal, 2005: *Fundamentals of Ecology*, Ceneage Learning India.
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+3 THIRD YEAR FIFTH SEMESTER

Core Paper - 11

REGIONAL PLANNING AND DEVELOPMENT

Time : 3 Hrs.

Credit: 04

End Semester Theory : 60 Marks

Mid-Semester Theory : 15 Marks

Course Outcomes:

Regional Planning- Enable the students the understanding of the importance of a region vis-à-vis various planning program.

Unit -I:

Definition of Region, Evolution and Types of Regional planning: Formal, Functional, and Planning Regions. Need for Regional Planning; Characteristics of an ideal Planning Region.

Unit -II:

Definition of Planning Region; Approaches and Methods. Planning Regions of India.

Unit -III:

Theories and Models for Regional Planning Growth Pole Model of Perroux, Myrdal, Hirschman, Rostow.

Unit- IV:

Policies and Programs for Rural and Regional Development Planning in India, Concept of Human development Index.

PRACTICAL

Credit : 02

25 Marks

1. Transport network analysis-Alfa, Beta.Gama
2. Nearest neighbour analysis
3. Traffic flow diagram
4. Practical record and viva-voce

Text Book

1. Chand, Mahesh and V.K. Puri : Regional planning
2. Mishra R. P. : Regional Planning, Concept Publishers, New Delhi.

Reference Book :

- Friedmann J. and Alonso W. (1975): *Regional Policy - Readings in Theory and Applications*, MIT Press. Massachusetts.
- Haynes J., 2008: *Development Studies, Polity short Introduction Series*.
- Peet R., 1999: *Theories of Development*, The Guilford Press, New York.
- UNDP 2001-04: *Human Development Report*. Oxford University Press.
- World Bank 2001-05: *World Development Report*, Oxford University Press, New.

+3 THIRD YEAR FIFTH SEMESTER

Core Paper - 12 REMOTE SENSING AND GIS

Time : 3 Hrs.

Credit: 04

End Semester Theory : 60 Marks

Mid-Semester Theory : 15 Marks

Course Outcomes:

Remote Sensing and GIS- Students are enlightened about the various remote sensing and GIS techniques.

Unit -I:

Remote Sensing and GIS' Definition and Components, Platforms and Types Advantages of Remote Sensing, Limitation of Remote Sensing & Principle of Remote Sensing.

Unit -II:

Aerial Photography and Satellite Remote Sensing: Principles, Types and Geometry of Aerial Photograph, EMR Interaction with Atmosphere and Earth Surface; Satellites and Types of Sensors.

Unit-III:

GIS definition, components, History and development, Application of GIS.

Unit - IV:

GIS Data Structures: Types (spatial and Non-spatial) Raster and Vector Data Structure, GPS elements and Uses.

PRACTICAL

Credit : 02

25 Marks

(Project)

A project file consisting of two exercises will be done from aerial photos and satellite images (scale, orientation and interpretation) or 3 exercises on using any GIS Software on above mentioned themes.

Or

Submission of project report on any topic from the course Records Viva-voce carries 10% of marks

Text Book

1. Lillesand T.M., Kiefer R. W. and Chipman J.W., 2004: *Remote Sensing and Image interpretation*, Wiley. (Wiley Student Edition).

Reference Book :

- Bhatta, B. (2008) *Remote Sensing and GIS*, Oxford University Press, New Delhi.
 - Campbell J. B., 2007: *Introduction to Remote Sensing*, Guildford Press.
 - Chaunival D. (2010) *Sudur Samvedana Avam Bhaugolik Suchna Pranali*. Sharda Pustak Bhawan, Allahabad.
 - Jensen, J. R. (2005) *Introductory Digital Image Processing: A Remote Sensing Perspective* Pearson Prentice-Hall.
 - Joseph, G. 2005: *Fundamentals of Remote Sensing* United Press India.
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+3 THIRD YEAR SIXTH SEMESTER

Core Paper - 13 GEOGRAPHY OF INDIA

Time : 3 Hrs.

Credit: 04

End Semester Theory : 60 Marks

Mid-Semester Theory : 15 Marks

Course Outcomes:

Geography of India – Students learn about the various aspects of India as a country; location, geography and socio economic.

Unit-I:

Physiographic Divisions, soil and vegetation, climate (characteristics and classification).

Unit-II:

Population Distribution Demographic structure, trend of population growth.

Unit-III:

Mineral and power resources distribution and utilisation of iron ore coal, petroleum, Natural gas;

Unit-IV:

Agricultural production and distribution of rice and wheat industrial development. Irons Steel. Cotton and Textile Industry, Automobile.

PRACTICAL

Credit : 02

25 Marks

1. Use of Instrument -measurement of length of river or road and area by the help of Planimeter and Rota meter
2. Chain and tape survey
3. Plane table survey
4. Practical record and viva-voce.

Text Book :

1. Sharma.T.C. (2013) Economy Geography of India Rawat Publication Jaipur
2. Khullar, D. R. India1 A Comprehensive Geography.

Reference Book :

- Deshpande C. D., 1992: *India : A Regional Interpretation*, ICSSR, New Delhi.
 - Mandal R. B. (ed.), 1990: *Patterns of Regional Geography - An International Perspective., Vol. 3 - Indian Perspective.*
 - Sharma, T.C. 2003: *India - Economic and Commercial Geography*, Vikas Publ., New Delhi.
 - Singh R. L., 1971: *India : A Regional Geography*, National Geographical Society of India.
 - Singh Jagdish 2003: *India - A comprehensive & Systematic Geography*, Gyanodaya Prakashan, Gorakhpur.
 - Spate O.H.K. and Learmonth A. T. A., 1967: *India and Pakistan : A General and Regional Geography*, Methuen.
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+3 THIRD YEAR SIXTH SEMESTER

Core Paper - 14 DISASTER MANAGEMENT

Time : 3 Hrs.

Credit: 04

End Semester Theory : 60 Marks

Mid-Semester Theory : 15 Marks

Course Outcomes:

Disaster Management- Students enlightened the various strategies and management processes combatting natural hazards and disasters.

Unit - I:

Concept of Hazards, Disasters, Natural and manmade hazards, Types of hazards. Concept disaster management, Vulnerability and risk.

Unit - II:

Disaster management cycle. Pre disaster management. During disaster management Post Disaster review and management Prevention, mitigation, preparedness, Adaptation

Unit - III:

Detail study of nature and characteristics of hazards Flood, Cyclone, Drought, Earthquake Manmade hazards- Industrial and Fire.

Unit - IV :

Indigenous community based disaster preparedness Role of NDMA, NIDM, NDRF, OSDMA & ODRAF, Disaster working system. Role of NGOs and GOs in disaster management.

PRACTICAL

Credit : 02

25 Marks

Project work

Preparation of a report on a specific hazard/disaster.

Text books :

1. Singh, Savindar (2009). Disaster Management

Reference books :

1. Mishra B.J: Natural hazards and disaster management
 2. Sundar 1 & Sezuiyan T: Disaster management
 3. Verma: Encyclopedia of Disaster management
 4. Eye Publication: Vulnerable India
 5. Sinha. A.-Disaster management. United Press
 6. Singh R.B-Risk Assessment and Vulnerability analysis.
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+3 THIRD YEAR FIFTH SEMESTER

DSE - 1

POPULATION GEOGRAPHY

Time : 3 Hrs.

Credit: 04

End Semester Theory : 60 Marks

Mid-Semester Theory : 15 Marks

Course Outcomes:

Population Geography – Enable students to learn population and its dynamics.

Unit - I:

Defining the Field - Nature and Scope; Sources of Data with special reference to India (Census, Vital Statistic and NSS), Population problems.

Unit-II:

Population Size Distribution and Growth-Determinants and Patterns. Theories of Growth - Malthusian Theory and Demographic Transition Theory.

Unit-III:

Population Dynamics Fertility. Determinants and Implications, Mortality and Migration Measures.

Unit-IV:

Population Composition and Characteristics Age-Sex Composition, Rural and Urban Composition; Literacy. Contemporary Issues -Ageing of Population. Declining Ratio; HIV/AIDS, Population Problems.

PRACTICAL

Credit : 02

25 Marks

1. Population projection: AP.GP method
2. Drawing of triangular diagram and Lorenz curve
3. Construction of compound and super imposed pyramids
4. Practical record and viva-voce.

Text book

1. Chandna R. C and Sidhu M. S., 1980: *An Introduction to Population Geography*, Kalyani Publishers.

Reading List:

- Barrett H.R., 1995: *Population Geography*, Oliver and Boyd.
- Bhende A. and Kanitkar T., 2000: ;*Principle of Population studies*, Himalaya Publishing House.
- Clarke J. I., 1965: *Population Geography*, Pergamon Press, Oxford.
- Jones, H.R. 2000: *Population Geography*, 3rd ed. Paul Chapman, London,.
- Lutz W., Warren C.S. and Scherbov S., 2004: *The End of the World Population Growth in the 21st Century*, Earthscan.
- Newbold K B., 2009. *Population Geography Toots ana Issues*. Rowman and Little field Publishers.
- Pacione M., 1986, *Population Geography. Progress anil Prospect*, Taylor and Francis.
- Wilson M.G.A., 1968: *Population Geography*, Nelson.
- Panda B P (1986). *Janasanhya Bhugol*, M P Hindi Granth Academy, Bhopal
- Maurya S D (2009) *Jansankya Bhugol*, Sharda Pustak Bhawan, Allahabad
- Chandna, RC (2006), *Jansankhya Bhugol*, Kalyani Publishers, Delhi

+3 THIRD YEAR FIFTH SEMESTER

DSE - 2 RESOURCE GEOGRAPHY

Time : 3 Hrs.

Credit: 04

End Semester Theory : 60 Marks

Mid-Semester Theory : 15 Marks

Course Outcomes:

Resource Geography – Students garner the knowledge about resource and its management and sustainable development

Unit - I:

Natural Resource : Concept, Types, Classification, Functional Theory of Resource.

Unit - II:

Distribution, Utilization of soil Resource and Water Resources, Distribution, Utilization of Forest and Energy Resources.

Unit - III:

Problem and management of Soil, Water, Forest & Energy Resources.

Unit - IV:

Sustainability of Resources, Resource management & Conservation, Resource Scarcity Hypothesis.

PRACTICAL

Credit : 02

25 Marks

1. Survey by Prismatic Compass
2. Survey by Theodolite (horizontal and vertical)
3. Levelling by Dumpy level
4. Practical record and viva-voce

Text book :

1. Singh, R.L. 1988 (Reprint)- India : A Regional Geography

Reading List:

- Cutter S. N., Renwick H, L. and Renwick W., 1991: *Exploitation, Conservation, Preservation: At geographical Perspective on Natural Resources Use*, John Wiley and Sons, New York.
 - Gadgil M. and Guha R., 2005: *The Use and Abuse of Nature: Incorporating This Fissured Land: An Ecological History of India and Ecology and Equity*, Oxford University Press. USA.
 - Holechek J. L. C., Richard A., Fisher J. T. and Valdez R., 2003: *Natural Resources Ecology, Economics and Policy*, Prentice Hall, New Jersey.
 - Jones G. and Hollier G., 1997: *Resources, Society and Environmental Management*, Paul Chapman, London.
 - Klee G. 1991: *Conservation of Natural Resources*, Prentice Hall, Englewood.
 - Mother A. S. and Chapman K., 1995: *Environmental Resources*. John Wiley and Sons, New York.
 - Mitchell B., 1997: *Resource and Environmental Management*: Longman harlow, England.
 - Owen S. and Owen P.L., 1901 : *Environment, Resources and Conservation*, Cambridge University Press, New York.
 - Rees J., 1990: *Natural Resources: Allocation, Economics and Policy*, Routledge, London.
-

+3 THIRD YEAR SIXTH SEMESTER

DSE - 3 RURAL DEVELOPMENT

Time : 3 Hrs.

Credit: 04

End Semester Theory : 60 Marks

Mid-Semester Theory : 15 Marks

Course Outcomes:

Rural Development – Students learn about the rural conditions and the various projects and schemes by the govt toward rural development.

Unit - I:

Rural development: Meaning and concept, indicators and objectives. Problems of rural development, Interdependence of rural and urban sector, Gandhian concept of rural development.

Unit - II:

Sectoral approach: Agriculture and allied sectors, problem faced by agricultural sector, National agricultural policy, Pradhan Mantri Fasal Bima Yojana (PMFBY). Lab to land approach.

Unit-III:

Area based approach: Hill Area Development Programme. Command Area Development Programme. Tribal Area Development programme, Drought prone Area Development Programme.

Unit-IV :

Target group approach. Integrated Rural Development Programme (IRDP). Training Rural Youth for self-employment (TRYSEM), Swarna Jayantli Gram Swarozgar Yojana(SJGSY), Development of women and children in Rural Areas..

PRACTICAL

Credit : 02

25 Marks

Project on any slum area or village area survey.

Books :

1. Rural Geography- B.S. Nege
2. Yojana Monthly magazines on rural development.
3. Kurukhetra monthly magazine on rural development.

+3 THIRD YEAR SIXTH SEMESTER

DSE - 4 DISSERTATION / PROJECT WORK

Credit: 04

100 Mark

A project report may be given in view of discipline papers. It will be considered as a special course involving application of knowledge solving exploring a real life situation and difficult problem.

+3 SECOND YEAR THIRD SEMESTER

GE - 3 GEOGRAPHY OF INDIA

Time : 3 Hrs.

Credit: 04

End Semester Theory : 60 Marks

Mid-Semester Theory : 15 Marks

Unit I:

Physical: Physiographic Divisions, soil and vegetation, climate (characteristics and classification)

Unit II:

Population: Distribution and growth, Structure, Social: Distribution of population by race, caste, religion, language, tribes.

Unit III:

Economic Mineral and power resources distribution and utilisation of iron ore, coal. Petroleum, Natural gas, agricultural production and distribution of rice and wheat, industrial development, automobile and information technology.

Unit IV:

Transport in India: Road, Rail and Airways, Waterways.

Project: Submission of project on any topic related to India

OR

Project: Submission of Project report on any topic from the course Text books

1. Sharma, T.C. (2013) Economic Geography of India. Rawat Publication, Jaipur
2. Khullar, D.R. India : A Comprehensive Geography.

Reading List

1. Deshpand C.D., 1992: India : A Regional Interpretation, 1CSSR, New Delhi
2. Johnson, B.L.C., ed. 2001: Geographical Dictionary of India, Vision Books, New Delhi
3. Sdyasuk Galina and P. Sengupta (1967): Economic Regionalisation of India, Census of India.

+3 SECOND YEAR FOURTH SEMESTER

GE - 4 GEOGRAPHY OF ODISHA

Time : 3 Hrs.

Credit: 04

End Semester Theory : 60 Marks

Mid-Semester Theory : 15 Marks

Unit I:

Physiography of Odisha, Drainage, Climate, Soil, Natural Vegetation.

Unit II: Agriculture

- (a) Production and Distribution of Rice, Pulses, Oil seeds : sava
 - (b) Agricultural Problems and Prospects
-

Unit III: Minerals and power resources

- (a) Distribution of Iron Ore, Bauxite, Coal iron and steel industry,
- (b) Aluminium Industry, Cotton Textile.

Unit IV:

- (a) Population : Distribution and Growth Transport : Roadways & Railways.
- (b) Project : Submission of project report on any topic related to Odisha.

PRACTICALCredit : **02****25 Marks**

Project Interaction with a community and report on social cultural status

Text Book :

Hussain, Majid (2012) Human Geography. Rawat Publications, Jaipur

Reading List :

1. Hussain, M.I. (2005) Population Geography, Rawat Publications, Jaipur
 2. Daniel, P.A. and Hopkinson, M.F. (1989) The Geography of Settlement, Oliver & Boyd, London.
 3. Johnson R: Gregory D, Pratt G. Et al. (2008) The Dictionary of Human Geography, Blackwell Publication.
 4. Jordan-Bychkov et al. (2006) The Human Mosaic: A Thematic Introduction to Cultural Geography. W.W. Freeman and Company, New York.
 5. Kaushik, S.D. (2010) Manav Bhugol, Rastogi Publication, Meerut.
 6. Maurya, S.D. (2012) Manav Bhugol, Sharda Pustak Bhawan, Allahabad.
 7. Hussain, majid (2012) Manav Bhugol, Rawat Publications, Jaipur.
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HINDI

Programme Outcome

This programme could provide Graduates to enter in the field of :

1. Teaching, School and Colleges
2. Translators
3. Professionals for Tourism Sector
4. And Anchors/Writers/Research Scholars in the field of media and cinema

Programme Specific Outcomes

The students should possess of knowledge, skills and attitudes during the end of B.A, Hindi (Hons.) degree course. By virtue of this course students are pursuing this Higher Studies in different Universities like : Delhi University, University of Hyderabad, Central Hindi Institution Agra and B.Ed in Hindi at Govt. Training College, Cuttack .

Course Outcomes

History of Hindi Literature

On completion of the course the students acquire the knowledge of socio, political, economical and cultural Background of society where a particular literature is written.

Hindi Translation

To know the basic principles of Translation issues face by translates and study of world literature and culture through translation.

Media & Journalism

Students acquire the knowledge and History of media. Writing the pieces of News and Research in mythological literature.

Functional Hindi

Functional Hindi is a latest concept in Hindi language and literature. Concepts of Rajbhasha and Implementation of Hindi in Central and Central Govt. undertakings are the prime object of the course.

+3 FIRST YEAR FIRST SEMESTER

Core Paper - 1

Time : 3 Hrs.
Credit : 06

End Semester Theory : 80 Marks
Mid Semester Theory : 20 Marks

हिन्दी साहित्य का इतिहास (भाग - १)

Unit - I:

हिन्दी साहित्य के प्रमुख इतिहास ग्रन्थ (केवल परिचय), काल विभाजन एवं नामकरण।

Unit - II:

आदिकाल की पृष्ठभूमि, आदिकाल के प्रमुख कवि, आदिकाल की प्रमुख रचनाएँ, आदिकाल की प्रमुख काव्य प्रवृत्तियाँ।

Unit - III:

भक्तिकाल की पृष्ठभूमि और प्रवृत्तियाँ, निर्गुण काव्यधारा (ज्ञान मार्ग एवं प्रेम मार्ग) निर्गुण काव्यधारा के प्रमुख कवि एवं रचनाएँ।

सगुण काव्यधारा की प्रवृत्तियाँ और विशेषताएँ, रामभक्ति शाखा, कृष्ण भक्ति शाखा, प्रमुख कवि एवं रचनाएँ।

Unit - IV:

रीतिकाल की पृष्ठभूमि, रीति काव्य का परिचय, प्रमुख कवि और उनकी रचनाएँ, प्रवृत्तियाँ।

सहायक ग्रंथ :

१. हिन्दी साहित्य का इतिहास - आचार्य रामचन्द्र शुक्ल, नागरी प्रचारणी सभा, काशी
२. हिन्दी साहित्य का उदभव और विकास - आचार्य हजारी प्रसाद द्विवेदी
३. हिन्दी साहित्य का दूसरा इतिहास - डॉ. बच्चन सिंह
४. भक्ति काव्य और लोक जीवन - शिवकुमार मिश्र
5. Social Life and concepts in Medieval Hindi Bhakti Poetry - Dr. Savitri Chandra
६. भारतीय चिंतन परंपरा - के. दामोदरन
७. हिन्दी साहित्य का इतिहास - लक्ष्मीसागर वार्ष्णेय
८. हिन्दी साहित्य का आलोचनात्मक इतिहास - डा. रामकुमार वर्मा

+3 FIRST YEAR FIRST SEMESTER

Core Paper - 2

Time : 3 Hrs.
Credit : 06

End Semester Theory : 80 Marks
Mid-Semester Theory : 20 Marks

भक्तिकालीन हिन्दी कविता
(निर्गुण एवं रामभक्ति काव्यधारा)

Unit- 1:

निर्गुण भक्ति काव्य का स्वरूप, ज्ञानमार्ग और प्रेम मार्ग, रामभक्ति काव्य का स्वरूप, प्रमुख कवि और प्रवृत्तियाँ

Unit -II;

कबीर - पद संख्या : - २. रहना नहिं देस बिराना है, ४. साधो, देखा जग बौराना, ५. तोको पीव मिलेंगे। साखी - 1 से 21

Unit -III:

मलिक मुहम्मद जायसी - नागमती वियोग - वर्णन

Unit - IV:

तुलसी दास - भरत महिमा

पाठ्य पुस्तक:

१. हिन्दी काव्य संग्रह, सं. रामवीर सिंह, केन्द्रीय हिन्दी संस्थान, आगरा

सहायक ग्रंथ :

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| १. भक्ति आंदोलन और सूरदास का काव्य | - मैनेजर पाण्डेय। |
| २. हिंदी सूफी काव्य की भूमिका | - रामपूजन तिवारी। |
| ३. राष्ट्रीय एकता, वर्तमान समस्याएँ और भक्ति साहित्य | - कैलाश नारायण तिवारी |
| ४. कबीर की विचारधारा | - गोविंद त्रिगुणायत |
| ५. भक्ति काव्य यात्रा | - रामस्वरूप चतुर्वेदी |
| ६. तुलसीदास | - रामचन्द्र शुक्ल |
| ७. कबीर | - हजारी प्रसाद द्विवेदी |

+3 FIRST YEAR SECOND SEMESTER

Core Paper-3

Time : 3 Hrs.
Credit: 06

End Semester Theory : 80 Marks
Mid-Semester Theory : 20 Marks

हिन्दी साहित्य का इतिहास (भाग - २)

Unit- 1:

आधुनिक काल की सामाजिक, सांस्कृतिक एवं राजनैतिक पृष्ठभूमि। गद्य का उद्भव एवं विकास। खड़ी बोली का साहित्य।

Unit -II: Basic:

भारतेन्दु युगीन काव्य, द्विवेदी युगीन काव्य तथा छायावादी कविता (केवल कविता की प्रमुख प्रवृत्तियाँ)

Unit -III:

गद्य की प्रमुख विधाओं का विकास : उपन्यास और कहानी।

Unit - IV:

क) नाटक, एकांकी, निबंध (उद्भव और विकास)

ख) अस्मिता विमर्श - दलित, स्त्री, आदिवासी विमर्श

सहायक ग्रंथ :

१. हिन्दी साहित्य का इतिहास - आचार्य रामचन्द्र शुक्ल, नागरी प्रचारणी सभा, काशी
२. हिन्दी साहित्य का उद्भव और विकास - आचार्य हजारी प्रसाद द्विवेदी
३. हिन्दी साहित्य का दूसरा इतिहास - डॉ. बच्चन सिंह
४. हिन्दी साहित्य: बीसवीं शताब्दी - नन्ददुलारे वाजपेयी, इलाहाबाद
५. भारतेन्दु हरिश्चन्द्र और हिन्दी नवजागरण की समस्याएँ- रामविलास शर्मा, राजकमल, दिल्ली
६. हिन्दी दलित साहित्य - मोहनदास नैमिशराय, साहित्य अकादेमी।
७. अस्मितामूलक विमर्श और हिंदी साहित्य - डॉ. रजत रानी 'मीनू' वाणीप्रकाशन, नई दिल्ली
८. समकालीन हिन्दी साहित्य : विविध विमर्श - प्रो. श्रीराम शर्मा

+3 FIRST YEAR SECOND SEMESTER

Core Paper - 4

Time : 3 Hrs.
Credit: 06

End Semester Theory : 80 Marks
Mid-Semester Theory : 20 Marks

कृष्णभक्ति एवं रीतिकालीन हिन्दी कविता

Unit- 1:

कृष्णभक्ति काव्य का स्वरूप, कृष्ण भक्ति के प्रमुख कवि : सूरदास : विनय के पद - 1 से 5 भ्रमरगीत -6 से 10

Unit -II: Basic:

रसखान - पद

३ - मानुष हैं तो वही

४ - या लकुटि और कमरिया

६ - सेस गनेस महेस

१० - मोरपखा परि उपर

१२ - कान्ह भये बस बाँसूरी के

Unit -III:

बिहारी : भक्ति, ऋतु वर्णन, एवं नीति के दोहे (1 से 26)

Unit - IV:

घनानन्द : प्रेम - साधना, प्रेम की अनन्यता, उपालंभ के पद (1, 2, 3, 4 और 5)

पाठ्य पुस्तक:

१. हिन्दी काव्य संग्रह, सं. रामवीर सिंह, केन्द्रीय हिन्दी संस्थान, आगरा

सहायक ग्रंथ :

- | | |
|------------------------------------|-------------------------|
| १. रीतिकाव्य की भूमिका | - डॉ. नगेन्द्र |
| २. हिन्दी साहित्य का उत्तर मध्यकाल | - महेन्द्र कुमार |
| ३. बिहारी | - विश्वनाथ प्रसाद मिश्र |
| ४. घनानन्द और स्वच्छन्द काव्य धारा | - मनोहर लाल गौड़ |

+3 SECOND YEAR THIRD SEMESTER

Core Paper-5

Time : 3 Hrs.
Credit : 06

End Semester Theory : 80 Marks
Mid-Semester Theory : 20 Marks

अनुवाद सिद्धान्त

Unit- I:

अनुवाद की परिभाषा एवं स्वरूप, अनुवाद के क्षेत्र, अनुवाद कला अथवा विज्ञान।

Unit -II: Basic:

अनुवाद की प्रक्रिया और प्रविधि, अनुवाद तथा समतुल्यता का सिद्धान्त

Unit - III:

अनुवाद के प्रकार: साहित्यिक अनुवाद (भाषा अनुवाद), कार्यालयी अनुवाद, सारानुवाद, भावानुवाद

Unit - IV:

व्यावहारिक अनुवाद : किसी अंग्रेजी अवतरण का हिन्दी में अनुवाद। (केवल कार्यालयी अनुच्छेद ही दिया जाएगा)

Unit - V:

व्यावहारिक अनुवाद : किसी हिन्दी अवतरण का अंग्रेजी में अनुवाद (केवल कार्यालयी अनुच्छेद ही दिया जाएगा)

सहायक ग्रंथ :

१. अनुवाद के भाषिक सिद्धान्त - कैटफोट
२. अनुवाद प्रविधि - प्रो. बालेन्दु शेखर तिवारी
३. अनुवाद के सिद्धान्त - आर. आर. रेड्डी
४. अनुवाद: प्रक्रिया एवं प्रयोग - छबिल कुमार मेहेर
५. अनुवाद विज्ञान - डा. भोलानाथ तिवारी
६. अनुवाद प्रक्रिया एवं परिदृश्य - रीतारानी पालीवाल

+3 SECOND YEAR THIRD SEMESTER

Core Paper - 6

Time : 3 Hrs.
Credit: 06

End Semester Theory : 80 Marks
Mid-Semester Theory : 20 Marks

हिन्दी कथा साहित्य (उपन्यास)

Unit- 1:

हिन्दी उपन्यास उद्भव और विकास, प्रेमचन्द का उपन्यास साहित्य, प्रेमचन्द के उपन्यासों में भारतीय समाज एवं मेहनतकश वर्ग।

Unit -II: Basic:

हिन्दी का महिला उपन्यास साहित्य, स्त्री विमर्श की अवधारणा और संभावनाएँ।

Unit - III:

गबन - प्रेमचंद

Unit - IV:

आपका बंटी - मन्नू भण्डारी

सहायक ग्रंथ :

१. प्रेमचंद और उनका युग - रामविलास शर्मा, राजकमल प्रकाशन
 २. विरासत का सवाल - शिवकुमार मिश्र
 ३. हिन्दी उपन्यास एक अंतर्यात्रा - रामदरश मिश्र
 ४. उपन्यास के पहलू - ई. एम. फोस्टर
 ५. आधुनिक हिंदी उपन्यास - सं. भीष्म साहनी, राम जी मिश्र, भगवतीप्रसाद निदारिया, राजकमल प्रकाशन
 ६. मन्नू भण्डारी और आपका बंटी - डा. मालविका
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+3 SECOND YEAR THIRD SEMESTER

Core Paper-7

Time : 3 Hrs.
Credit: 06

End Semester Theory : 80 Marks
Mid-Semester Theory : 20 Marks

हिन्दी कथा साहित्य (कहानी)

Unit- 1:

१. उसने कहा था - चंद्रधर शर्मा गुलेरी
२. पूस की रात - प्रेमचंद
३. पुरस्कार - प्रसाद

Unit -II; Basic:

४. मुगलों ने सल्तनत बख्श दी - भगवतीचरण वर्मा
५. वापसी - उषा प्रियंवदा
६. कलाकार - राजेन्द्र यादव

Unit - III:

७. मानसरोवर के हंस - कमलेश्वर
८. भोलाराम का जीव - हरिशंकर परसाई
९. रानी माँ का चबूतरा - मन्नू भंडारी

Unit - IV:

१०. पोष्टमैन - शैलेश मटियानी
११. पंचलाईट - फणीश्वरनाथ रेणु
१२. सुबह की सैर - निर्मल वर्मा

पाठ्य पुस्तक:

१. आधुनिक कहानी संग्रह - सं. सरोजिनी शर्मा, केन्द्रीय हिन्दी संस्थान, आगरा

सहायक ग्रंथ :

१. कहानी नयी कहानी - नामवर सिंह
२. नयी कहानी की भूमिका - कमलेश्वर
३. हिंदी कहानी का इतिहास - गोपाल राय
४. कहानी स्वरूप एवं संवेदना - राजेन्द्र यादव

+3 SECOND YEAR FOURTH SEMESTER

Core Paper - 8

Time : 3 Hrs.
Credit: 06

End Semester Theory : 80 Marks
Mid-Semester Theory : 20 Marks

कथेतर गद्य साहित्य

Unit- 1:

जीवनी - उद्देश्य, प्रस्तावना, जीवनी का स्वरूप जीवनी साहित्य : परंपरा और विकास

Unit -II; Basic:

आत्मकथा - उद्देश्य, प्रस्तावना, आत्मकथा का स्वरूप, आत्मकथा साहित्य : परंपरा और विकास

Unit - III:

रेखाचित्र - 'रेखाएँ और रेखाएँ', संपादक - सुधाकर पाण्डेय, अनुराग प्रकाशन, वारणसी

- १) रजिया - रामवृक्ष बेनीपुरी
- २) रामा - महादेवी वर्मा

Unit - IV:

निबंध

पाठ्य पुस्तक :

आधुनिक निबंध संग्रह: सं सुरेश कुमार, केन्द्रीय हिन्दी संस्थान, आगरा।

- १) नाखून क्यों बढ़ते हैं - हजारीप्रसाद द्विवेदी
- २) नये वर्ष के शुभ संकल्प - रामविलास शर्मा
- ३) अमरनाथ की महायात्रा - कन्हैयालाल नंदन
- ४) छायावादी काव्य शैली - नामवर सिंह

सहायक ग्रंथ :

१. प्रतिनिधि हिंदी निबंधकार - विभुराम मिश्र, ज्योतिश्वर मिश्र, लोकभारती प्रकाशन।
२. यात्रा साहित्य विद्या: शास्त्र ओर इतिहास - बापूराम देशाई, विकास प्रकाशन, कानपुर।
३. हिंदी का गद्य साहित्य - रामचंद्र तिवारी।
४. आधुनिक हिन्दी गद्य साहित्य का विकास और विश्लेषण - डा. विजय मोहन सिंह

+3 SECOND YEAR FOURTH SEMESTER

Core Paper - 9

Time : 3 Hrs.
Credit: 06

End Semester Theory : 80 Marks
Mid-Semester Theory : 20 Marks

आधुनिक हिन्दी कविता (1)

Unit- 1:

यशोधरा : मैथिलीशरण गुप्त : कविता सं.

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| १) घूम रहा है कैसा चक्र, | (२) सखि वे मुझसे कहकर जाते, |
| ३) आर्यपुत्र दे चुके परीक्षा | (४) चुप रह चुप रह हाय अभागे |
| ५) रूदन का हसना ही तो गान | |

Unit -II: Basic:

जयशंकर प्रसाद -

- १) आँसू - १ से २०
- २) ले चल मुझे भुलावा देकर

Unit - III:

निराला -

- १) तोड़ती पत्थर
- २) बादल राग
- ३) संध्या सुन्दरी
- ४) पंत : प्रथम रश्मि, ताज

Unit - IV:

महादेवी : मैं नीर भरी दुख की बदली, पंथ होने दो अपरिचित, मधुर-मधुर मेरे दीपक जल

पाठ्य पुस्तक :

हिन्दी काव्य संग्रह - सं रामवीर सिंह, के. हि.सं. आगरा

सहायक ग्रंथ :

१. छायावाद - नामवर सिंह, राजकमल प्रकाशन, दिल्ली
२. आधुनिक हिंदी साहित्य की प्रवृत्तियाँ - नामवर सिंह, लोकभारती प्रकाशन, इलाहाबाद।
३. निराला : आत्महंता आस्था - दूधनाथ सिंह
४. जयशंकर प्रसाद - नन्ददुलारे वाजपेयी
५. महादेवी वर्मा - जगदीश गुप्त

3 SECOND YEAR FOURTH SEMESTER

Core Paper - 10

Time : 3 Hrs.
Credit: 06

End Semester Theory : 80 Marks
Mid-Semester Theory : 20 Marks

भाषा विज्ञान और हिन्दी भाषा

Unit- 1:

भाषा की परिभाषा एवं स्वरूप, भाषा परिवर्तन के कारण। लिपि की परिभाषा एवं स्वरूप, भारत में लिपि का विकास, देवनागरी लिपि की विशेषताएँ एवं मानकीकरण।

Unit -II: Basic:

भाषा विज्ञान की परिभाषा एवं स्वरूप, ज्ञान की अन्य शाखाओं से संबन्ध।

Unit - III:

दक्खिनी हिन्दी भाषा का साहित्य खड़ी बोली और साहित्यिक भाषा के रूप में
हिन्दी का उद्भव और विकास
फोर्ट विलियम कॉलेज की भाषा - नीति

Unit - IV:

हिन्दी के विविध रूप: राजभाषा, राष्ट्रभाषा, सम्पर्क भाषा, संचार भाषा

सहायक ग्रंथ :

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| १. भाषा विज्ञान की भूमिका | - देवेन्द्रनाथ शर्मा, दीप्ति शर्मा, राधाकृष्ण प्रकाशन, नई दिल्ली |
| २. हिन्दी : उद्भव, विकास और रूप | - हरदेव बाहरी, किताब महल, नई दिल्ली |
| ३. हिंदी भाषा का इतिहास | - धीरेन्द्र वर्मा |
| ४. भाषा और समाज | - रामविलास शर्मा, राजकमल प्रकाशन, नई दिल्ली। |
| ५. भाषा और लिपि का इतिहास | - धीरेन्द्र वर्मा |
| ६. आधुनिक भाषा विज्ञान | - डा. राजमणि शर्मा |
| ७. भाषा विज्ञान एवं भाषा शास्त्र | - कपिलदेव द्विवेदी |

+3 THIRD YEAR FIFTH SEMESTER

Core Paper - 11

Time : 3 Hrs.
Credit: 06

End Semester Theory : 80 Marks
Mid-Semester Theory : 20 Marks

हिन्दी नाटक और रंगमंच

Unit- 1:

हिंदी नाटक और रंगमंच का परिचय, भारतीय रंगमंच, पाश्चात्य रंगमंच, जयशंकर प्रसाद का नाट्य साहित्य।

Unit -II: Basic:

‘आषाढ़ का एक दिन’ - मोहन रोकश

Unit - III:

‘माधवी’ - भीष्म साहनी

Unit - IV:

आधुनिक एकांकी संग्रह - सं. सुरेश कुमार, केंद्रीय हिंदी संस्थान, आगरा

- १) भोर का तारा - जगदीश चंद्र माथुर
- २) औरंगजेब की आखिरी रात - रामकुमार वर्मा
- ३) जुलूस - कणादि ऋषि भटनागर
- ४) धीरे बहो गंगा - लक्ष्मीनारायण लाल

सहायक ग्रंथ :

१. नाटककार जयशंकर प्रसाद - सं. सत्येन्द्र कुमार तनेजा, राधाकृष्ण प्रकाशन।
२. हिन्दी नाटक - बच्चन सिंह, लोकभारती प्रकाशन, इलाहाबाद।
३. आधुनिकता और मोहन राकेश - डॉ. उर्मिला मिश्र, विश्वविद्यालय प्रकाशन, वाराणसी।
४. आधुनिक हिंदी नाटक और रंगमंच- सं. नेमिचंद जैन

+3 THIRD YEAR FIFTH SEMESTER**Core Paper - 12**

Time : 3 Hrs.
Credit: 06

End Semester Theory : 80 Marks
Mid-Semester Theory : 20 Marks

भारतीय काव्य शास्त्र

Unit- 1:

काव्य लक्षण, काव्य प्रयोजन, शब्द शक्ति

Unit -II:

रस सिद्धान्त : परिभाषा एवं स्वरूप, रस के प्रकार

रीति सिद्धान्त : परिभाषा एवं स्वरूप, रीति के भेद,

Unit - III:

अलंकार : परिभाषा एवं स्वरूप, प्रमुख भेद, लक्षण एवं उदाहरण : उपमा,

रूपक, अनुप्रास, उत्प्रेक्षा, अन्योक्ति यमक, श्लेष, भ्रान्तिमान, अतिशयोक्ति, वक्रोक्ति।

Unit - IV:

छंद : लक्षण एवं उदाहरण : दोहा, चौपाई, सवैया, रोला, छप्पय, बरवै, सोरठा, मंदाक्रांता, धनाक्षरी, कुंडलिया।

सहायक ग्रंथ :

१. भारतीय काव्यशास्त्र - भगीरथ मिश्र
२. भारतीय काव्य शास्त्र - सत्यदेव चौधरी, अलंकार प्रकाशन, दिल्ली
३. भारतीय काव्य शास्त्र - नगेन्द्र, नैशनल पब्लिशिंग हाउस, दिल्ली
४. अलंकार मुक्तावली - देवेन्द्रनाथ शर्मा

+3 THIRD YEAR SIXTH SEMESTER

Core Paper - 13

Time : 3 Hrs.
Credit: 06

End Semester Theory : 80 Marks
Mid-Semester Theory : 20 Marks

आधुनिक हिन्दी कविता (2)

Unit- 1:

राममधारी सिंह दिनकर
जनतन्त्र का जन्म, अभिनव मनुष्य
बच्चन - पथ की पहचान

Unit -II: Basic:

अज्ञेय : हिरोशिमा, कलगी बाजरे की भवानी प्रसाद मिश्र : गीतफरोश, अभिव्यक्ति

Unit - III:

धर्मवीर भारती : कस्बे की शाम, बोआई का गीत
नागार्जुन : बहुत दिनों के बाद, प्रेतका बयान

Unit - IV:

धूमिल - मोचीराम
रघुवीर सहाय - रामदास
शमशेर - एक पीली शाम

पाठ्यपुस्तक :

हिन्दी काव्य संग्रह - केन्द्रीय हिन्दी संस्थान, आगरा

सहायक ग्रंथ :

- | | |
|---|---|
| १ . आधुनिक हिन्दी कविता का विकास | - हेतु भारद्वाज |
| २ . कविता के नये प्रतिमान | - नामवर सिंह, राजकमल प्रकाशन, नई दिल्ली |
| ३ . नयी कविता और अस्तित्ववाद | - रामविलास शर्मा, राजकमल प्रकाशन, नई दिल्ली |
| ४ . समकालीन कविता का यथार्थ | - परमानंद श्रीवास्तव |
| ५ . समकालीन हिन्दी कविता | - रवीन्द्र भ्रमर । |
| ६ . स्वातंत्र्योत्तर हिन्दी कविता में राजनैतिक चेतन | - डॉ. उसमान खान |

+3 THIRD YEAR SIXTH SEMESTER

Core Paper - 14

Time : 3 Hrs.
Credit: 06

End Semester Theory : 80 Marks
Mid-Semester Theory : 20 Marks

पाश्चात्य काव्य शास्त्र

Unit- 1:

प्लेटो : काव्य, सत्य और अनुकरण, आरस्तू के काव्य सिद्धान्त

Unit -II: Basic:

लोगिनुस : काव्य में उदात्त

विलियम वड्सवर्थ : काव्य संबंधी विचार

Unit - III:

मैथ्यू आर्नल्ड: कविता और जीवन, कविता और समाज, आई.ए.रिचर्ड्स : मूल्य सिद्धान्त।

Unit - IV:

बिम्बवाद, प्रतीकवाद स्वच्छंदतावाद, मार्क्सवाद

सहायक ग्रंथ :

- | | |
|--|---|
| १ . पाश्चात्य साहित्य - चिंतन | - निर्मला जैन, राधाकृष्ण प्रकाशन, नई दिल्ली। |
| २ . पाश्चात्य काव्यशास्त्र - इतिहास सिद्धान्त और वाद | - भागीरथ मिश्र, विश्वविद्यालय प्रकाशन, वाराणसी |
| ३ . पाश्चात्य समीक्षा दर्शन | - जगदीश चंद्र जैन, हिंदी प्रचारक संस्थान, वाराणसी |
| ४ . भारतीय एवं पाश्चात्य काव्यशास्त्र की रूपरेखा | - रामचंद्र तिवारी, लोकभारती प्रकाशन, इलाहाबाद |

+3 THIRD YEAR FIFTH SEMESTER

DSE - 1

Time : 3 Hrs.
Credit: 06

End Semester Theory : 80 Marks
Mid-Semester Theory : 20 Marks

तुलसीदास

Unit- 1:

तुलसी और उनका युग / तुलसी की भक्ति भावना। रामकाव्य की परम्परा और तुलसी।

Unit -II; Basic:

तुलसी की प्रमुख रचनाएँ / तुलसी के नारी संबंधी विचार / तुलसी का समन्वयवाद।

Unit - III:

पाठ्यपुस्तक: रामचरितमानस : तुलसीदास, गीता प्रेस, गोरखपुर (अयोध्याकाण्ड पद सं. 1 से 50)

Unit - IV:

विनयपत्रिका : तुलसीदास, गीता प्रेस, गोरखपुर, प्रथम 1 से 20 पद।

सहायक ग्रंथ:

१. तुलसीदास : - डॉ. माताप्रसाद गुप्त, हिन्दी परिषद प्रयाग
२. तुलसी और उनका युग: - डॉ. राजपति दीक्षित, ज्ञानमण्डल, काशी
३. तुलसी आधुनिक वातायन से - रमेश कुन्तल मेध
४. गोस्वामी तुलसीदास की दृष्टि में नारी और उसका महत्व: - ज्ञानवती त्रिवेदी, काशी विश्वविद्यालय प्रकाशन।
५. गोस्वामी तुलसीदास - रामचन्द्र शुक्ल

+3 THIRD YEAR FIFTH SEMESTER**DSE - 2**

Time : 3 Hrs.
Credit: 06

End Semester Theory : 80 Marks
Mid-Semester Theory : 20 Marks

प्रेमचन्द

Unit- 1:

प्रेमचन्द और उनका युग। प्रेमचन्द ओर भारतीय स्वतन्त्रता आंदोलन।

Unit -II: Basic:

प्रेमचन्द और भारतीय किसान। उपन्यासकार के रूप में प्रेमचन्द।

सेवासदन - प्रेमचन्द

Unit - III:

कहानीकार प्रेमचंद मानसरोवर, भाग-1

- १) अलगयोझा
- २) ईदगाह
- ३) बड़े भाई साहब
- ४) ठाकुर का कुआँ
- ५) पूस की रात

Unit - IV:

कुछ विचार : प्रेमचन्द, लोकभारती प्रकाशन

- १) साहित्य का उद्देश्य

- २) राष्ट्रभाषा हिन्दी और उसकी समस्याएँ
- ३) उर्दू, हिन्दी और हिन्दुस्तानी

सहायक ग्रंथ :

१. प्रेमचन्द और उनका युग - रामविलास शर्मा, राजकमल प्रकाशन, नयी दिल्ली
२. हिन्दी उपन्यास - आचर्य रामचन्द्र तिवारी, विश्वविद्यालय प्रकाशन
३. प्रेमचन्द : एक विवेचन - इन्द्रनाथ मदान
४. कहानीकार प्रेमचन्द : रचनादृष्टि और रचना शिल्प - शिवकुमार मिश्र, लोकभारती प्रकाशन, इलाहाबाद

+3 THIRD YEAR SIXTH SEMESTER

DSE - 3

Time : 3 Hrs.
Credit: 06

End Semester Theory : 80 Marks
Mid-Semester Theory : 20 Marks

कार्यालयी हिन्दी

Unit- 1:

राजभाषा हिन्दी : संवैधानिक प्रावधान : राजभाषा, अष्टम अनुसूची, राजभाषा अधिनियम १९६३, राजभाषा नियम १९७६

Unit -II; Basic:

टिप्पण एवं आलेखन : टिप्पण: स्वरूप, टिप्पण की प्रक्रिया एवं उद्देश्य, प्रारूपलेखन: स्वरूप एवं परिचय, प्रारूप तैयार करने की विधि, प्रारूप लेखन की रूपरेखा, प्रारूप लेखन के क्षेत्र।

संक्षेपण : परिभाषा, संक्षेपण की प्रक्रिया एवं भेद,

पत्रलेखन: अर्थ एवं स्वरूप, पत्रलेखन की विशेषताएँ सरकारी पत्रों के प्रकार।

Unit - III:

कम्प्यूटर में हिन्दी का अनुप्रयोग:

कम्प्यूटर : अर्थ, स्वरूप एवं परिभाषा, कम्प्यूटर के मुख्यभाग, कम्प्यूटर प्रणाली, कार्यालयों में कम्प्यूटर का प्रयोग।

Unit - IV:

प्रशासनिक शब्दावली - प्रमुख शब्द, प्रमुख वाक्यांश तथा पदनाम।

सहायक ग्रंथ :

१. प्रयोजनमूलक हिंदी : संरचना और अनुप्रयोग - रामप्रकाश, दिनेश गुप्त
२. प्रयोजनमूलक हिन्दी : सिद्धान्त और प्रयोग - दंगल झाल्टे, वाणी, दिल्ली
३. प्रयोजनमूलक हिन्दी - विनोद गोदरे, वाणी प्रकाशन, नई दिल्ली

+3 THIRD YEAR SIXTH SEMESTER

DSE - 4

Time : 3 Hrs.

Credit: 06

End Semester Theory : 80 Marks

Mid-Semester Theory : 20 Marks

विज्ञापन : अवधारणा और प्रयोजनमूलक आयाम

Unit- 1:

विज्ञापन : स्वरूप एवं अवधारणा

- (i) विज्ञापन : अर्थ व परिभाषा
- (ii) विज्ञापन का महत्त्व
- (iii) विज्ञापन के सामाजिक तथा व्यावसायिक उद्देश्य, मार्केटिंग और ब्रांड निर्माण
- (iv) विज्ञापन के नए संदर्भ (प्रायोजित कार्यक्रम)

Unit -II; Basic:

विज्ञापन : विविध माध्यम

- (i) सामान्य परिचय
- (ii) विज्ञापन माध्यम का चयन
- (iii) प्रिंट, रेडियो एवं टेलीविजन के लिए कॉपी लेखन

Unit - III:

विज्ञापन की भाषा

- (i) विज्ञापन की भाषा का स्वरूप
- (ii) विज्ञापन की भाषागत विशेषताएँ
- (iii) विज्ञापन की भाषा के विभिन्न पक्ष, सादृश्य विधान, अलंकरण, तुकांतता, समानांतरता, विचलन, मुहावरे, लोकोक्तियाँ, भाषा संकर
- (iv) हिंदी विज्ञापनों की भाषा

Unit - IV:

विज्ञापन - निर्माण का अभ्यास

- (i) प्रिंट माध्यम: वर्गीकृत एवं सजावटी विज्ञापन - निर्माण
- (ii) रेडियो जिंगल लेखन
- (iii) टेलीविजन के लिए स्टोरी बोर्ड निर्माण

सहायक ग्रंथ :

१. जनसंपर्क, प्रचार एवं विज्ञापन - विजय कुलश्रेष्ठ
२. जनसंचार माध्यम : भाषा और साहित्य - सुधीर पचौरी
३. डिजिटलयुग में विज्ञापन - सुधा सिंह, जगदीश चतुर्वेदी
४. आधुनिक विज्ञापन और जनसंपर्क - डा. तारेण भाटिया

+3 THIRD YEAR SIXTH SEMESTER**DSE - 5**

Credit: 06

100 Marks

परियोजना कार्य

परियोजना कार्य / लघु शोध प्रबंध - संभावित पृष्ठ संख्या ४० से ५० पृष्ठों के बीच हो / निम्नलिखित विषयों पर आलोचनामूलक / शोधात्मक कार्य किया जा सकता है।

क) अनुवाद

ख) पुस्तक समीक्षा

ग) किसी जटिल अथवा गहन विषय को हल करने की दिशा में,

अथवा

घ) किसी साहित्यिक मान्यता की स्थापना / पुनः स्थापना हेतु किया गया मौलिक कार्य।

+3 SECOND YEAR THIRD SEMESTER**GE - 1**

Time : 3 Hrs.

End Semester Theory : 80 Marks

Credit: 06

Mid-Semester Theory : 20 Marks

मध्यकालीन इतिहास और भक्ति कविता

Unit- 1:

मध्यकाल सामान्य परिचय, भक्तिकाल की पृष्ठभूमि, भक्तिकालीन साहित्य की प्रमुख प्रवृत्तियाँ

Unit -II Basic:

भक्तिकाल की प्रमुख काव्य धाराएँ

निर्गुण काव्य - ज्ञानाश्रयी शाखा एवं प्रेममार्गी शाखा

सगुण काव्य - कृष्णभक्ति शाखा एवं रामभक्ति शाखा

Unit - III:

पाठ्य पुस्तक : हिन्दी काव्य संग्रह: सं. रामवीर सिंह, केन्द्रीय हिन्दी संस्थान, आगरा,

कबीर दास - साखी १ से २१.

मलिक मुहम्मद जायसी - नागमति वियोग वर्णन - १ से ८

सूरदास - भ्रमरगीत ६ से १०

Unit - IV:

तुलसीदास - भरत - महिमा १ से १०

अनुमोदित ग्रंथ :

१. मध्यकालीन भारत राजनीति, समाज और संस्कृति - प्रो. सतीश चन्द्र, ओरियंट लॅगमैन
2. Mediaval India - Prof. Yusul Hussain
३. हिन्दी साहित्य की भूमिका - आचार्य हजारीप्रसाद द्विवेदी, राजकमल प्रकाशन, दिल्ली
४. हिन्दी सूफी काव्य की भूमिका - डा. रामपूजन तिवारी

+3 SECOND YEAR FOURTH SEMESTER

GE - 2

Time : 3 Hrs.
Credit: 06

End Semester Theory : 80 Marks
Mid-Semester Theory : 20 Marks

साहित्य और सन्दर्भ: विविधवाद

Unit- 1:

१) स्वच्छंदतावाद (२) अभिव्यंजनावाद

Unit -II; Basic:

३) अस्तित्ववाद, (४) मार्क्सवाद

Unit - III:

५) उत्तरआधुनिकतावाद, (६) बिम्ब, फटासी

Unit - IV:

७) मिथक प्रतीक

अनुमोदित ग्रंथ :

१. हिन्दी आलोचना - डॉ. सदन कुमार पाल, शबनम, पुस्तक महल, कटक
२. भारतीय और पाश्चात्य काव्यशास्त्र तथा हिन्दी आलोचना - डॉ. रामचन्द्र तिवारी, विश्वविद्यालय प्रकाशन, काशी
३. आलोचना से आगे - सुधीश पचौरी
४. हिन्दी आलोचना के बीज शब्द - डॉ. बच्चन सिंह
५. हिन्दी आलोचना का विकास - नन्दकिशोर नवल

+3 SECOND YEAR THIRD SEMESTER

GE - 3

Time : 3 Hrs.
Credit: 06

End Semester Theory : 80 Marks
Mid-Semester Theory : 20 Marks

साहित्यिक पत्रकारिता (हिन्दी)

Unit- I:

पत्रकारिता : परिभाषा एवं स्वरूप, प्रमुख पत्रकार - भारतेन्दु, महावीरप्रसाद द्विवेदी, निराला, राजेन्द्र यादव।

Unit- II:

हिन्दी पत्रकारिता का उद्भव और विकास एवं भेद

Unit- III:

समकालीन प्रमुख पत्रिकाएँ : आलोचना, हंस, साहित्य अमृत, नया ज्ञानोदय आदि

Unit- IV:

भेंटवार्ता, फीचर - लेखन, संपादकीय लेखन

सहायक ग्रंथ :

१. हिन्दी समाचार पत्रों का इतिहास - अम्बिका प्रसाद वाजपेयी
२. हिन्दी पत्रकारिता - राकेश दुबे, शबनम पुस्तक महल, कटक
३. हिन्दी पत्रकारिता - डॉ. कृष्ण बिहारी मिश्र
४. हिन्दी पत्रकारिता - विविध आयाम - सं. वेद प्रदाप वैदिक
५. हिन्दी पत्रकारिता सिद्धान्त और स्वरूप - डा. सविता चड्ढा

CURRICULUM FRAMEWORK

for the UG Course of the Dept. of History

A. PROGRAMME OUTCOMES (POs):

B.A. (Hons.) in History under the Choice Based Credit System (CBCS) aims at offering a general framework within which History teaching may be organised. This programme aims at enabling the students to acquire the skills of critical thinking, rational enquiry, effective communication, and exploring the relationship between the past and the present while remaining sensitive to the larger historiographical debates that are important to the study of human society. The programme will familiarise the students with the history and heritage of the Indian subcontinent, including that of Odisha, from the earliest times up to the period after independence. The students will also gain knowledge of the history and the process of development in other parts of the world as well as certain other societies, during the same eras. This programme will also enable the students to carefully read a complex historical narrative, evaluate its deployment of evidence and understand its argument as well as critically analyse the same. It will also help develop respect for national ethos, human values, ideals, and constitutional values.

B. PROGRAMME SPECIFIC OUTCOMES (PSOs):

Students enrolled in the program complete a curriculum that exposes and trains students in a full range of essential skills and abilities. They will have the opportunity to master the following objectives:

- a. Learn a basic narrative of historical events in a specific region of the world in a specific time frame.
 - b. Articulate factual & contextual knowledge of specific places & times, to make careful comparisons (across time, space & culture).
 - c. Develop the ability to use bibliographical tools for the advanced study of history.
 - d. Understand & evaluate different historical ideas, various arguments, and point of view.
 - e. Develop an appreciation of themselves & of others through the study of the past in local, regional, national, and global context.
 - f. Instil an appreciation of the uniqueness of visual evidence and cultivate the skill of using visual evidence to understand human activity of the recent and distant past.
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HISTORY

+3 FIRST YEAR FIRST SEMESTER

Core Paper - 1

HISTORY OF INDIA- I

Time: 3 Hrs.
Credit: 06

End Semester Theory: 80 Marks
Mid Semester Theory: 20 Marks

Course Outcome:

This paper describes the antiquity of India's past and methods of reconstruction of it, the different sources which are scientifically corroborated to reconstruct the past. It also describes the beginning of farming communities and scientific methods which have come up in recent years and helps to understand the Vedic roots of Indic civilisation.

Unit-I: Reconstructing Ancient Indian History

1. Early Indian notions of History
2. Sources of Historical Writings
3. Historical Geography (Major Harappan Sites and Sixteen Mahajanapadas).

Unit-II: Pre-historic Hunter-Gatherers and Food Production

1. Paleolithic Culture: Upper, Middle, and Lower; Tool making habit.
2. Mesolithic Culture: New developments in Technology and Economy.
3. Neolithic and Chalcolithic Settlements
4. Food Production: Beginning of Agriculture

Unit-III: The Harappan Civilization

1. Origins; Settlement Patterns and Town Planning.
2. Economic Life: Agriculture, Craft Productions and Trade.
3. Social and Political Organization; Religious Beliefs and Practices; Art.

Unit-IV: Cultures in Transition

1. Early Vedic Age: Society, Polity, Religion and Literature
2. Later Vedic Age: Social Stratification (Varna and Gender), Polity, Religion, and Culture

Reading List:

1. R. S. Sharma, Material Culture and Social Formations in Ancient India, 1983.
2. Upinder Singh, A History of Ancient and Early Medieval India.

Suggested Reading:

1. Romila Thapar, Early India: From Beginning to 1300 CE, Penguin.
 2. A.L. Basham, The Wonder that was India, Vol.1
 3. B. Fagan, Digging from the Earth
 4. H.D. Sankhalia, Prehistory of India.
 5. B.R. Alchin, The Birth of Indian Civilization.
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+3 FIRST YEAR FIRST SEMESTER

Core Paper - 2

SOCIAL FORMATIONS AND CULTURAL PATTERNS OF THE ANCIENT WORLD

Time :3 Hrs.

Credit :06

End Semester Theory :80 Marks

Mid Semester Theory : 20 Marks

Course Outcome:

This paper will develop critical understanding of the interdisciplinary approach in understanding the evolution of homo-sapiens. It will also make students familiar with the prehistoric tool-making techniques and development of agriculture. Students will develop appreciation of the global heritage and appreciate the difference between senatorial democracy and popular democracy of Rome and Greece respectively.

Unit-I:

1. Evolution of Man;
2. Paleolithic Cultures
3. Mesolithic Cultures.

Unit-II: Neolithic Culture:

1. Food Production
2. Development of Agriculture
3. Animal Husbandry

Unit-III: Bronze Age Civilizations

1. Egypt
2. Mesopotamia (Sumeria& Babylonia)
3. China (Shang)

Unit-IV: Ancient Greece:

1. Athens and Sparta
2. Politics, Economic
3. Culture

Reading List:

1. Burns and Ralph. World Civilizations, Vol. A.
2. V. Gordon Childe, What Happened in History?

Suggested Reading:

1. G. Clark, World Prehistory: A New Perspective.
 2. Bisman Basu, The Story of Man
 3. H.Neil&M.C.Willam, A World of History, Oxford, New York, 1907.
 4. H.R. Hall, Ancient History of the Near East, 1932.
 5. H.S. Baghela, World of Civilization
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+3 FIRST YEAR SECOND SEMESTER

Core Paper - 3

HISTORY OF INDIA-II (300BCE-750CE)

Time: 3 Hrs.

Credit: 06

End Semester Theory: 80 Marks

Mid Semester Theory :20 Marks

Course Outcome:

Students will be able to understand the linkages between social, political, economic, and cultural processes of Indian history in the specified period. They will be able to appreciate the context and the structure of the Mauryan empire and the policy of Asoka in a multicultural past of India. The paper will also familiarise the students with the socio-economic history of the Gupta and Post-Gupta polities. Religion and its representation in Indian art will also be studied.

Unit-I: Economy and Society (circa 300 BCE to circa CE 300):

1. Expansion of Agrarian Economy: Production relations.
2. Urban growth: Trade & Commerce
3. Social stratification: Class, Varna, Jati, Gender

Unit-II: Changing political formations (circa 300 BCE to circa CE 300):

1. The Mauryan Empire: Chandragupta Maurya and Asoka-Conquest and Administration
2. Post-Mauryan Polities: Kushanas and Satavahanas
3. The Cholas

Unit-III: Towards Early Medieval India [circa CE Fourth century to CE 750]:

1. Gupta Age: Agrarian Expansion, Land Grants, Graded Land Rights and Peasantry.
2. Varna, Proliferation of Jatis; changing norms of marriage and property.
3. The Nature of Polities : The Gupta Empire
4. Post- Gupta Polities : Pallavas, Chalukyas, and Vardhanas

Unit-IV: Religion, Culture, Philosophy and Society

1. Consolidation of the Brahmanical Tradition: Dharma, Varnashram, Purusharthas,
2. Buddhism: Hinayan and Mahayana
3. Jainism: It's major Principles
4. Development of Art and Architecture: Mauryan and Guptas

Reading List:

1. D. D. Kosambi, An Introduction to the Study of Indian History, 1975.
2. A. L. Basham, Wonder That Was India, Rupa.

Suggested Reading:

1. Romila Thapar, Early India: From the Origins to 1300, 2002.
 2. Dharma Kumar and Irfan Habib, Cambridge Economic History of India, vol-I.
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3. Romila Thapar, Ancient India.
4. K.M. Ashraf, Life and Condition of the People of Hindustan.
5. D.N. Jha (ed.), Feudal Social Formation in Early India.

+3 FIRST YEAR SECOND SEMESTER

Core Paper - 4

SOCIAL FORMATIONS AND CULTURAL PATTERNS OF THE MEDIEVAL WORLD

Time :3 Hrs.
Credit :06

End Semester Theory :80 Marks
Mid Semester Theory : 20 Marks

Course Outcome:

Upon completion of this paper, the student shall be able to: identify the main historical developments in ancient Rome and gain an understanding of the restructuring of state and society from tribe-based polities to those based on territorial identity and citizenship. They will be able to trace the emergence and institutionalization of social hierarchies and marginalization of dissent, explain the trends in the medieval economy. Further, they will be able to analyse the rise of Islam and the move towards state formation in West Asia and understand the role of religion and other cultural practices in community organisation in medieval Europe.

Unit-I: Polity and Economy in Ancient Rome

1. Polity and Empire in Ancient Rome
2. Crises of the Roman Empire-Rise and fall of Julius Caesar
3. Agrarian Economy
4. Urbanization and Trade

Unit-II: Economic Developments in Europe from 7th to 14th Centuries:

1. Agricultural Production
2. Towns and Trade,
3. Feudalism- Origin, Growth and Decline

Unit-III: Religion and Culture in Medieval Europe:

1. Medieval Church
2. Monastic Communities
3. Papacy

Unit-IV: Societies in Central Islamic Lands:

1. The Tribal background, Rise of Islam; Rise of Sultanates
2. Religious Developments: the Origins of Shariah,

Reading List:

1. Perry Anderson, Passages from Antiquity to Feudalism.
 2. Marc Bloch, Feudal Society, 2 Vols.
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Suggested Reading:

1. J. Barrowclough, The Medieval Papacy.
2. Cambridge History of Islam, 2 Vol.
3. Will Durant, The Story of Civilization (vols. I & II).
4. T.W. Wallbank & N.M. Bailey, Civilization –Past and Present.
5. R. Coulborne, Feudalism in History.

+3 SECOND YEAR THIRD SEMESTER**Core Paper - 5****HISTORY OF INDIA-III (c. 750 -1206)**

Time :3 Hrs.

Credit :06

End Semester Theory :80 Marks

Mid Semester Theory : 20 Marks

Course Outcome:

This paper will help students understand the new periodisation and its basis, critically analyse of the relation between political realm and religious realm, interrelation between economy, society, polity, and culture in the making of regions. Students will be familiarised with the debates on the emergence of 'early-medieval' social order, including condition of the peasantry and the nature of brahmanical social order and relations with law books which reinforced brahmanical social order. The processes of state formation, agrarian expansion, proliferation of caste and urban as well as commercial processes will be explained, in an interconnected manner. The major currents of development in the cultural sphere, namely Bhakti movement, Puranic Hinduism, Tantricism, architecture and art as well as the emergence of a number 'regional' languages will be discussed.

Unit- I: Studying Early Medieval India: Political Structures

1. Sources: Literary and Archaeological
2. Evolution of Political structures: Rajputs and Cholas
3. Legitimization of Kingship; Brahmanas and Temples
4. Arab conquest of Sindh: Causes and Impact

Unit-II: Agrarian Structure and Social Change:

1. Agricultural Expansion; Crops
2. Landlords and Peasants
3. Proliferation of Castes
4. Peasantization of Tribes

Unit-III: Trade and Commerce:

1. Inter-regional Trade
 2. Maritime Trade and Forms of Exchange
 3. Process of Urbanization
 4. Merchant Guilds of South India
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Unit-IV: Religious and Cultural Developments:

1. Puranic Traditions; Buddhism and Jainism
2. Islamic Intellectual Traditions: Al-Biruni
3. Regional Languages and Literature
4. Art and Architecture: Evolution of Regional styles: Kalingan and Dravidian style of Temple Architecture

Reading List:

1. B.D. Chattopadhyaya, The Making of Early Medieval India.
2. R.S. Sharma and K.M. Shrimali, (eds), Comprehensive History of India, Vol. IV (A & B).

Suggested Reading:

1. Satish Chandra, Medieval India, Vol. I, Har Anand.
2. D. D. Koasambi, The Culture and Civilization of Ancient India: In Historical outline New Delhi; Vikas 1971.5th Print.
3. K. A. Nilakantha Sastri, The Colas, South Indian History.
4. Mittal, Socio-Cultural History of India.
5. R.C. Majumdar (ed) History and Culture of Indian people. Bombay; Bharatiya Vidya Bhavan 1960.Relevant Vol.

+3 SECOND YEAR THIRD SEMESTER

Core Paper - 6

RISE OF THE MODERN WEST - I

Time :3 Hrs.

Credit :06

End Semester Theory :80 Marks

Mid Semester Theory : 20 Marks

Course Outcome:

Upon completion of this paper the student shall be able to outline important changes that took place in Europe from the medieval period and acquire an integrated approach to the study of economic, social, political, and cultural developments in Europe. The processes by which major transitions occurred in Europe's economy, state forms, social structure and cultural life will be explained. Elements of early modernity in these spheres will be examined. linkages between Europe's state system and trade and empire are critically analysed and

Unit-I: Transition from feudalism to capitalism:

1. The problems of Transition: Economic Expansion, Industrial production
2. Trade and Commerce
3. Urban Development, Town

Unit-II: Early Colonial Expansion:

1. Motives, Voyages and Explorations.
 2. The Conquests of America
 3. Mining and Plantation, The African Slaves.
-

Unit-III: Renaissance and Reformation:

1. Its Social Roots Spread of Humanism in Europe.
2. The Renaissance: Art, Architecture, Sculpture, Painting and Literature
3. Origins and Spread of Reformation Movements.
4. Emergence of European State system: Spain, France, England, Russia

Unit-IV: Economic Developments of the Sixteenth Century:

1. Shift of economic balance from the Mediterranean to the Atlantic.
2. Commercial Revolution- Causes and Nature
3. Growth of Industries and its Impact

Reading List:

1. Charles A. Nauert, Humanism and the Culture of the Renaissance (1996).
2. Harry Miskimin, The Economy of Later Renaissance Europe: 1460 û1600.

Suggested Reading:

1. Meenaxi Phukan, Rise of the Modern West: Social and Economic History of Early Modern Europe.
2. F. Rice, The Foundation of Early Modern Europe.
3. Toynbee, A.J, A Study of History (12 volumes).
4. Maurice Dobb, Transition from Feudalism to Capitalism.
5. Wallbank, T.W. & Bailey, N.M. Civilization: Past and Present.

+3 SECOND YEAR THIRD SEMESTER**Core Paper - 7****HISTORY OF INDIA IV (C.1206 - 1526)**

Time :3 Hrs.

Credit :06

End Semester Theory :80 Marks

Mid Semester Theory : 20 Marks

Course Outcome:

On completion of this paper, the students shall be able to discuss different kinds of sources available for writing histories of various aspects of life during the thirteenth to the sixteenth century and critically evaluate the multiple perspectives from which historians have studied the politics, cultural developments, and economic trends in India during the period of study. Students will appreciate the ways in which technological changes, commercial developments, and challenges to patriarchy by certain women shaped the times.

Unit-I: Sultanate: Political Structures

1. Survey of Sources: (a) Persian Tarikh Tradition, (b) Vernacular Histories; (c) Epigraphy.
2. Consolidation of the Sultanate of Delhi: Balban, Alauddin Khalji and Mahammad-bin Tughluq.
3. Theories of kingship: The Ruling Elites: Ulema, Sufis and the Imperial Monuments

Unit-II: Emergence of Regional Identities

1. Bahamanis, Vijayanagar and Odisha.
2. Regional Art, Architecture and Literature in Vijayanagar and Odisha

Unit-III: Society and Economy:

1. Iqta and the Revenue-free Grants.
2. Agricultural production, Technology.
3. Market Regulations, Growth of Urban Centers.
4. Trade and Commerce, Indian Overseas Trade.

Unit-IV: Religion, Society and Culture:

1. Sufi Silsilas: Chishtis and Suhrawardis; doctrines and practices, Social roles
2. Bhakti Movements and Monotheistic Traditions: Kabir, Nanak, Ravidas and Sri Chaitanya.
3. Social Impact of the Bhakti Tradition: Rise of Liberal Thought, Ideology of Equality and Gender Relations

Reading List:

1. Satish Chandra, Medieval India, Vol. I, Har Anand Publications, New Delhi.
2. J.L. Mehta, An Advanced Study of the History of Medieval India, Vol.I.

Suggested Reading:

1. Irfan Habib, Medieval India: The Study of a Civilization, NBT, New Delhi.
2. ABM Habibullah, The Foundation of Muslim Rule in India.
3. SBP Nigam, Nobility under the Sultans of Delhi.
4. R.P. Tripathy, Some Aspects of Muslim Administration in India.
5. R.S.Sharma, Early Medieval Indian Society: Orient Blackswan 2001.

+3 SECOND YEAR FOURTH SEMESTER

Core Paper - 8

RISE OF THE MODERN WEST - II

Time :3 Hrs.

Credit :06

End Semester Theory :80 Marks

Mid Semester Theory : 20 Marks

Course Outcome:

Upon completion of this paper the student shall be able to explain major economic, social, political, and intellectual developments in Europe during the 17th and 18th centuries, contextualise elements of modernity in these realms. The features of Europe's economy and origins of the Industrial Revolution are discussed. The relationship between trade, empire, and slavery and industrial capitalism are analysed the divergence debate i.e., the trajectory of History of western Europe and Asia and Africa.

Unit-I: The English Revolution and European politics in the 18th century:

1. Background: Socio-Economic and Political Crisis in 17th Century Europe.
2. Major Issues-Political and Intellectual Currents;
3. Parliamentary Monarchy;
4. Patterns of Absolutism in Europe

Unit-II: Rise of Modern Science

1. Development of Science from Renaissance to the 17th century
2. Impact of Modern Science on European society

Unit-III: Mercantilism and European Economics

1. Origin and spread of Mercantilism
2. Impact of Mercantilism on European economy
3. Agricultural and Scientific Background to the Industrial Revolution

Unit-IV: The American Revolution

1. Political currents
2. Socio-Economic Issues
3. Significance of the American Revolution

Reading List:

1. H. Butterfield, The Origins of Modern Science.
2. Meenaxi Phukan, Rise of the Modern West: Social and Economic History of Early Modern Europe.

Suggested Reading:

1. Harry Miskimin, The Economy of Later Renaissance Europe: 1460 - 1600.
 2. C.A Fisher, History of Modern Europe.
 3. F. Rice, The Foundation of Early Modern Europe
 4. David Thomson, Europe since Napoleon, Pelican Books, 1985
 5. Swain, J.E., A History of World Civilization, Eurasia Publishing House Pvt. Ltd., New Delhi, 1994
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+3 SECOND YEAR FOURTH SEMESTER

Core Paper - 9

HISTORY OF INDIA V (C. 1526 - 1750)

Time :3 Hrs.

Credit :06

End Semester Theory : 80 Marks

Mid Semester Theory : 20 Marks

Course Outcome:

Upon completion of this paper the student shall be able to compare, discuss and examine the varied scholarly perspectives on the issues of the establishment, consolidation, and nature of the Mughal state, explain the changes and continuities in agrarian relations, land revenue regimes, Bhakti, and Sufi traditions. How the different means such as visual culture was used to articulate authority by the rulers will be discussed and the nuances of the process of state formation in the areas beyond the direct control of the Mughal state is discerned.

Unit-I: Establishment of Mughal rule:

1. India on the eve of advent of the Mughals
2. Military Technology: Fire Arms,
3. Sher Shah: Administrative and Revenue Reforms

Unit-II: Consolidation of Mughal rule:

1. Incorporation of Rajputs and other Indigenous Groups in Mughal Nobility
2. Evolution of Administrative Institutions: zabti, mansab, jagir, madad-i-maash
3. Emergence of the Marathas; Shivaji; Expansion under the Peshwas

Unit-III: Society and Economy:

1. Land rights and Revenue system: Zamindars and Peasants
2. Trade Routes and patterns of Internal Commerce; overseas trade
3. Urban Centres, Craft and Technology

Unit-IV: Cultural ideals:

1. Religious tolerance and sulh-i-kul; Sufi mystical and Intellectual Interventions
2. Art and Architecture
3. Mughal and Rajput Paintings: Themes and Perspectives

Reading List:

1. J.L. Mehta, An Advanced Study of the History of Medieval India, Vol.II.
2. Satish Chandra, Medieval India, vol.2, Har Anand Publications, New Delhi.

Suggested Reading:

1. Irfan Habib, Agrarian System of Mughal India, 1526-1707.
 2. A.B.Pandey, Later Medieval Period.
 3. R.P.Tripathi, Rise and Fall of the Mughal Empire
 4. S.Nurul Hassan, Thoughts on Agrarian Relations in Mughal India.
 5. Ishwari Prasad, Life and Times of Humayun.
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+3 SECOND YEAR FOURTH SEMESTER

Core Paper - 10

HISTORICAL THEORIES & METHOD

Time :3 Hrs.

Credit :06

End Semester Theory :80 Marks

Mid Semester Theory : 20 Marks

Course Outcome:

Upon completion of this paper the student shall be able to understand the theoretical underpinning of historical construction, analyse the changing discourse of history, learn about the nature and authenticity of sources, understand how historical theories shaped historical narrative in different periods, and appreciate the evolution of the discipline of history as Humanities subject to that of a social science discipline.

Unit-I: Meaning and Scope of History

1. Definition, Nature ,and Scope of History.
2. Object and Value of History.
3. History, Science and Morality.

Unit-II: Traditions of Historical Writing

1. Ancient Greek Traditions – Herodotus, Thucydides, Polybius
2. Ancient Roman Traditions - Livy and Tacitus
3. Medieval Understanding: Western – St. Augustine, Arabic – Ibn Khaldun.

Unit-III: History as Interdisciplinary Practice

1. History and Archaeology, History and Anthropology.
2. History and Psychology, History and Literature.
3. History and Political Science

Unit-IV: Historical Methods

1. Sources of History: Written, Oral. Visual & Archaeological.
2. Historical facts.
3. Historical Causation.
4. Historical Objectivity

Reading List:

1. B. Sheik Ali, History: Its Theory and Method, Macmillan, Reprinted, 1996.
2. E. H. Carr, What is History? , Penguin Books, Reprinted, 1983.

Suggested Reading:

1. E. Sreedharan, A Textbook of Historiography, Orient Longman, Reprinted, 2004.
 2. Marc Bloch, The Historians Craft.
 3. R.G. Collingwood, The Idea of History
 4. G.T.Reiner, History: Its Purpose and Method.
 5. K.Rajayyan, History: it's Theory & Method
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+3 THIRD YEAR FIFTH SEMESTER

Core Paper - 11

HISTORY OF MODERN EUROPE-9 (C.1780-1880)

Time :3 Hrs.

Credit :06

End Semester Theory :80 Marks

Mid Semester Theory : 20 Marks

Course Outcome:

At the end of the paper students will be able to identify what is meant by the French Revolution and trace short-term and long-term repercussions of revolutionary regimes and Empire-building by France. They will be able to understand the ideological alternatives to the ideology of capitalism and delineate diverse patterns of industrialization in Europe and assess the social impact of capitalist industrialisation. Students will be able to analyse the patterns of resistance to industrial capital and the emerging political assertions by new social classes.

Unit-I : The French Revolution (1789):

1. Socio, Religious, Economic and Political Conditions
2. Intellectual Currents.
3. Role of the Middle Classes

Unit-II : Revolution and its European Repercussions:

1. National Constituent Assembly
2. National Legislative Assembly
3. Napoleonic Consolidation- Reform and Empire

Unit-III : Restoration and Revolution: c. 1815 - 1848:

1. Congress of Vienna Restoration of old Hierarchies
2. Revolutionary and Radical Movements- A) July Revolution (1830) and B) February Revolution (1848)

Unit-IV : Socio-Economic Transformation and Remaking of States (Late 18th Century to Late 19th Century)

1. Process of Capitalist Development: Agrarian and Industrial Revolutions in England and German States.
2. Evolution of Social Classes: Land Owners, Peasantry: Bourgeoisie and Proletariat
3. Popular Movements and the Formation of National Identities in Germany and Italy, Ireland

Reading List:

1. T.S. Hamerow, Restoration, Revolution and Reaction: Economics and Politics in Germany [1815 - 1871].
2. Anthony Wood, History of Europe, 1815 to 1960 (1983).

Suggested Reading:

1. E.J. Hobsbawm, Nations and Nationalism.
 2. A. Wesley Rohem, The Record of Mankind, Health and Company, Boston, 1952.
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3. CMD Ketelbey, History of Modern Times since 1789, OUP, 2009.
4. David Thomson, Europe since Napoleon, Pelican Books, 1985.
5. Edward Mac Nall Burns et al, World Civilizations, vols. A,B,C,Goyal Saab, New Delhi.

+3 THIRD YEAR FIFTH SEMESTER

Core Paper - 12

HISTORY OF INDIA VII (c. 1750 - 1857)

Time :3 Hrs.

Credit :06

End Semester Theory :80 Marks

Mid Semester Theory : 20 Marks

Course Outcome:

This paper will enable students to understand the process and nature of British Colonial power in India, the ideologies, and institutions the British used to perpetuate their rule in India, economic policies of Britain as an imperial and colonial power in India and the major resistance movements against the British Raj leading up to the Revolt of 1857.

Unit-I: Expansion and Consolidation of Colonial Power:

1. Foreign Trade and Early forms of Economic Exploitations in Bengal
2. Dynamics of Expansion, with special reference to Bengal, Mysore and Odisha

Unit-II: Colonial State and Ideology:

1. Arms of the Colonial state: army, Police, Law.
2. Imperial Ideology: Orientalism and Utilitarianism
3. Education: Indigenous and Modern.

Unit-III: Economy and Society:

1. Land revenue systems- Permanent, Ryotwari and Mahalwari.
2. Commercialization of Agriculture- Consequences
3. Drain of Wealth- Causes and Consequences
4. Growth of Modern Industry

Unit-IV: Popular Resistance:

1. Santhal Uprising (1856-57)
2. Indigo Rebellion (1860)
3. Movement of 1857- Causes and Consequences

Reading List:

1. Dharma Kumar and Tapan Raychaudhuri, (ed.), The Cambridge Economic History of India, Vol. II.
 2. Bipan Chandra, K.N. Panikkar, Mridula Mukherjee, Sucheta Mahajan and Aditya Mukherjee, India's Struggle for Independence.
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Suggested Reading:

1. Sumit Sarkar, Modern India (1885-1947), Mac Milan.
2. A.R.Desai, Social Background of Indian Nationalism
3. R. Vlyanovsky, Agrarian India between the World Wars.
4. Sekhar Bondhapadhaya, From Plessey to Partition.
5. G.Kaushal, Economic History of India, 1757-1956

+3 THIRD YEAR SIXTH SEMESTER

Core Paper - 13

HISTORY OF INDIA VIII (c. 1857 - 1950)

Time :3 Hrs.

Credit :06

End Semester Theory :80 Marks

Mid Semester Theory : 20 Marks

Course Outcome:

After successful completion of the paper, the students will be able to identify how different regional, religious, linguistic and gender identities developed in the late 19th and early 20th centuries. The social and economic facets of colonial India and their influence on the national movement will be outlined. Various trends of anti-colonial struggles in colonial India are explained, complex developments leading to communal violence and partition will be analysed. The negotiations for independence, the key debates on the Constitution will be discussed.

Unit-I: Cultural Changes, Socio and Religious Reform Movements:

1. The advent of Printing and its Implications
2. Reform and Revival: Brahma Samaj, Arya Samaj, Aligarh Movement.
3. Emancipation of Women, Sanskritization and Anti-Caste Movements

Unit-II: Nationalism: Trends up to 1919:

1. Political Ideology and Organizations, Formation of INC
2. Moderates and Extremists.
3. Swedish Movement
4. Revolutionaries

Unit-III: Gandhian Nationalism after 1919: Ideas and Movements:

1. Mahatma Gandhi: His Perspectives and Methods
2. Non- Cooperation, Civil Disobedience, Quit India,
3. Subhas Chandra Bose and INA
4. Nationalism and Social Groups: Peasants, Tribes, Dalits and Women

Unit-IV: Communalism and Partition:

1. Ideologies and Practices, Muslim League
 2. Hindu Maha Sabha
-

3. Partition and Independence
4. Making of the Constitution

Reading List:

1. Sumit Sarkar, Modern India, 1885-1947.
2. Bipan Chandra, K.N. Panikkar, Mridula Mukherjee, Sucheta Mahajan and Aditya Mukherjee, India's, Struggle for Independence, Penguin

Suggested Reading:

1. Sekhar Bandopadhyaya, From Plessey to Partition
2. N.S. Bose, Indian Awakening and Bengal
3. A. R. Desai, Social Background of Indian Nationalism, Popular, Bombay.
4. S.Gopal, British Policy in India, 1858-1905.
5. Bipan Chandra, Indian National Movement.

+3 THIRD YEAR SIXTH SEMESTER

Core Paper - 14

HISTORY OF MODERN EUROPE II (C. 1880 - 1939)

Time :3 Hrs.

Credit :06

End Semester Theory :80 Marks

Mid Semester Theory : 20 Marks

Course Outcome:

Upon completion of this paper the student shall be able to discuss the peculiarities of the disintegration of large empires and remaking of Europe's map, deliberate on the meaning of imperialism and the manifestations of imperialist rivalry and expansion in the 19th and early 20th century. The conflict between radical and conservative forces, and the gradual consolidation of ultra-nationalist and authoritarian regimes in Europe is analysed. The major currents in the intellectual sphere are contextualised.

Unit-I: Liberal Democracy, Working Class Movements and Socialism in the 19th and 20th Centuries:

1. The Struggle for Parliamentary Democracy and Civil Liberties in Britain.
2. Forms of Protest during early Capitalism: Food Riots in France and England Luddites and Chartism.
3. Early Socialist Thought; Marxian Socialism

Unit-II: The Crisis of Feudalism in Russia and Experiments in Socialism:

1. Emancipation of Serfs
 2. Revolutions of 1905; the Bolshevik Revolution of 1917.
 3. Programme of Socialist Construction.
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Unit-III: Imperialism, War, and Crisis: c. 1880-1939:

1. Growth of Militarism; Power Blocks and Alliances: Expansion of European Empires – First World War (1914 – 1918)
2. Fascism and Nazism.
3. The Spanish Civil War.
4. Origins of the Second World War.

Unit-IV: Intellectual Developments since circa 1850: Major Intellectual Trends:

1. Mass Education and Extension of Literacy.
2. Institutionalization of Disciplines: History, Sociology and Anthropology.
3. Darwin and Freud.

Reading List:

1. C.M. Cipolla, Fontana Economic History of Europe, Volume II the Present (1981). I : The Industrial Revolution.
2. T.S. Hamerow, Restoration, Revolution and Reaction: Economics and Politics in Germany [1815 - 1871].

Suggested Reading:

1. George Lichtheim, A Short History of Socialism.
2. K.B. Keswani, International Relations in Modern World (1990-1995).
3. C.D.M. Ketelby, A History of Modern Times.
4. Carr.E.H., International Relations between the Two World Wars, 1919-1939, New York, 1966.
5. Garden Green Wood, The Modern World –A History of Our Times.

+3 THIRD YEAR FIFTH SEMESTER

DSE - 1

HISTORY AND CULTURE OF ORISSA - I

Time :3 Hrs.

Credit :06

End Semester Theory :80 Marks

Mid Semester Theory : 20 Marks

Course Outcome:

The students will understand the difference between historical regions and present-day administrative regions, understand the process of the making of the historical region of Odisha through the intertwined process of land grants, integration of cults in the specified period in the broader context of different polities. Socio-cultural life in early and medieval Odisha is discussed.

Units: I

1. Historical Geography: Kalinga, Utkal, Kosal
 2. Kalinga War (261 B.C.) and its Significance.
 3. Kharavela –Career and Achievements
-

Unit: II

1. Matharas and Eastern Gangas and Sailodbhavas
2. Bhaumakaras
3. Somavamsis

Unit: III

1. Imperial Gangas
2. SuryavamsiGajapatis
3. Post- Gajapati Political developments upto 1568.

Unit: IV

1. Social and Cultural Life in Early and Medieval Odisha
2. Growth and Decay of Urban Centres
3. Trade and Commerce
4. Taxation and Land Revenue

Reading List:

1. K.C. Panigrahi, History of Odisha, Kitab Mahal.
2. Sahu, Mishra & Sahu, History of Odisha.

Suggested Reading:

1. S.K. Panda, Political and Cultural History of Odisha.
2. A. C Pradhan, A Study of History of Orissa
3. B.K. Mallik, etal (eds) Odia Identity, Page Maker Publications, Bhubaneswar, 2019.
4. R. D Banarjee, History of Orissa, 2 vols.
5. M.N. Das(ed), Sidelights on History and Culture of Orissa, Vidyapuri,Cuttack, 1977

+3 THIRD YEAR FIFTH SEMESTER

DSE - 2

HISTORY AND CULTURE OF ORISSA - II

Time :3 Hrs.

Credit :06

End Semester Theory :80 Marks

Mid Semester Theory : 20 Marks

Course Outcome:

At the end of this paper students will be able appreciate the impact of Moghul and Maratha rule in Odisha, analyse the nature of insurgency of the subaltern classes. The nature and consequence of Odia nationalism and its basis will be discussed, Students will analyse the tropes of nationalism of the Odia speaking people. Students will also understand the process of the making of the present-day administrative boundary of Odisha.

Units: I

1. Afghan Conquest and Mughal Rule in Odisha : Administration
2. Maratha rule in Odisha : Administration
3. British Occupation and Early Colonial Administration : Land Revenue, Salt Policy, Jail and Police Administration.

Unit: II

1. Resistance Movements: Ghumsar Rebellion, Paik rebellion, Revolt of 1857 and Surendra Sai, Keonjhar Uprisings.
2. Famine of 1866 – Causes and Consequences
3. Growth of Education and Language Movement

Unit: III

1. Growth of Nationalism
2. Formation of Separate Province of Orissa.
3. Prajamandal Movement

Unit: IV

1. Nationalist Politics in Odisha
2. Quit India Movement
3. Merger of Princely States

Reading List:

1. P.K. Mishra & J.K. Samal, A Comprehensive History and Culture of Orissa- Vol. I & II.
2. A. C. Pradhan, Sidelights on Freedom Struggle in Orissa.

Suggested Reading:

1. K.M. Patra, Freedom Struggle in Odisha.
 2. J.K.Samal, Orissa under the British Crown.
 3. K.M.Patra, Orissa State Legislature & Freedom Struggle.
 4. B.C. Ray, Orissa under the Mughals, Punthi Pustak.
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+3 THIRD YEAR SIXTH SEMESTER

DSE - 3

HISTORY AND CULTURE OF ORISSA - III

Time :3 Hrs.

Credit :06

End Semester Theory :80 Marks

Mid Semester Theory : 20 Marks

Course Outcome:

At the end of this paper students will be able to contextualise the emergence and spread of Puranic religions in Odisha, trace the origin and reasons for popularity of heterodox religions like such Buddhism and Jainism. The students will be able to study the evolution of Kalinga architecture, brahmanical sculptures and narrative art in temples.

Unit: I

1. Buddhism in Odisha
2. Jainism in Odisha
3. Shaivism in Odisha

Unit: II

1. Saktism and Tantricism in Odisha
2. Growth of Vaishnavism in Odisha and Cult of Jagannath
3. Growth of Odia Literature: Sarala Mahabharata
4. Pancha-Sakha Literature

Unit: III

1. Buddhist Art and Architecture
2. Jaina Art
3. Evolution of Temple Architecture -Parsurameswar, Mukteswar, Lingaraja, Jagannath and Konarka

Unit: IV

1. Christian Missionaries – Education and Health
2. Mahima Movement and its Impact
3. Neo-Hindu Movements – Brahmo, Arya Samaj.

Reading List:

1. A.C. Pradhan, A Study of the History of Odisha, Panchasheel.
2. B.K. Mallik, Paradigm of Dissent and Protest:- Social Movements in Eastern India (1400-1700 AD)

Suggested Reading:

1. K.S. Behera, Temples of Orissa.
 2. P.K. Mishra(ed), Comprehensive History and Culture of Orissa, Vol-I Pt. II.
 3. N.K. Bose, Canons of Orissan Architecture
 4. M.N. Das (ed), Sidelights on History and Culture of Orissa.
 5. N.K. Sahu, Buddhism in Orissa
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+3 THIRD YEAR SIXTY SEMESTER

DSE - 4 (Optional/ Project)

HISTORY OF CONTEMPORARY ODISHA (1947-1980)

Time :3 Hrs.

Credit :06

End Semester Theory :80 Marks

Mid Semester Theory : 20 Marks

Course Outcome:

The students will learn to write dissertation on their respective research interest areas. It will enable students to peruse through existing body of literature through literature review, identify primary and secondary sources and analyse them, develop analytical skills, and understand that pursuing research is a scientific and systematic process.

Unit I: Political Developments

1. Second Congress Ministry (1946-1950):
 - a) Integration of Princely States with Odisha
 - b) New Capital
 - c) Hirakud Dam Project
2. Years of Uncertainties (1950-1980)
 - a) Third Congress Ministry and Abolition of Zamindari System
 - b) Biju Patnaik's First Ministry Achievements

Unit II: United Political Initiatives

1. Coalition Politics- Achievements and Challenges
 - a) R.N. Singdeo,
 - b) Sadasiba Tripathy
2. Panchayati Raj Institutions-Its Working and Impacts.
 - a) Rural Stages
 - b) Urban Stages

Unit III: Economic Development

- a) Growth of Industries- Rourkela Steel Plant and Odisha Sponge Iron Ltd.
- b) Irrigation and Agricultural Infrastructure
- c) Development in Transport and State communication- National and State Highways in Odisha

Unit IV: Social Developments and Problems

- a) Government Community Development Programmes- Its Impact
- b) Peasant Movement Causes and Effects
- c) Growth of Art and Craft: Raghunathpur, Pipli and Bargarh

Reading List:

1. Hemant K. Mohapatra, Odisara Etihasha (Odia), Friends Publishers, Cuttack, 2019.
 2. Sukadeva Nanda, Coalition Politics in Odisha, Sterling Publishers, Delhi.
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Suggested Reading:

1. Sunit Ghosh, Orissa in Turmoil: A Study in Political Developments, Bookland International, Bhubaneswar, 1991.
2. Basant Das, Odisha Rajanitira Gopan Katha (Odia), Anusandhan Publication, Bhubaneswar, 2001.
3. B.B. Jena & J.K. Baral (eds), Government and Politics in Orissa, Print House (India), Lucknow, 1988.
4. Chittaranjan Das, Nabakrushna Chaudhury, NBT, New Delhi.
5. Dasarathi Bhuyan, Orissa Politics: From 1936 to Contemporary Politics, Mangalam Publishers, New Delhi, 2010.

OR**PROJECT REPORT**

The students may be allotted topics of their interest in the beginning of 5th Semester Classes. They may write the Project Reports on local History and Culture, local personalities with their significant contribution to change the Society and economy with historical perspective containing up to 50 double spaced typed pages. The students may consult the sources like local archaeology, manuscripts, community documents, oral traditions, oral narratives, local biographies, and family sources for writing the project dissertation. The Teachers will guide the students to complete their Project assignments. The students may be allowed to fill up their forms after their submission of the projects assigned to them. The student has to secure fifty percent of marks from the evaluation of the project and fifty percent of the marks in the viva voce test which are compulsory.

+3 FIRST YEAR FIRST SEMESTER**GE - 1****HISTORY OF INDIA - I (EARLY TIMES TO 1750)**

Time :3 Hrs.

Credit :06

End Semester Theory :80 Marks

Mid Semester Theory : 20 Marks

Course Outcome:

After the end of the paper, students will be able to identify major milestones in Indian history and understand that there are several contested histories and there is no singular narrative of the past. They will be able to critically analyse the nature of historical sources and corresponding historical reconstruction also develop an appreciation in of the pluralities of India's past.

Unit – I : Reconstructing Ancient Indian History

1. Sources of Historical Writings.
2. Vedic Age : Society, Polity and Culture
3. Buddhism and Jainism : Principles and Impact

Unit – II : Polity and Administration

1. The Mauryan Empire: Conquest and Administration
2. Gupta Society: Land Grants, Peasantry and beginning of Feudal Society

3. Gupta Polity: Conquests and Administration
4. Harshavardhan: Achievements

Unit – III: Early Medieval Society, Economy, and Culture

1. Post Gupta Trade and Commerce
2. Delhi Sultanate: Conquests and Administration
3. Bhakti and Sufi Movements in India
4. Development of Regional Language and Literature

Unit – IV: India on the eve of the advent of the Mughals

1. Sher Shah : Administration and Reforms
2. Mughal Administrative Institutions: Zabti, Mansab and Jagir
3. Religious Tolerance Sulh-i- Kul
4. Mughal Art and Architecture

Reading List:

1. Upindra Singh, History of Ancient & Early Medieval India.
2. Romila Thappar, The Early India

Suggested Reading:

1. Irfan Habib, Medieval India, NBT, New Delhi
2. R.S. Sharma, India's Ancient Past
3. S.A.A. Rizvi, Wonder that was India, Vol.II, Rupa
4. Cultural Heritage of India, BharatiyaVidyabhaban Series, Vol-1-IV
5. A.L.Basheon(ed), CulturalHistoryofIndia,OUPNewDelhi,2011

+3 FIRST YEAR SECOND SEMESTER

GE - 2

HISTORY OF INDIA - II (1750-1950)

Time :3 Hrs.

Credit :06

End Semester Theory :80 Marks

Mid Semester Theory : 20 Marks

Course Outcome:

Students will be able to the relation between capitalism and colonialism in the context of a colonialcountry like India and understand the domestic political economic and foreign policy that operated from thestandpoint of the British Imperialism. The discourses of development by the Raj and the incidental benefits of suchdevelopment on national consciousness will be analysed. The coercive and hegemonic basis of the Raj will be critically examined. Students will be able to develop team to discuss on the nature of 1857 Revolt and understand the nature of its nationalism and its primordial root and how this led to struggles ofvarious types against colonial Raj.

Unit – I Foundation and Expansion of British Rule

1. Battle of Plassey (1757) and Conquest of Bengal
2. Conquest of Mysore and Maharashtra
3. Expansion through Diplomacy: Subsidiary Alliance and Doctrine of Lapse

Unit – II Consolidation of British Rule and Indian Responses

1. Peasant & Tribal Resistance against British Rule: Sanyasi Rebellion (1763); Kondh Rebellion in Ghumusar, Santal Rebellion
2. Revolt of 1857 : Nature and Significance
3. Land Revenue Settlements: Permanent Settlement, Ryotwari and Mahalwari Settlement

Unit – III – Social and Cultural Policies

1. Socio-Religious Reform Movements: Brahmo Samaj, Arya Samaj, Theosophical Society, Aligarh Movement.
2. Growth of Press and Education
3. Issues of Caste and Gender :Jyotibabu Phule- Women Question and Issues, Depressed Class.

Unit – IV – Indian National Movement

1. Politics of Moderates and Extremists (1885-1920)
2. Gandhian Mass Movements (Non-Cooperation, Civil Disobedience and Quit India Movements), (1920-1940)
3. Communal Politics and Partition
4. Making of the Democratic Constitution

Reference

1. A.R. Desai, Social Background of Indian Nationalism, Popular, Mumbai
2. Priyadarshi Kar, Comprehensive History of Modern India.

Suggested Reading:

1. Sumit Sarkar, Modern India : 1885-1947, Mac Millan.
 2. B.R.Mani, Debrahminising History: Dominance and Resistance in Indian Society, Manohar, New Delhi, First Published 2005.
 3. Chandra Bharil, Social and Political Ideas of B.R.Ambedkar, Aalekh Publishers, Jaipur, 1977.
 4. Sumit Sarkar, Modern India (1885-1947), Mac Millan, Delhi, First Published 1983.
 5. Hirendra N.Mukherjee, Gandhi, Ambedkar and the Extirpation of Untouchability, PPT, New Delhi
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MATHEMATICS

+3 FIRST YEAR FIRST SEMESTER

Core Paper - 1

CALCULUS

Time: 3 Hrs.

Credit: 04

End Semester Theory: 60 Marks

Mid Semester Theory: 15 Marks

Course Objective: The main emphasis of this course is to equip the student with necessary analytic and technical skills to handle problems of mathematical nature as well as practical problems. More precisely, main target of this course is to explore the different tools for higher order derivatives, to plot various curves and to solve the problems associated with differentiation and integration of vector functions

Course Outcome: After completing the course, students are expected to be able to use Leibnitz's rule to evaluate derivatives of higher order, able to study the geometry of various types of functions, evaluate the area, volume using the techniques of integrations, able to identify the difference between scalar and vector, acquired knowledge on some the basic properties of vector functions.

Unit-I:

Hyperbolic functions, higher order derivatives, Leibnitz rule and its applications to problems the type $e^{ax+b} \sin x$, $e^{ax+b} \cos x$, $(ax + b)^n \sin x$, $(ax + b)^n \cos x$, concavity and inflection points, asymptotes, curve tracing in Cartesian coordinates, tracing in polar coordinates of standard curves, L' Hospital's rule, Application in business, economics and life sciences.

Unit-II:

Riemann integration as a limit of sum, integration by parts, Reduction formulae, derivations and illustrations of reduction formulae of the type $\int \sin^n x \, dx$, $\int \cos^n x \, dx$, $\int \tan^n x \, dx$, $\int \sec^n x \, dx$, $\int (\log x)^n x \, dx$, $\int \sin^n x \cos^n x \, dx$, definite integral, integration by substitutions.

Unit-III:

Volumes by slicing, disks and washers methods, volumes by cylindrical shells, parametric equations, parameterizing a curve, arc length, arc length of parametric curves, area of surface of revolution, techniques of sketching conics, reflection properties of conics, rotation of axes and second degree equations, classification into conics using the discriminant, polar equations of conics.

Unit-IV:

Triple product, introduction to vector functions, operations with vector-valued functions, limits and continuity of vector functions, differentiation and integration of vector functions, tangent and normal components of acceleration.

LIST OF PRACTICALS

(Using any software/ MATLAB to be performed on a Computer.)

1. Plotting the graphs of the functions e^{ax+b} , $\log(ax+b)$, $1/ax+b$, $\sin(ax+b)$, $\cos(ax+b)$ and $|ax+b|$ to illustrate the effect of a and b on the graph.
2. Plotting the graphs of the polynomial of degree 4 and 5.
3. Sketching parametric curves (E.g. Trochoid, cycloid, hypocycloid).
4. Obtaining surface of revolution of curves.
5. Tracing of conics in Cartesian coordinates /polar coordinates.
6. Sketching ellipsoid, hyperboloid of one and two sheets (using Cartesian co-ordinates).

BOOKS RECOMMENDED:

1. H. Anton, I. Bivens and S. Davis, Calculus, 10th Ed., John Wiley and Sons (Asia) P. Ltd., Singapore, 2002. Ch 5 (5.2, 5.3, 5.5), Ch 10 (10.1, 10.4-10.6), Ch 11 (11.4), Ch 12 (12.1, 12.2).
2. Shanti Narayan, P. K. Mittal, Differential Calculus, S. Chand, 2014. Ch 4 (4.7), Ch 5, Ch 10, Ch 13, Ch 15 (15.1-15.6), Ch 17.
3. Shanti Narayan, P. K. Mittal, Integral Calculus, S. Chand, 2014. Ch 2, Ch 4.

BOOKS FOR REFERENCE:

1. James Stewart, Single Variable Calculus, Early Transcendentals, Cengage Learning, 2016.
2. G.B. Thomas and R.L. Finney, Calculus, 9th Ed., Pearson Education, Delhi, 2005.

+3 FIRST YEAR FIRST SEMESTER**Core Paper - 2****DISCRETE MATHEMATICS**

Time: 3 Hrs.

Credit: 04

End Semester Theory: 60 Marks

Mid Semester Theory: 15 Marks

Course Objective: This is a preliminary course for the basic courses in mathematics and all its applications. The objective is to acquaint students with basic counting principles, set theory and logic, matrix theory and graph theory.

Course Outcome: The acquired knowledge will help students in simple mathematical modeling. They can study advance courses in mathematical modeling, computer science, statistics, physics, chemistry etc.

Unit-I:

Sets, relations, Equivalence relations, partial ordering, well ordering, axiom of choice, Zorn's lemma, Functions, cardinals and ordinals, countable and uncountable sets, statements, compound statements, proofs in Mathematics, Truth tables, Algebra of propositions, logical arguments, Well-ordering property of positive integers, Division algorithm, Divisibility and Euclidean algorithm, Congruence relation between integers, modular arithmetic, Chinese remainder theorem, Fermat's little theorem.

Unit-II:

Principles of Mathematical Induction, pigeonhole principle, principle of inclusion and exclusion Fundamental Theorem of Arithmetic, permutation combination circular permutations binomial and multinomial theorem, Recurrence relations, generating functions, generating function from recurrence relations.

Unit-III:

Matrices, algebra of matrices, determinants, fundamental properties, minors and cofactors, product of determinant, adjoint and inverse of a matrix, Rank and nullity of a matrix, Systems of linear equations, row reduction and echelon forms, solution sets of linear systems, applications of linear systems, Eigen values, Eigen vectors of a matrix.

Unit-IV:

Graph terminology, types of graphs, sub-graphs, isomorphic graphs, Adjacency and incidence matrices, Paths, Cycles and connectivity, Eulerian and Hamiltonian paths, Planar graphs.

BOOKS RECOMMENDED:

1. Edgar G. Goodaire and Michael M. Parmenter, Discrete Mathematics with Graph Theory, 3rd Ed., Pearson Education (Singapore) P. Ltd., Indian Reprint, 2005.
2. Kenneth Rosen Discrete mathematics and its applications Mc Graw Hill Education 7th edition. Ch 1 (1.1, 1.2, 1.7, 1.8), Ch 2 (2.1 – 2.3, 2.5), Ch 3 (3.4, 3.5, 3.7), Ch 4 (4.1 – 4.4), Ch 5 (5.1 – 5.3), Ch 6 (6.1 – 6.5), Ch 8 (8.2 – 8.5, 8.7), Ch 9 (9.5, 9.6).
3. V Krishna Murthy, V. P. Mainra, J. L. Arora, An Introduction to Linear Algebra, Affiliated East-West Press Pvt. Ltd. Ch 5 (Excluding proofs of theorem), Ch 6 (6.2, 6.4 – 6.8)

BOOKS FOR REFERENCE:

1. J. L. Mott, A. Kendel and T.P. Baker: Discrete mathematics for Computer Scientists and Mathematicians, Prentice Hall of India Pvt Ltd, 2008.

+3 FIRST YEAR SECOND SEMESTER

Core Paper - 3

REAL ANALYSIS

Time: **3 Hrs.**

Credit: **04**

End Semester Theory: **60** Marks

Mid Semester Theory : **15** Marks

Course Objective: The objective of the course is to have the knowledge on basic properties of the field of real numbers, studying Bolzano-Weierstrass Theorem, sequences and convergence of sequences, series of real numbers and its convergence etc. This is one of the core courses essential to start doing mathematics.

Course Outcome: On successful completion of this course, students will be able to handle fundamental properties of the real numbers that lead to the formal development of real analysis and understand limits and their use in sequences, series, differentiation and integration. Students will appreciate how abstract ideas and rigorous methods in mathematical analysis can be applied to important practical problems.

UNIT-I

Review of Algebraic and Order Properties of \mathbb{R} , ε -neighborhood of a point in \mathbb{R} , Bounded above sets, Bounded below sets, Bounded Sets, Unbounded sets, Suprema and Infima, The Completeness Property of \mathbb{R} , The Archimedean Property, Density of Rational (and Irrational) numbers in \mathbb{R} . Intervals, Interior point, Open Sets, Closed sets, Limit points of a set, Illustrations of Bolzano-Weierstrass theorem for sets, closure, interior and boundary of a set.

UNIT-II

Sequences and Subsequences, Bounded sequence, Convergent sequence, Limit of a sequence. Limit Theorems, Monotone Sequences. Divergence Criteria, Bolzano Weierstrass Theorem for Sequences, Cauchy sequence, Cauchy's Convergence Criterion. Infinite series, convergence and divergence of infinite series, Cauchy Criterion, Tests for convergence: Comparison test, Limit Comparison test, Ratio Test, Cauchy's nth root test, Integral test, Alternating series, Leibniz test, Absolute and Conditional convergence.

UNIT-III

Limits of functions (epsilon-delta approach), sequential criterion for limits, divergence criteria. Limit theorems, one sided limits, Infinite limits and limits at infinity, Continuous functions, sequential criterion for continuity & discontinuity. Algebra of continuous functions, Continuous functions on an interval, Boundedness Theorem, Maximum Minimum Theorem, Bolzano's Intermediate value theorem, location of roots theorem, preservation of intervals theorem. Uniform continuity, non-uniform continuity criteria, uniform continuity theorem, Monotone and Inverse Functions.

UNIT-IV

Differentiability of a function at a point & in an interval, Caratheodory's theorem, chain Rule, algebra of differentiable functions, Mean value theorem, interior extremum theorem. Rolle's theorem, intermediate value property of derivatives, Darboux's theorem. Applications of mean value theorem to inequalities.

BOOKS RECOMMENDED:

1. R.G. Bartle and D. R. Sherbert, Introduction to Real Analysis (3rd Edition), John Wiley and Sons (Asia) Pvt. Ltd., Singapore, 2002. Ch 6 (6.1.5 - 6.1.7), Ch 9 (9.2.6, 9.2.7).
2. G. Das and S. Pattanayak, Fundamentals of Mathematical Analysis, TMH Publishing Co. Ch 2 (2.1 – 2.4, 2.6), Ch 4 (4.1 – 4.7, 4.10 – 4.13), Ch 5 (5.1 – 5.5), Ch 6 (6.1 – 6.7, 6.9), Ch 7 (7.1 – 7.4 (Excluding Cauchy MVT)).

BOOKS FOR REFERENCE:

1. S.C. Mallik and S. Arora-Mathematical Analysis, New Age International Publications.
 2. A.Kumar, S. Kumaresan, A basic course in Real Analysis, CRC Press, 2014.
 3. Brian S. Thomson, Andrew. M. Bruckner, and Judith B. Bruckner, Elementary Real Analysis, Prentice Hall, 2001.
 4. Gerald G. Bilodeau, Paul R. Thie, G.E. Keough, An Introduction to Analysis, Jones & Bartlett, Second Edition, 2010.
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+3 FIRST YEAR SECOND SEMESTER

Core Paper - 4

DIFFERENTIAL EQUATIONS

Time :3 Hrs.

Credit :04

End Semester Theory :60 Marks

Mid Semester Theory : 15 Marks

Course Objective: Differential Equations introduced by Leibnitz in 1676 models almost all Physical, Biological, Chemical systems in nature. The objective of this course is to familiarize the students with various methods of solving differential equations and to have a qualitative applications through models. The students have to solve problems to understand the methods.

Course Outcome: A student completing the course is able to solve differential equations and is able to model problems in nature using Ordinary Differential Equations. This is also prerequisite for studying the course in Partial Differential Equations and models dealing with Partial Differential Equations.

UNIT-I

Differential equations and mathematical models, General, Particular, explicit, implicit and singular solutions of a differential equation. Exact differential equations and integrating factors, separable equations and equations reducible to this form, linear equations and Bernoulli's equation, special integrating factors and transformations.

UNIT-II

Introduction to compartmental models, Exponential decay radioactivity (case study of detecting art forgeries), lake pollution model (with case study of Lake Burley Griffin), drug assimilation into the blood (case study of dull, dizzy and dead), exponential growth of population, Density dependent growth, Limited growth with harvesting.

UNIT-III

General solution of homogeneous equation of second order, principle of superposition, Wronskian, its properties and applications, method of undetermined coefficients, Method of variation of parameters, Linear homogeneous and non-homogeneous equations of higher order with constant coefficients, Euler's equation.

UNIT-IV

Equilibrium points, Interpretation of the phase plane, predatory-pray model and its analysis, epidemic model of influenza and its analysis, battle model and its analysis.

Practical / Lab work to be performed on a computer:

Modeling of the following problems using Matlab / Mathematica / Maple etc.

1. Plotting of second & third order solution family of differential equations.
 2. Growth & Decay model (exponential case only).
 3. (a) Lake pollution model (with constant/seasonal flow and pollution concentration)/
(b) Case of single cold pill and a course of cold pills.
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- (c) Limited growth of population (with and without harvesting).
- 4. (a) Predatory- prey model (basic volterra model, with density dependence, effect of DDT, two prey one predator).
- (b) Epidemic model of influenza (basic epidemic model, contagious for life, disease with carriers).
- (c) Battle model (basic battle model, jungle warfare, long range weapons).
- 5. Plotting of recursive sequences.

BOOKS RECOMMENDED:

1. J. Sinha Roy and S Padhy: A course of Ordinary and Partial differential equation Kalyani Publishers, New Delhi. Ch 1, Ch 2 (2.1 – 2.7), Ch 4 (4.1 – 4.6)
2. Belinda Barnes and Glenn R. Fulford, Mathematical Modeling with Case Studies, A Differential Equation Approach using Maple and Matlab, 2ndEd., Taylor and Francis group, London and New York, 2009. Ch 1 (1.1), Ch 2 (2.1 – 2.3, 2.5 – 2.8, 2.11), Ch 3 (3.1-3.3), Ch 5 (5.1, 5.2, 5.7), Ch 6 (6.1 – 6.4).

BOOKS FOR REFERENCE:

1. Simmons G F, Differential equation, Tata Mc Graw Hill, 1991.
2. Martin Braun, Differential Equations and their Applications, Springer International, Student Ed.
3. S. L. Ross, Differential Equations, 3rd Edition, John Wiley and Sons, India.
4. C.Y. Lin, Theory and Examples of Ordinary Differential Equations, World Scientific, 2011.

+3 SECOND YEAR THIRD SEMESTER

Core Paper - 5

THEORY OF REAL FUNCTIONS

Time :3 Hrs.

Credit :04

End Semester Theory :60 Marks

Mid Semester Theory : 15 Marks

Course Objective: The objective of the course is to have knowledge on limit theorems on functions, limits of functions, continuity of functions and its properties, uniform continuity, differentiability of functions, algebra of functions and Taylor's theorem and, its applications. The student how to deal with real functions and understands uniform continuity, mean value theorems.

Course Outcome: On the completion of the course, students will have working knowledge on the concepts and theorems of the elementary calculus of functions of one real variable. They will work out problems involving derivatives of function and their applications. They can use derivatives to analyze and sketch the graph of a function of one variable, can also obtain absolute value and relative extrema of functions. This knowledge is basic and students can take all other analysis courses after learning this course.

UNIT-I

L' Hospital's Rules, other Intermediate forms, Cauchy's mean value theorem, Taylor's theorem with Lagrange's form of remainder, Taylor's theorem with Cauchy's form of remainder, application of Taylor's theorem to convex functions, Relative extreme, Taylor's series and Maclaurin's series, expansions of exponential and trigonometric functions.

UNIT-II

Riemann integration; inequalities of upper and lower sums; Riemann conditions of integrability. Riemann sum and definition of Riemann integral through Riemann sums; equivalence of two definitions; Riemann integrability of monotone and continuous functions; Properties of the Riemann integral; definition and integrability of piecewise continuous and monotone functions. Intermediate Value theorem for Integrals; Fundamental theorems of Calculus.

UNIT-III

Improper integrals: Convergence of Beta and Gamma functions. Pointwise and uniform convergence of sequence of functions, uniform convergence, Theorems on continuity, derivability and integrability of the limit function of a sequence of functions.

UNIT-IV

Series of functions; Theorems on the continuity and derivability of the sum function of a series of functions; Cauchy criterion for uniform convergence and Weierstrass M-Test Limit superior and Limit inferior, Power series, radius of convergence, Cauchy Hadamard Theorem, Differentiation and integration of power series; Abel's Theorem; Weierstrass Approximation Theorem.

BOOKS RECOMMENDED:

1. R.G. Bartle & D. R. Sherbert, Introduction to Real Analysis, John Wiley & Sons. Ch 6 (6.4.1 – 6.4.6)
2. G. Das and S. Pattanayak, Fundamentals of mathematics analysis, TMH Publishing Co. Ch 4 (4.8, 4.14), Ch 7 (7.4, 7.5), Ch 8 (8.1 – 8.6), Ch 9 (9.1 – 9.8)
3. S. C. Mallik and S. Arora, Mathematical analysis, New Age International Ltd., New Delhi.

BOOK FOR REFERENCES:

1. A. Kumar, S. Kumaresan, A basic course in Real Analysis, CRC Press, 2014
 2. K. A. Ross, Elementary analysis: the theory of calculus, Undergraduate Texts in Mathematics, Springer (SIE), Indian reprint, 2004A. Mattuck, Introduction to Analysis, Prentice Hall.
 3. Charles G. Denlinger, Elements of real analysis, Jones and Bartlett (Student Edition), 2011
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+3 SECOND YEAR THIRD SEMESTER

Core Paper - 6

GROUP THEORY-I

Time :3 Hrs.

Credit :04

End Semester Theory :60 Marks

Mid Semester Theory : 15 Marks

Course Objective: Group theory is one of the building blocks of modern algebra. Objective of this course is to introduce students to basic concepts of group theory and examples of groups and their properties. This course will lead to future basic courses in advanced mathematics, such as Group theory-II and ring theory.

Course Outcome: A student learning this course gets idea on concept and examples of groups and their properties. He understands cyclic groups, permutation groups, normal subgroups and related results. After this course he can opt for courses in ring theory, field theory, commutative algebras, linear classical groups etc. and can be apply this knowledge to problems in physics, computer science, economics and engineering.

UNIT-I

Symmetries of a square, Dihedral groups, definition and examples of groups including permutation groups and quaternion groups (illustration through matrices), elementary properties of groups, Subgroups and examples of subgroups, centralizer, normalizer, center of a group,

UNIT-II

Product of two subgroups, Properties of cyclic groups, classification of subgroups of cyclic groups, Cycle notation for permutations, properties of permutations, even and odd permutations, alternating group,

UNIT-III

Properties of cosets, Lagrange's theorem and consequences including Fermat's Little theorem, external direct product of a finite number of groups, normal subgroups, factor groups.

UNIT-IV

Cauchy's theorem for finite abelian groups, group homomorphisms, properties of homomorphisms, Cayley's theorem, properties of isomorphisms, first, second and third isomorphism theorems.

BOOKS RECOMMENDED:

1. Joseph A. Gallian, Contemporary Abstract Algebra (4th Edition), Narosa Publishing House, New Delhi. Ch 1 (p31 – p40), Ch 2 (p42 – p59), Ch 3 (p60 – p74), Ch 4 (p75 – p90), Ch 5 (p93 – p105, p112 – p115 except problem 59), Ch 6 (p120 – p126, p132 – p136), Ch 7 (p138 – p144, p150 – p152), Ch 8 (p156, p157), Ch 9 (p174 – p180, 182), Ch 10 (194 - 201).
2. John B. Fraleigh, A First Course in Abstract Algebra, 7th Ed., Pearson, 2002.

BOOK FOR REFERENCES:

1. M. Artin, Abstract Algebra, 2nd Ed., Pearson, 2011.
 2. Joseph 1. Rotman, An Introduction to the Theory of Groups, 4th Ed., Springer Verlag, 1995.
 3. I. N. Herstein, Topics in Algebra, Wiley Eastern Limited, India, 1975.
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+3 SECOND YEAR THIRD SEMESTER

Core Paper - 7

PARTIAL DIFFERENTIAL EQUATIONS AND SYSTEM OF ODEs

Time :3 Hrs.

End Semester Theory :60 Marks

Credit :04

Mid Semester Theory : 15 Marks

Course Objective: The objective of this course is to understand basic methods for solving Partial Differential Equations of first order and second order. In the process, students will be exposed to Charpit's Method, Jacobi Method and solve wave equation, heat equation, Laplace Equation etc. They will also learn classification of Partial Differential Equations and system of ordinary differential equations.

Course Outcome: After completing this course, a student will be able to take more courses on wave equation, heat equation, diffusion equation, gas dynamics, non-linear evolution equations etc. All these courses are important in engineering and industrial applications for solving boundary value problem.

UNIT-I

Partial Differential Equations - Basic concepts and Definitions, Mathematical Problems. First-Order Equations: Classification, Construction and Geometrical Interpretation. Method of Characteristics for obtaining General Solution of Quasi Linear Equations. Canonical Forms of First-order Linear Equations. Method of Separation of Variables for solving first order partial differential equations.

UNIT-II

Derivation of Heat equation, Wave equation and Laplace equation. Classification of second order linear equations as hyperbolic, parabolic or elliptic. Reduction of second order Linear Equations to canonical forms.

UNIT-III

The Cauchy problem, Cauchy problem of an infinite string. Initial Boundary Value Problems, Semi-Infinite String with a fixed end, Semi-Infinite String with a Free end. Equations with non-homogeneous boundary conditions, Non-Homogeneous Wave Equation. Method of separation of variables, Solving the Vibrating String Problem, Solving the Heat Conduction problem

UNIT-IV

Systems of linear differential equations, types of linear systems, differential operators, an operator method for linear systems with constant coefficients, Basic Theory of linear systems in normal form, homogeneous linear systems with constant coefficients: Two Equations in two unknown functions, The method of successive approximations.

LIST OF PRACTICALS (USING ANY SOFTWARE)

- (i) Solution of Cauchy problem for first order PDE.
 - (ii) Finding the characteristics for the first order PDE.
 - (iii) Plot the integral surfaces of a given first order PDE with initial data.
-

(iv) Solution of the wave equation $\frac{\partial^2 u}{\partial t^2} - C \frac{\partial^2 u}{\partial x^2} = 0$ for the following associated conditions :

- (a) $u(x,0) = \phi(x), u_t(x,0) = \psi(x), x \in R, t > 0$
- (b) $u(x,0) = \phi(x), u_t(x,0) = \psi(x), u(0, t) = 0, x \in (0, \infty), t > 0.$
- (c) $u(x,0) = \phi(x), u_t(x,0) = \psi(x), u_x(0, t) = 0, x \in (0, \infty), t > 0.$
- (d) $u(x,0) = \phi(x), u_t(x,0) = \psi(x), u(0, t) = 0 = u(l, t), x \in (0, l), t > 0.$

(v) Solution of the diffusion equation $\frac{\partial u}{\partial t} - K \frac{\partial^2 u}{\partial x^2} = 0$ for the following associated conditions

- (a) $u(x, 0) = \phi(x), u_t(0, t) = a, u(l, t) = b, x \in (0, l), t > 0$
- (b) $u(x, 0) = \phi(x), x \in R, t \in (0, T)$
- (c) $u(x, 0) = \phi(x), u(0, t) = a, x \in (0, \infty), t \geq 0.$

BOOKS RECOMMENDED :

1. Tyn Myint-U and Lokenath Debnath, Linear Partial Differential Equations for Scientists and Engineers, 4th edition, Birkhauser, Indian reprint, 2014. Ch 1 (1.2, 1.3), Ch 2 (2.1 – 2.7), Ch 3 (3.1 - 3.6), Ch 4 (4.1 – 4.3), Ch 5 (5.1, 5.4, 5.5), Ch 7 (7.1 – 7.6).
2. S.L. Ross, Differential equations, 3rd Ed., John Wiley and Sons, India. Ch 7 (7.1 – 7.4), Ch 8 (8.3).

BOOK FOR REFERENCES :

1. J Sinha Roy and S Padhy: A course of Ordinary and Partial differential equation Kalyani Publishers, New Delhi,
2. Martha LAbell, James P Braselton, Differential equations with MATHEMATICA, 3rd Ed., Elsevier Academic Press, 2004.
3. Robert C. Mc Owen: Partial Differential Equations, Pearson Education Inc.
4. T Amarnath: An Elementary Course in Partial Differential Equations, Narosa Publications.

+3 SECOND YEAR FOURTH SEMESTER

Core Paper - 8

NUMERICAL METHODS AND SCIENTIFIC COMPUTING

Time :3 Hrs.
Credit :04

End Semester Theory :60 Marks
Mid Semester Theory : 15 Marks

Use of Scientific Calculator is allowed.

Course Objective: Calculation of error and approximation is a necessity in all real life, industrial and scientific computing. The objective of this course is to acquaint students with various numerical methods of finding solution of different type of problems, which arises in different

branches of science such as locating roots of equations, finding solution of systems of linear equations and differential equations, interpolation, differentiation, evaluating integration.

Course Outcome: Students can handle physical problems to find an approximate solution. After getting trained a student can opt for advance courses in numerical analysis in higher mathematics. Use of good mathematical software will help in getting the accuracy one need from the computer and can assess the reliability of the numerical results, and determine the effect of round off error or loss of significance.

UNIT-I

Rate of convergence, Algorithms, Errors: Relative, Absolute, Round off, Truncation. Approximations in Scientific computing, Error propagation and amplification, conditioning, stability and accuracy, computer arithmetic mathematical software and libraries, visualisation,

Numerical solution of non-linear equations: Bisection method, Regula- Falsi method, Secant method, Newton- Raphson method, Fixed-point Iteration method.

UNIT-II

Rate of convergence of the above methods. System of linear algebraic equations: Gaussian Elimination and Gauss Jordan methods. Gauss Jacobi method, Gauss Seidel method and their convergence analysis. Computing eigen-values and eigenvectors

UNIT-III

Polynomial interpolation: Existence uniqueness of interpolating polynomials. Lagrange and Newtons divided difference interpolation, Error in interpolation, Central difference & averaging operators, Gauss-forward and backward difference interpolation. Hermite and Spline interpolation, piecewise polynomial interpolation.

UNIT-IV

Numerical Integration: Some simple quadrature rules, Newton-Cotes rules, Trapezoidal rule, Simpsons rule, Simpsons 3/8th rule, Numerical differentiation and integration, Chebyshev differentiation and FFT, Richard-son extrapolation.

PRACTICAL/LAB WORK TO BE PERFORMED ON A COMPUTER:

Use of computer aided software (CAS), for example Matlab / Mathematica / Maple / Maxima etc., for developing the following Numerical programs:

- (i) Calculate the sum $1/1 + 1/2 + 1/3 + 1/4 + \dots + 1/N$.
 - (ii) To find the absolute value of an integer.
 - (iii) Enter- 100 integers into an array and sort them in an ascending' order.
 - (iv) Any two of the following
 - (a) Bisection Method
 - (b) Newton Raphson Method
 - (c) Secant Method
 - (d) Regular Falsi Method
 - (v) Gauss-Jacobi Method
-

- (vi) SOR Method or Gauss-Siedel Method
- (vii) Lagrange Interpolation or Newton Interpolation
- (viii) Simpson's rule.

Note: For any of the CAS Matlab / Mathematica / Maple / Maxima etc., Data types-simple data types, floating data types, character data types, arithmetic operators and operator precedence, variables and constant declarations, expression, input/output, relational operators, logical operators and logical expressions, control statements and loop statements, Arrays should be introduced to the students.

BOOKS RECOMMENDED:

1. M. K. Jain, S. R. K. Iyengar and R. K. Jain, Numerical Methods for Scientific and Engineering Computation, New age International Publisher, India. Ch 1, Ch 2 (2.1 – 2.3, 2.5 except Muller and Chebyshev method, 2.6 (upto p59)), Ch 3 (3.1, 3.2 (upto p120), 3.4 (except SOR method), 3.5), Ch 4 (Upto 4.4 excluding Stirling & Bessel interpolation, 4.5, 4.6 (upto p259)), Ch 5 (5.1, 5.2 (upto p331), 5.4, 5.6, 5.7, 5.9)
2. Michael Heath: Scientific Computing : An introductory Survey.

BOOK FOR REFERENCES:

1. B. Bradie, A Friendly Introduction to Numerical Analysis, Pearson Education, India, 2007.
2. Kendall E. Atkinson: An Introduction to Numerical Analysis
3. C. F. Gerald and P. O. Wheatley, Applied Numerical Analysis, Pearson Education, India, 7th Edition, 2008
4. S. D. Conte & S. de Boor: Elementary Numerical Analysis: An Algorithmic Approach.

+3 SECOND YEAR FOURTH SEMESTER

Core Paper - 9

TOPOLOGY OF METRIC SPACES

Time :3 Hrs.
Credit :04

End Semester Theory : 60 Marks
Mid Semester Theory : 15 Marks

Course Objective: This is an introductory course in topology of metric spaces. The objective of this course is to impart knowledge on open sets, closed sets, continuous functions, connectedness and compactness in metric spaces.

Course Outcome: On successful completion of the course students will learn to work with abstract topological spaces. This is a foundation course for all analysis courses in future.

UNIT-I

Metric spaces, sequences in metric spaces, Cauchy sequences, complete metric spaces, open and closed balls, neighborhood, open set, interior of a set, limit point of a set, closed set, diameter of a set, Cantor's theorem.

UNIT-II

Subspaces, Countability Axioms and Separability, Baire's Category theorem.

UNIT-III

Continuity: Continuous mappings, Extension theorems, Real and Complex valued Continuous functions, Uniform continuity, Homeomorphism, Equivalent metrics and isometry, uniform convergence of sequences of functions.

UNIT-IV

Contraction mappings and applications, connectedness, Local connectedness, Bounded sets and compactness, other characterization of compactness, continuous functions on compact spaces,

BOOKS RECOMMENDED:

1. Satish Shirali & Harikishan L. Vasudeva, Metric Spaces, Springer Verlag London (2006) (First Indian Reprint 2009). Ch 1 (1.2 – 1.5), Ch 2, Ch 3, Ch 4 (4.1, 4.2), Ch 5 (5.1 – 5.3).

BOOK FOR REFERENCES:

1. S. Kumaresan, Topology of Metric Spaces, Narosa Publishing House, Second Edition 2011.

+3 SECOND YEAR FOURTH SEMESTER

Core Paper - 10

RING THEORY

Time :3 Hrs.

Credit :04

End Semester Theory : **60** Marks

Mid Semester Theory : **15** Marks

Course Objective: This is a second course in modern algebra which deals with ring theory. Some basics of ring theory like rings, subrings, ideals, ring homomorphisms and their properties and. This course is an integral part of any course on Modern algebra the others being Group theory and Field Theory.

Course Outcome: After completing this course, this will help students to continue more courses in advanced Ring theory modules, Galois groups.

UNIT-I

Definition and examples of rings, properties of rings, subrings, integral domains and fields, characteristic of a ring, Ideals, ideal generated by a subset of a ring, factor rings, operations on ideals.

UNIT-II

Prime and maximal ideals. Ring homomorphisms, properties of ring homomorphisms, Isomorphism theorems I, II and III, field of quotients.

UNIT-III

Polynomial rings over commutative rings, division algorithm and consequences, principal ideal domains, factorization of polynomials, reducibility tests, irreducibility tests, Eisenstein criterion, Unique factorization in $\mathbb{Z}[x]$.

UNIT-IV

Divisibility in integral domains, irreducibles, primes, unique factorization domains, Euclidean domains.

BOOKS RECOMMENDED:

1. Joseph A. Gallian, Contemporary Abstract Algebra (4th Edition), Narosa Publishing House, New Delhi. Ch 12, Ch 13, Ch 14, Ch 15, Ch 16, Ch 17, Ch 18.
2. John B. Fraleigh, A First Course in Abstract Algebra, 7th Ed., Pearson, 2002.

BOOK FOR REFERENCES:

1. M. Artin, Abstract Algebra, 2nd Ed., Pearson, 2011.
2. Joseph J. Rotman, An Introduction to the Theory of Groups, 4th Ed., Springer Verlag, 1995.
3. I. N. Herstein, Topics in Algebra, Wiley Eastern Limited, India, 1975.

+3 THIRD YEAR FIFTH SEMESTER

Core Paper - 11

MULTIVARIATE CALCULUS

Time :3 Hrs.

Credit :04

End Semester Theory : **60** Marks

Mid Semester Theory : **15** Marks

Course Objective: The objective of this course to introduce functions of several variable to a student after he has taken a course in one variable calculus. The course will introduce partial derivatives and several of its consequences and will introduce double and triple integrals along with line integrals which are fundamental to all streams where calculus can be used.

Course Outcome: After reading this course a student will be able to calculate partial derivatives, directional derivatives, extreme values and can calculate double, triple and line integrals. He will have idea of basic vector calculus including green's theorem, divergence theorem and stoke's theorem. He can take courses in calculus on manifolds, Differential geometry and can help in numerical computations involving several variables.

UNIT-I

Functions of several variables, limit and continuity of functions of two variables. Partial differentiation, total differentiability and differentiability, sufficient condition for differentiability. Chain rule for one and two independent parameters, directional derivatives, the gradient, maximal and normal property of the gradient, tangent planes.

UNIT-II

Extrema of functions of two variables, method of Lagrange multipliers, constrained optimization problems. Definition of vector field, divergence and curl, Double integration over rectangular region, double integration over nonrectangular region. Double integrals in polar co-ordinates,

UNIT-III

Triple integrals, Triple integral over a parallelepiped and solid regions. Volume by triple integrals, cylindrical and spherical co-ordinates. Change of variables in double integrals and triple integrals.

UNIT-IV

Line integrals, Applications of line integrals: Mass and Work. Fundamental theorem for line integrals, conservative vector fields, independence of path. Green's theorem, surface integrals, integrals over parametrically defined surfaces. Stokes' theorem, The Divergence theorem.

BOOKS RECOMMENDED:

1. M. J. Strauss, G. L. Bradley and K. J. Smith, Calculus (3rd Edition), Dorling Kindersley (India) Pvt. Ltd. (Pearson Education), Delhi, 2007. Ch 11, Ch 12, Ch 13.
2. S.C. Mallik and S. Arora : Mathematical Analysis, New Age International Publications

BOOK FOR REFERENCES:

1. G.B. Thomas and R.L. Finney, Calculus, 9th Ed., Pearson Education, Delhi, 2005.
2. E. Marsden, A.J. Tromba and A. Weinstein, Basic Multivariable Calculus, Springer(SIE). Indian reprint, 2005.
3. James Stewart, Multivariable Calculus, Concepts and Contexts, 2nd Ed., Brooks/Cole, Thomson Learning, USA, 2001.
4. S Ghorpade, B V Limaye, Multivariable calculus, Springer international edition

+3 THIRD YEAR FIFTH SEMESTER

Core Paper - 12 LINEAR ALGEBRA

Time : 3 Hrs.

Credit : 04

End Semester Theory : 60 Marks

Mid Semester Theory : 15 Marks

Course Objective: Linear algebra is a basic course in almost all branches of science. A full course in undergraduate program will help students in finding real life applications later. The objective of this course is to introduce a student the basics of linear algebra and some of its application

Course Outcome: The student will use this knowledge wherever he/She goes after undergraduate program. It has applications in computer science, finance mathematics, industrial mathematics, bio mathematics and what not.

UNIT-I

Vector spaces, subspaces, examples, algebra of subspaces, quotient spaces, linear combination of vectors, linear span, linear independence, basis and dimension, dimension of subspaces. Linear transformations, null space, range, rank and nullity of a linear transformation.

UNIT-II

Matrix representation of a linear transformation, Algebra of linear transformations, Isomorphisms, Isomorphism theorems, invertibility and isomorphisms, change of coordinate matrix, Dual spaces, dual basis, double dual, transpose of a linear transformation and its matrix in the dual basis, annihilators, Basics of Fields.

UNIT-III

Eigenspaces of a linear operator, diagonalizability. Invariant subspaces and Cayley-Hamilton theorem, the minimal polynomial for a linear operator, Inner product spaces and norms, Gram-Schmidt orthogonalization process,

UNIT-IV

Orthogonal complements, Bessel's inequality, the adjoint of a linear operator, Least Squares Approximation, minimal solutions to systems of linear equations, Normal and self-adjoint operators, Orthogonal projections and Spectral theorem.

BOOKS RECOMMENDED:

1. Stephen H. Friedberg, Arnold J. Insel, Lawrence E. Spence, Linear Algebra (4th Edition), Pearson, 2018. Ch 1 (1.1 – 1.6), Ch 2 (2.1 – 2.6), Ch 5 (5.1, 5.2, 5.4).

BOOKS FOR REFERENCE:

1. Rao A.R. and Bhim Sankaram, Linear Algebra Hindustan Publishing house.
2. Gilbert Strang, Linear Algebra and its Applications, Thomson, 2007.

+3 THIRD YEAR SIXTH SEMESTER

Core Paper - 13

COMPLEX ANALYSIS

Time :3 Hrs.

Credit :04

End Semester Theory : **60** Marks

Mid Semester Theory : **15** Marks

Course Objectives: The objective of the course is aimed to provide an introduction to the theories for functions of a complex variable. The concepts of analyticity and complex integration are presented. The Cauchy's theorem and its applications, the calculus of residues and its applications are discussed in detail.

Course Outcome: Students will be able to handle certain integrals not evaluated earlier and will know a technique for counting the zeros of polynomials. This course is prerequisite to many other advance analysis courses.

UNIT-I

Complex Numbers and Complex plane: Basic properties, convergence, Sets in the Complex plane, Functions on the Complex plane: Continuous functions, holomorphic functions, power series, Integration along curves.

UNIT-II

Cauchy's Theorem and Its Applications: Goursat's theorem, Local existence of primitives and Cauchy's theorem in a disc, evaluation of some integrals, Cauchy's integral formulas.

UNIT-III

Morera's theorem, Sequences of holomorphic functions, Holomorphic functions defined in terms of integrals, Schwarz reflection principle, Zeros and poles.

UNIT-IV

Meromorphic Functions and the Logarithm: The residue formula, Examples, Singularities and meromorphic functions, the argument principle and applications, the complex logarithm.

BOOKS RECOMMENDED:

1. Elias M. Stein & Rami Shakarchi, Complex Analysis, Princeton University press, Princeton and Oxford, 2003. Ch 1, Ch 2, Ch 3, Ch 4, Ch 5 (5.1 – 5.4).

BOOKS FOR REFERENCE:

1. James Ward Brown and Ruel V. Churchill, Complex Variables and Applications (Eighth Edition), McGraw - Hill International Edition, 2009.
2. G. F. Simmons, Introduction to Topology and Modern Analysis, Mcgraw-Hill, Edition 2004.
3. Joseph Bak and Donald 1. Newman, Complex analysis (2ndEdition), Undergraduate Texts in Mathematics, Springer-Verlag New York, Inc., New York, 1997.

+3 THIRD YEAR SIXTH SEMESTER

Core Paper - 14

GROUP-THEORY-II

Time :3 Hrs.

Credit :06

End Semester Theory : 60 Marks

Mid Semester Theory : 15 Marks

Course Objective: The objective of this course is to be exposed to more advanced results in group theory after completing a basic course. The course introduces results on automorphism, commutator subgroup, group action Sylow theorems etc.

Course Outcome: The knowledge of automorphism helps to study more on field theory. Students learn on direct products, group actions, class equations and their applications with proof of all results. This course helps to opt for more advanced courses in algebra and linear classical groups.

UNIT-I

Automorphism, inner automorphism, automorphism groups, automorphism groups of finite and infinite cyclic groups, applications of factor groups to automorphism groups. characteristic subgroups.

UNIT-II

Commutator subgroup and its properties, Properties of external direct products, the group of units modulo n as an external direct product, internal direct products, Fundamental Theorem of finite abelian groups.

UNIT-III

Group actions, stabilizers and kernels, permutation representation associated with a given group action, Application of group actions: Generalized Cayley's theorem, Index theorem.

UNIT-IV

Groups acting on themselves by conjugation, class equation and consequences, conjugacy in S_n , p - groups, Sylow's theorems and consequences, Cauchy's theorem, Simplicity of A_n for $n \geq 5$, non-simplicity tests.

BOOKS RECOMMENDED:

1. John B. Fraleigh, A First Course in Abstract Algebra, Narosa Publishing House, New Delhi. Ch 3 (Sec-15 (p150, 151), Sec - 16).
2. Joseph A. Gallian Contemporary Abstract Algebra (4th Edition), Narosa Publishing House, New Delhi. Ch 6 (p128 – p132), Ch 8 (p156 – p162), Ch 9 (p180 – p187), Ch 11, Ch 24 (p387 – p395), Ch 25, Ch 29 (p478, p479) .

BOOK FOR REFERENCES:

1. M. Artin, Abstract Algebra, 2nd Ed., Pearson, 2011.
2. David S. Dummit and Richard M. Foote, Abstract Algebra, 3rd Ed., John Wiley and Sons (Asia) Pvt. Ltd., Singapore, 2004.
3. J.R. Durbin, Modern Algebra, John Wiley & Sons, New York Inc., 2000.

+3 THIRD YEAR FIFTH SEMESTER

DSE - 1

LINEAR PROGRAMMING

Time :3 Hrs.

Credit :06

End Semester Theory : **80** Marks

Mid Semester Theory : **20** Marks

Course Objective : The objective of this course is to familiarize industrial problems to students with various methods of solving Linear Programming Problems, Transportation Problems, Assignment Problems and their applications. Also, students will know the application of linear Programming method in Game Theory.

Course Outcome : More knowledge on this topic in higher studies will help students to deal industrial models. This is also prerequisite for studying advanced courses in Nonlinear Programming Problems, Inventory Control Problem and Queuing Theory etc.

UNIT-I

Introduction to linear Programming problem, Theory of simplex method, optimality and unboundedness, the simplex algorithm, simplex method in tableau format, introduction to artificial variables, two-phase method, Big-M method and their comparison.

UNIT-II

Duality, formulation of the dual problem, primal-dual relationships, Fundamental Theorem of Duality, economic interpretation of the dual.

UNIT-III

Transportation problem and its mathematical formulation, northwest-corner method, least cost method and Vogel approximation method for determination of starting basic solution, algorithm for solving transportation problem. Assignment problem and its mathematical formulation, Hungarian method for solving assignment problem.

UNIT-IV

Game theory: formulation of two person zero sum games, solving two person zero sum games, games with mixed strategies, graphical solution procedure, linear programming solution of games.

BOOKS RECOMMENDED:

1. Kanti Swarup, Operations Research, Sultan Chand & Sons, New Delhi. Books. Ch 4 (4.1 – 4.4), Ch 5 (5.1 – 5.4, 5.5, 5.8), Ch 10 (10.1 – 10.3, 10.5, 10.9), Ch 11 (11.1 – 11.3), Ch 17 (17.1 – 17.5, 17.9).

BOOKS FOR REFERENCE:

1. S. Hillier and G.J. Lieberman, Introduction to Operations Research- Concepts and Cases (9th Edition), Tata McGraw Hill, 2010.
2. Mokhtar S. Bazaraa, John J. Jarvis and Hanif D. Sherali, Linear Programming and Network Flows (2nd edition), John Wiley and Sons, India, 2004.
3. G. Hadley, Linear Programming, Narosa Publishing House, New Delhi, 2002.
4. Hamdy A. Taha, Operations Research: An Introduction (10th edition), Pearson, 2017.

+3 THIRD YEAR FIFTH SEMESTER

DSE - 2

PROBABILITY AND STATISTICS

Time : 3 Hrs.

Credit :06

End Semester Theory : 80 Marks

Mid Semester Theory : 20 Marks

Course Objective : The objective of the course is to expertise the student to the extensive role of statistics in everyday life and computation, which has made this course a core course in allbranches of mathematical and engineering sciences.

Course Outcome : The students shall learn probability and statistics for various random variables, multivariate distributions, correlations and relations. He shall learn law of large numbers and shall be able to do basic numerical calculations.

UNIT-I

Probability: Introduction, Sample spaces, Events, probability of events, rules of probability, conditional probability, independent events, Bayes's theorem, Probability distributions and probability densities: random variables, probability distributions, continuous random variables, probability density functions, Multivariate distributions, joint distribution function, joint probability density function, marginal distributions, conditional distributions, conditional density, The theory in practice, data analysis, frequency distribution, class limits, class frequencies, class boundary, class interval, class mark, skewed data, multimodality, graphical representation of the data, measures of location and variability. Population, sample, parameters

UNIT-II

Mathematical Expectation: Introduction, expected value of random variable, moments, Chebyshev's theorem, moment generating functions, product moments, moments of linear combinations of random variables, conditional expectations, the theory in practice, measures of location, dispersion

UNIT-III

Special probability distributions: Discrete Uniform distribution, binomial distribution, Negative binomial, geometric, hypergeometric, poisson, multinomial distribution, multinomial. Special

probability densities; Uniform distribution, gamma, exponential, gamma, chi-square, beta distribution, normal, normal approximation to binomial, bivariate normal, Functions of random variables, distribution function technique, transformation technique-one variable, several variables, moment generating function technique.

UNIT-IV

Sampling distributions: population distribution, random sample, sampling distribution of mean, Central Limit theorem, Sampling distribution of the mean: finite populations, chi-square, t, F distributions, regression and correlation: Bivariate regression, regression equation, Linear regression, method of least squares.

BOOKS RECOMMENDED:

1. Irwin Miller and Marylees Miller, John E. Freund's Mathematical Statistics with Applications (8th Edition), Pearson, Asia, 2014. Ch 1 (1 – 8), Ch 3 (1 – 8), Ch 4, Ch 5 (1 – 9), Ch 6 (1 – 7), Ch 7 (1 – 5), Ch 8 (1 – 7), Ch 14 (1 – 3).

BOOK FOR REFERENCES:

1. Robert V. Hogg, Joseph W. McKean and Allen T. Craig, Introduction to Mathematical Statistics, Pearson Education, Asia, 2007.
2. Alexander M. Mood, Franklin A. Graybill and Duane C. Boes, Introduction to the Theory of Statistics, (3rd Edition), Tata McGraw- Hill, Reprint 2007.
3. Sheldon Ross, Introduction to Probability Models (9th Edition), Academic Press, Indian Reprint, 2007.

+3 THIRD YEAR SIXTH SEMESTER

DSE - 3

DIFFERENTIAL GEOMETRY

Time :3 Hrs.

Credit :06

End Semester Theory :80 Marks

Mid Semester Theory : 20 Marks

Course Objective: After learning methods on curve tracing and Analytic Geometry, the objective of this course is to teach Differential geometry of curves and surfaces which trains a student using tools in calculus to derive intrinsic properties of plain curves and space curves. Course Outcome: After completing this course a student will learn on Serret-Frenet formulae, relation between tangent, normal and binormals, first and second fundamental forms and ideas on various curvatures. He has scope to take more advanced courses in surface theory and geometry.

UNIT-I

Theory of Space Curves: Space curves, Planer curves, Curvature, torsion and Serret-Frenet formulae. Osculating circles, Osculating circles and spheres. Existence of space curves.

UNIT-II

Evolutes and involutes of curves. Theory of Surfaces: Parametric curves on surfaces, surfaces of revolution, helicoids, Direction coefficients. First and second Fundamental forms.

UNIT-III

Principal and Gaussian curvatures. Lines of curvature, Euler's theorem. Rodrigue's formula, Conjugate and Asymptotic lines. Developables : Developable associated with space curves and curves on surfaces, Minimal surfaces.

UNIT-IV

Geodesics: Canonical geodesic equations. Nature of geodesics on a surface of revolution. Clairaut's theorem. Normal property of geodesics. Torsion of a geodesic. Geodesic curvature. Gauss-Bonnet theorem. Surfaces of constant curvature.

BOOKS RECOMMENDED:

1. T.J. Willmore, An Introduction to Differential Geometry, Dover Publications, 2012. Ch 1, Ch 2 (1 – 18), Ch 3 (1 – 7).

BOOK FOR REFERENCES:

1. A. Pressley, Elementary Differential Geometry, Springer International Edition, 2014.
2. O'Neill, Elementary Differential Geometry, 2nd Ed., Academic Press, 2006.
3. C.E. Weatherburn, Differential Geometry of Three Dimensions, Cambridge University Press 2003.
4. D.J. Struik, Lectures on Classical Differential Geometry, Dover Publications, 1988.

+3 THIRD YEAR SIXTY SEMESTER

DSE - 4 (Optional/ Project)

NUMBER THEORY

Time :3 Hrs.

Credit :06

End Semester Theory :80 Marks

Mid Semester Theory : 20 Marks

Course Objective: The main objective of this course is to build up the basic theory of the integers, prime numbers and their primitive roots, the theory of congruence, quadratic reciprocity law and number theoretic functions, Fermat's last theorem, to acquire knowledge in cryptography specially in RSA encryption and decryption.

Course Outcome: Upon successful completion of this course students will be able to know the basic definitions and theorems in number theory, to identify order of an integer, primitive roots, Euler's criterion, the Legendre symbol, Jacobi symbol and their properties, to understand modular arithmetic number-theoretic functions and apply them to cryptography.

UNIT- I

Linear Diophantine equation, prime counting function, statement of prime number theorem, Goldbach conjecture, linear congruences, complete set of residues, Chinese remainder theorem, Fermat's little theorem, Wilson's theorem.

UNIT-II

Number theoretic functions, sum and number of divisors, totally multiplicative functions, definition and properties of the Dirichlet product, the Mobius inversion formula, the greatest integer function,

Euler's phi-function, Euler's theorem, reduced set of residues, some properties of Euler's phi-function.

UNIT-III

Order of an integer modulo n , primitive roots for primes, composite numbers having primitive roots, Euler's criterion, the Legendre symbol, Jacobi symbol and their properties, quadratic reciprocity, quadratic congruences with composite moduli.

UNIT-IV

Affine ciphers, Hill ciphers, p v g h v g gv public key cryptography, RSA encryption and decryption, the equation $x^2 + y^2 = z^2$, Fermat's Last Theorem.

BOOKS RECOMMENDED:

1. David M. Burton, Elementary Number Theory (6th Edition), Tata McGraw-Hill Edition, Indian reprint, 2007. Ch 2 (2.5), Ch 3 (3.1 – 3.3), Ch 4 (4.1 – 4.4), Ch 5 (5.1 – 5.4), Ch 6 (6.1 – 6.3), Ch 7 (7.1 – 7.4), Ch 8 (8.1 – 8.3), Ch 9 (9.1, 9.3), Ch 10 (10.1), Ch 12 (12.1, 12.2).

BOOK FOR REFERENCES:

1. Thomas Koshy, Elementary Number Theory with Applications (2nd Edition), Academic Press, 2007.
2. Neville Robinns, Beginning Number Theory (2nd Edition), Narosa Publishing House Pvt. Limited, Delhi, 2007.

OR

Discipline Specific Elective Paper-IV

PROJECT

Guidelines for +3 (CBCS) Under Graduate (B.A./B.Sc.) Mathematics (Honours) Project

1. Any student registering for doing project is required to inform the HOD, Mathematics the name of his/her project supervisor(s) at the time of pre-registration.
 2. By the last date of add and drop, the student must submit the "Project Registration Form", appended as Annexure-I to this document, to the HOD, Mathematics. This form requires a project title, the signature of the student, signature(s) of the supervisor(s) and the signature of the HOD, Mathematics of the college/university.
 3. The project supervisor(s) should normally be a faculty member(s) of the Department of Mathematics and the topic of the project should be relevant to Mathematical Sciences. If a student desires to have a Project Supervisor from another department of the institute, the prior approval for the same should be sought from the HOD, Mathematics.
 4. A student may have at the most two Project Supervisors. If a student desires to have two supervisors, at least one of these should be from the Department of Mathematics.
 5. The student(s) will be required to submit one progress report and a final report of the Project to the HOD, Mathematics. The progress report is to be submitted in the sixth week of the semester in which the project is undertaken. The hard copy and an electronic version of the final report of the project should be submitted two weeks before the end semester examination of the sixth semester. In addition the student will be required to make an oral presentation in front of a committee (Under Graduate (B.A./ B.Sc.) Mathematics (Honours) Project committee of the
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college in which supervisor is one of the members) constituted for this purpose by the Department of Mathematics of the college.

6. The student is expected to devote about 100 hours. The project will be evaluated by a committee of faculty members at the end of the sixth semester. The committee will be constituted by the Under Graduate (B.A./B.Sc.) Mathematics (Honours) Project committee of the college keeping in mind the areas of project they will cover.
7. In each semester the grade of a student will be awarded by the committee in consultation with his/her project supervisor(s). The project is evaluated on the basis of the following components: First Progress Reports: 20%; second/Final Report: 30%; Presentation: 30%; Viva: 20%.
8. Project progress reports should normally be no longer than 250 words and final report should not be longer than 40 A4 size pages in double spacing. Each final project report need to contain the following: (i) Abstract (ii) Table of contents (iii) Review of literature (iv) Main text(v) List of references. It may be desirable to arrange the main text as an introduction, the main body and conclusions.

GUIDELINES FOR STRUCTURING CONTENTS

Sequence of Contents:

The following sequence for the thesis organization should be followed:

- | | |
|--------------------------|--|
| (i) Preliminaries | Title Page
Certificate
Abstract/Synopsis
Acknowledgement and/ or Dedication
Table of Contents
List of Figures, Tables, Illustrations,
Symbols, etc (wherever applicable) |
| (ii) Text of Thesis | Introduction
The body of the thesis, summary and conclusions |
| (iii) Reference Material | List of References, Bibliography |
| (iv) Appendices | |

NOTE:

1. Synopsis/Abstract should be self-complete and contain no citations for which the thesis has to be referred.
 2. The Text of the Thesis
 - (a) Introduction:

Introduction may be the first chapter or its first major division. In either case, it should contain a brief statement of the problem investigated. It should outline the scope, aim, general character of the research and the reasons for the student's interest in the problem.
-

(b) The body of Thesis

This is the substance of the dissertation inclusive of all divisions, subdivisions, tables, figures, etc.

(c) Summary and conclusions

If required, these are given as the last major division (chapter) of the text. A further and final subdivision titled "Scope for Further Work" may follow.

(d) Reference material

The list of references should appear as a consolidated list with references listed either alphabetically or sequentially as they appear in the text of the thesis.

For referencing an article in a scientific journal the suggested format should contain the following information: authors, title, name of journal, volume number, page numbers and year. For referencing an article published in a book, the suggested format should contain, authors, the title of the book, editors, publisher, year, page number of the article in the book being referred to. For referencing a thesis the suggested format should contain, author, the title of thesis, where thesis was submitted or awarded, year.

ANNEXURE - I

Department of Mathematics
Project Registration Form

Name of the college/university: Name of the student:

Roll No. :

e-mail :

Name of the supervisor(s):

Department(s):

e-mail(s):

Title of the Project:

Signature of the Student:

Signature of supervisor(s): (i)

(ii)

Signature of HOD, Mathematics:

+3 FIRST YEAR FIRST SEMESTER

GE - 1

CALCULUS AND DIFFERENTIAL EQUATIONS

Time :3 Hrs.

Credit :06

End Semester Theory :80 Marks

Mid Semester Theory : 20 Marks

Course Objective: Calculus invented by Newton and Leibnitz is powerful analytical tool to solve mathematical problems which arise in all branches of science and engineering. The main emphasis of this course is to equip the student with necessary analytic and technical skills to handle problems of a mathematical nature as well as practical problems using calculus and differential equation. The aim should be to expose the students to basic ideas quickly without much theoretical emphasis with importance on applications.

Excepted Outcome: After completing the course, students are expected to be able to apply knowledge of calculus and differential equations in the areas of their own interest.

UNIT-I

Curvature, Asymptotes, Tracing of Curves (Catenary, Cycloid, Folium of Descartes), Rectification, Quadrature, Elementary ideas about Sphere, Cones, Cylinders and Conicoids.

UNIT-II

Review of limits, continuity and differentiability of functions of one variable and their properties, Rolle's theorem, Mean value theorems, Taylor's theorem with Lagrange's theorem and Cauchy's form of remainder, Taylor's series, Maclaurin's series of $\sin x$, $\cos x$, e^x , $\log(1+x)$, $(1+x)^m$, L'Hospital's Rule, other Intermediate forms.

UNIT-III

Limit and Continuity of functions of several variables, Partial derivatives, Partial derivatives of higher orders, Homogeneous functions, Change of variables, Mean value theorem, Taylor's theorem and Maclaurin's theorem for functions of two variables (statements & applications), Maxima and Minima of functions of two and three variables, Implicit functions, Lagrange's multipliers (Formulae & its applications).

UNIT-IV

Ordinary Differential Equations of order one and degree one (variables separable, homogeneous, exact and linear). Equations of order one but higher degree. Second order linear equations with constant coefficients, homogeneous forms, Second order equations with variable coefficients, Variation of parameters.

BOOKS RECOMMENDED:

1. Shanti Narayan, P. K. Mittal, Differential Calculus, S. Chand, 2014. Ch 3, Ch 4, Ch 6, Ch 8, Ch 10, Ch 14 (14.1 – 14.6), Ch 17 (excluding polar curves).
2. Shanti Narayan, P. K. Mittal, Integral Calculus, S. Chand, 2014.
3. S.C. Mallik and S. Arora-Mathematical Analysis, New Age International Publications. Ch 5 (excluding proofs of theorems), Ch 6 (excluding proofs of theorems), Ch 7 (7.2 only), Ch 15 (excluding proofs of theorems).
4. J. Sinharoy and S. Padhy: A Course of Ordinary and Partial Differential Equations, Kalyani Publishers. Ch 2 (2.1 – 2.7), Ch 3, Ch 4 (4.1 – 4.4)

BOOK FOR REFERENCES:

1. H. Anton, I. Bivens and S. Davis, Calculus, 10th Ed., John Wiley and Sons (Asia) P. Ltd., Singapore, 2002.
2. Shanti Narayan and P.K. Mittal-Analytical Solid Geometry, S. Chand & Company Pvt. Ltd., New Delhi.
3. Martin Braun-Differential Equations and their Applications-Martin Braun, Springer International.
4. B. P.Acharya and D. C.Sahu : Analytical Geometry of Quadratic Surfaces, Kalyani Publishers.

+3 FIRST YEAR SECOND SEMESTER

GE - 2 ALGEBRA

Time :3 Hrs.

Credit :06

End Semester Theory :80 Marks

Mid Semester Theory : 20 Marks

Course Objective: This is a preliminary course for the basic courses in mathematics like, abstract algebra and linear algebra. The objective is to acquaint students with the properties of natural numbers i.e. Euclidean algorithm, congruence relation, fundamental theorem of arithmetic, etc. The basics of linear algebra i.e. vector spaces, matrices are introduced here.

Course Outcome: The acquired knowledge will help students to study further courses in mathematics like, group theory, ring theory and field theory and linear algebra. It has applications not only in higher mathematics but also in other science subjects like computer science, statistics, physics, chemistry etc.

UNIT-I

Sets, relations, Equivalence relations, partial ordering, well ordering, Functions, Composition of functions, Invertible functions, One to one correspondence and cardinality of a set, statements, compound statements, proofs in Mathematics, Truth tables, Algebra of propositions, logical arguments.

UNIT-II

Well-ordering property of positive integers, Division algorithm, Divisibility and Euclidean algorithm, Congruence relation between integers, Principles of Mathematical Induction, statement of Fundamental Theorem of Arithmetic.

UNIT-III

Matrices, algebra of matrices, determinants, fundamental properties, minors and cofactors, product of determinant, adjoint and inverse of a matrix, Rank and nullity of a matrix, Systems of linear equations, row reduction and echelon forms, solution sets of linear systems, applications of linear systems,.

UNIT-IV

Vector spaces and subspaces, examples, linear independence, linear dependence, basis, dimension, examples, Introduction to linear transformations, matrix representation of a linear transformation, Eigen values, Eigen vectors of a matrix.

BOOKS RECOMMENDED:

1. Edgar G. Goodaire and Michael M. Parmenter, Discrete Mathematics with Graph Theory, 3rd Ed., Pearson Education (Singapore) P. Ltd., Indian Reprint, 2005. Ch 0, Ch 1, Ch 2, Ch 3, Ch 4, Ch 5 (5.1).
2. V Krishna Murthy, V P Mainra, J L Arora, An Introduction to Linear Algebra, Affiliated East-West Press Pvt. Ltd. Ch 3 (3.1, 3.2, 3.3, 3.5, 3.6), Ch 5 (5.1, 5.4 - 5.9), Ch 6 (6.1, 6.2, 6.4 - 6.8).

BOOKS FOR REFERENCE:

1. David C. Lay, Linear Algebra and its Applications, 3rd Ed., Pearson Education Asia, Indian Reprint, 2007.
2. B S Vatsa and Suchi Vatsa Theory of Matrices New age International third edition 2010.
3. Ward Cheney, David Kincaid. Linear algebra theory and applications, Jones and Bartlett, 2010.

OR

GENERIC ELECTIVES (FOUR PAPERS CHOICE)**Generic Elective Paper I****CALCULUS AND DIFFERENTIAL EQUATIONS**

Time : 3 Hrs.

End Semester Theory : 80 Marks

Credit : 06

Mid Semester Theory : 20 Marks

Course Objective: Calculus invented by Newton and Leibnitz is powerful analytical tool to solve mathematical problems which arise in all branches of science and engineering. The main emphasis of this course is to equip the student with necessary analytic and technical skills to handle problems of a mathematical nature as well as practical problems using calculus and differential equation. The aim should be to expose the students to basic ideas quickly without much theoretical emphasis with importance on applications.

Expected Outcome: After completing the course, students are expected to be able to apply knowledge of calculus and differential equations in the areas of their own interest.

UNIT-I

Curvature, Asymptotes, Tracing of Curves (Catenary, Cycloid, Folium of Descartes), Rectification, Quadrature, Elementary ideas about Sphere, Cones, Cylinders and Conicoids.

UNIT-II

Review of limits, continuity and differentiability of functions of one variable and their properties, Rolle's theorem, Mean value theorems, Taylor's theorem with Lagrange's theorem and Cauchy's form of remainder, Taylor's series, Maclaurin's series of $\sin x$, $\cos x$, e^x , $\log(1+x)$, $(1+x)^m$, L'Hospital's Rule, other Intermediate forms.

UNIT-III

Limit and Continuity of functions of several variables, Partial derivatives, Partial derivatives of higher orders, Homogeneous functions, Change of variables, Mean value theorem, Taylor's theorem and Maclaurin's theorem for functions of two variables (statements & applications),

Maxima and Minima of functions of two and three variables, Implicit functions, Lagranges multipliers (Formulae & its applications), Concepts of Multiple integrals & its applications.

UNIT-IV

Ordinary Differential Equations of order one and degree one (variables separable, homogeneous, exact and linear). Equations of order one but higher degree. Second order linear equations with constant coefficients, homogeneous forms, Second order equations with variable coefficients, Variation of parameters.

BOOKS RECOMMENDED:

1. Shanti Narayan, P. K. Mittal, Differential Calculus, S. Chand, 2014.
2. Shanti Narayan, P. K. Mittal, Integral Calculus, S. Chand, 2014.
3. S.C. Mallik and S. Arora-Mathematical Analysis, New Age International Publications.
4. J. Sinharoy and S. Padhy: A Course of Ordinary and Partial Differential Equations, Kalyani Publishers.

BOOKS FOR REFERENCE:

1. H. Anton, I. Bivens and S. Davis, Calculus, 10th Ed., John Wiley and Sons (Asia) P. Ltd., Singapore, 2002.
2. Shanti Narayan and P.K. Mittal-Analytical Solid Geometry, S. Chand & Company Pvt. Ltd., New Delhi.
3. Martin Braun-Differential Equations and their Applications-Martin Braun, Springer International.
4. B. P. Acharya and D. C. Sahu: Analytical Geometry of Quadratic Surfaces, Kalyani Publishers.

Generic Elective Paper II

ALGEBRA

Time :3 Hrs.

End Semester Theory :80 Marks

Credit :06

Mid Semester Theory : 20 Marks

Course Objective: This is a preliminary course for the basic courses in mathematics like, abstract algebra and linear algebra. The objective is to acquaint students with the properties of natural numbers i.e. Euclidean algorithm, congruence relation, fundamental theorem of arithmetic, etc. The basics of linear algebra i.e. vector spaces, matrices are introduced here.

Course Outcome: The acquired knowledge will help students to study further courses in mathematics like, group theory, ring theory and field theory and linear algebra. It has applications not only in higher mathematics but also in other science subjects like computer science, statistics, physics, chemistry etc.

UNIT-I

Sets, relations, Equivalence relations, partial ordering, well ordering, Functions, Composition of functions, Invertible functions, One to one correspondence and cardinality of a set, statements,

compound statements, proofs in Mathematics, Truth tables, Algebra of propositions, logical arguments

UNIT-II

Well-ordering property of positive integers, Division algorithm, Divisibility and Euclidean algorithm, Congruence relation between integers, Principles of Mathematical Induction, statement of Fundamental Theorem of Arithmetic.

UNIT-III

Matrices, algebra of matrices, determinants, fundamental properties, minors and cofactors, product of determinant, adjoint and inverse of a matrix, Rank and nullity of a matrix, Systems of linear equations, row reduction and echelon forms, solution sets of linear systems, applications of linear systems.

UNIT-IV

Vector spaces and subspaces, examples, linear independence, linear dependence, basis, dimension, examples, Introduction to linear transformations, matrix representation of a linear transformation, Eigen values, Eigen vectors of a matrix.

BOOKS RECOMMENDED:

- 1 Edgar G. Goodaire and Michael M. Parmenter, Discrete Mathematics with Graph Theory, 3rd Ed., Pearson Education (Singapore) P. Ltd., Indian Reprint, 2005.
- 2 V Krishna Murthy, V P Mainra, J L Arora, An Introduction to Linear Algebra, Affiliated East-West Press Pvt. Ltd

BOOKS FOR REFERENCE:

1. David C. Lay, Linear Algebra and its Applications, 3rd Ed., Pearson Education Asia, Indian Reprint, 2007.
2. B S Vatsa and Suchi Vatsa Theory of Matrices New age International third edition 2010.
3. Ward Cheney, David Kincaid. Linear algebra theory and applications, Jones and Bartlett, 2010

Generic Elective Paper III

REAL ANALYSIS

Time :3 Hrs.
Credit :06

End Semester Theory :80 Marks
Mid Semester Theory : 20 Marks

Course Objective: The objective of the course is to have the knowledge on basic properties of the field of real numbers, studying Bolzano-Weierstrass Theorem, sequences and convergence of sequences, series of real numbers and its convergence etc. This is one of the core courses essential to start doing mathematics.

Course Outcome: On successful completion of this course, students will be able to handle

fundamental properties of the real numbers that lead to the formal development of real analysis and understand limits and their use in sequences, series, differentiation and integration. Students will appreciate how abstract ideas and rigorous methods in mathematical analysis can be applied to important practical problems.

UNIT-I

Review of Algebraic and Order Properties of \mathbb{R} , ε -neighborhood of a point in \mathbb{R} , Idea of countable sets, uncountable sets and uncountability of \mathbb{R} , Bounded above sets, Bounded below sets, Bounded Sets, Unbounded sets, Suprema and Infima, The Completeness Property of \mathbb{R} , The Archimedean Property, Density of Rational (and Irrational) numbers in \mathbb{R} .

UNIT-II

Intervals, Interior point, Open Sets, Closed sets, Limit points of a set, Illustrations of Bolzano-Weierstrass theorem for sets, closure, interior and boundary of a set. Sequences, Bounded sequence, Convergent sequence, Limit of a sequence. Limit Theorems, Monotone Sequences, Monotone Convergence Theorem. Subsequences, Divergence Criteria, Monotone Subsequence Theorem (statement only). Bolzano Weierstrass Theorem for Sequences, Cauchy sequence, Cauchy's Convergence Criterion.

UNIT-III

Infinite series, convergence and divergence of infinite series, Cauchy Criterion, Tests for convergence: Comparison test, Limit Comparison test, Ratio Test, Cauchy's nth root test, Integral test, Alternating series, Leibniz test, Absolute and Conditional convergence.

UNIT-IV

Sequence and Series of functions, pointwise and uniform convergences, M_n -test, weierstrass M -test, statement of results about uniform convergence, differentiability and integrability of function, power series and radius of convergence.

BOOKS RECOMMENDED:

1. S.C. Mallik and S. Arora- Mathematical Analysis, New Age International Publications.
2. G. Das and S. Pattanayak, Fundamentals of Mathematical Analysis, TMH Publishing Co.

BOOKS FOR REFERENCE:

1. R.G. Bartle and D. R. Sherbert, Introduction to Real Analysis (3rd Edition), John Wiley and Sons (Asia) Pvt. Ltd., Singapore, 2002.
 2. A. Kumar, S. Kumaresan, A basic course in Real Analysis, CRC Press, 2014.
 3. Brian S. Thomson, Andrew. M. Bruckner, and Judith B. Bruckner, Elementary Real Analysis, Prentice Hall, 2001.
 4. Gerald G. Bilodeau, Paul R. Thie, G.E. Keough, An Introduction to Analysis, Jones & Bartlett, Second Edition, 2010.
-

Generic Elective Paper IV

NUMERICAL METHODS

Time :3 Hrs.
Credit :06

End Semester Theory :80 Marks
Mid Semester Theory : 20 Marks

Course Objective: Calculation of error and approximation is a necessity in all real life, industrial and scientific computing. The objective of this course is to acquaint students with various numerical methods of finding solution of different type of problems, which arises in different branches of science such as locating roots of equations, finding solution of nonlinear equations, systems of linear equations, differential equations, Interpolation, differentiation, evaluating integration.

Course Outcome: Students can handle physical problems to find an approximated solution. After getting trained a student can opt for advance courses in Numerical analysis in higher mathematics. Use of good mathematical software will help in getting the accuracy one need from the computer and can assess the reliability of the numerical results, and determine the effect of round off error or loss of significance.

UNIT-I

Algorithms, Convergence, Bisection method, False position method, Fixed point iteration method, Newton's method, Secant method. Gauss Elimination and Gauss Jordan methods, LU decomposition, Gauss-Jacobi, Gauss- Siedel.

UNIT-II

Lagrange and Newton interpolation: linear and higher order, finite difference operators.

UNIT-III

Numerical differentiation: forward difference, backward difference and central Difference.

UNIT-IV

Integration: trapezoidal rule, Simpson's rule, Euler's method, Runge-Kutta methods of orders two and four.

BOOKS RECOMMENDED:

1. M.K. Jain, S.R.K. Iyengar and R.K. Jain, Numerical Methods for Scientific and Engineering Computation, 5th Ed., New age International Publisher, India, 2007.

BOOKS FOR REFERENCE:

1. S. S. Sastry, Introductory method for Numerical Analysis, PHI New Delhi, 2012.
 2. S. D. Conte and Carl De Boor, Elementary Numerical Analysis, Mc Graw Hill, 1980.
-

MUSIC

+3 FIRST YEAR FIRST SEMESTER

Core Paper - 1

(SWARA SADHANA & SANGEETA PARICHAYA)

Time : 3 Hrs.

Credit : 04

End Semester Theory : 60 Marks

Mid Semester Theory : 15 Marks

Introduction:

Basic information of musical terminology, knowledge of basic alankars , raags and taals.

Learning objectives:

Basic alankar (Sudha and Vikrut), Concept of raags and taals.

Outcome:

Ability to sing basic swar, raags. And understanding of basic taalsand basic terminology of music.

UNIT-I

Knowledge about various Alankars. (Suddha & Vikruta)

UNIT-II Definitions

Nada, Dhvani, Shruti, Swara, Saptaka, Sangeeta, Raga, Thaata, Alaap, Taan, Tala, Laya, Matra, Abartan, Badi, Sambadi, Anubadi, Bibadi & Jaati.

UNIT-III Shastriya Parichaya of the Ragas

Bhupali, Kalyan, Kafi, Khamaj, Brindabani Sarang.

UNIT-IV Detail Knowledge of Talas

Teental, Ektal

PRACTICAL

Credit : 02

25 Marks

Unit - 1

Learning of various Alankars with an ability of playing Harmonium.

Unit - 2 Chhota Khayal Gaykee

Bhupali, Kalyan, Kafi, Khamaj, Brindabani Sarang.

Unit - 3 Demonstration of Talas

Teental, Ektal

Unit - 4

Candidate has to learn one Sargam geet or Laksyan geet in any Raga from this core.

PRESCRIBED BOOKS :-

- * Hindustani Sangeet Lahari, Part - 1 & 2 (odia) by Dr. Damodar Hota.
- * Raga Parichaya (Hindi), Part - 1 & 2 by Dr. Harish Chandra Srivastab.
- * Raga Darshan (Odia), Part - 1 by Sri Chandan Kumar Jena.

+3 FIRST YEAR FIRST SEMESTER**Core Paper - 2****(PRABANDHA PARICHAYA & ANGA VARNAN OF TAANPURA)**

Time : 3 Hrs.

End Semester Theory : 60 Marks

Credit : 06

Mid Semester Theory : 15 Marks

Introduction:

knowledge of different forms of Hindustani classical music (Khayal, Dhrupad, Dhamar, Thumri, Bhajan). Knowledge of different renowned Musicians and Idea about tanpura (Drone)

Learning Objectives:

Teaching khayal, dhrupad, dhamar, thumri in different raags.

Life sketches.

Introduction of tanpura.

Outcomes:

Ability of performing different musical forms.

Getting idea of contribution of different scholars in Hindustani classical music.

Ability to identify tanpura and its parts.

UNIT-I Knowledge about following terms

Dhrupad, Dhamar, Khayal, Thumri, Sargangeet, Lakshyan geet, Bhajan.

UNIT-II

(A) Life Sketch of Pt. B.N. Bhatkhande & Pt. B.D. Paluskar.

(B) Pt. B.N. Bhatkhande's 10 thaats and the Ragas derived from the thaats.

UNIT-III

Physical structure of "Taanpura".

UNIT-IV

Similarities & Dis-similarities of the Ragas of Core - 1 & 2.

PRACTICAL

Credit : 02

25 Marks

Unit - I Detail Gayakee of these Ragas

Bhupali, Kalyan

Unit - II Chhota Khayal Gayakee of these Ragas

Desh, Bihag, Bhairab, Tilang

Unit - III

Candidate has to learn One Dhrupad or Dhamar & Sargamgeet, Lakshyangeet, Bhajan in any Raga of Core - 1 & 2.

Unit - IV Demonstration of Talas with Dugun laykari

Teental, Ektal, Chautal, Dhamar, Dadra & Kaharawa.

PRESCRIBED BOOKS :

- * Hindustani Sangeet Lahari (odia) , Part - 1 & 2 by Dr. Damodar Hota.
- * Raga Parichaya (Hindi), Part - 1, by Dr. Harish Chandra Srivastab.
- * Sangeet Visharad (Hindi) - By Vasant.
- * Bharatiya Sangeeta Khayal Saili (odia) by Dr. Chittaranjan Pani.

+3 FIRST YEAR SECOND SEMESTER**Core Paper - 3****(RAGA-TALA PARICHAYA & DHWANI NADA)**

Time : 3 Hrs.

Credit : 04

End Semester Theory : 60 Marks

Mid Semester Theory : 15 Marks

Introduction:

Introducing advance knowledge of musical terminology, new raagas&taalas.

Learning objectives:

Introducing detail and advance knowledge of Dhvani, Shruti, Swara, purvanga, uttranga etc.

Advance gayaki knowledge on new and old raagas with some new taals.

Outcome:

Able to use advance ornamental techniques in khayal gayaki.

UNIT-I Detail Knowledge of the followings

Dhwani, Nada, Shruti, Swara, Purvanga, Uttaranga, Alpatwa, Bahutwa, Sandhiprakash Raga.

UNIT-II Characterstics of the Ragas.

Bhairav, Bageshree, Durga, Shankara, Asavari, Allhaya Bilawal.

UNIT-III Characterstics of the talas.

Jhaptal & Rupak

UNIT-IV Life Sketch

Swami Haridas

Mian Taansen

PRACTICALCredit : **02****25 Marks****Unit - I** Detail Knowledge of the Ragas

Bhairab, Bageshree

Unit - II Chhota Khayal Gayakee of the Ragas

Durga, Shankara, Asavari, Allheya Bilawal.

Unit - III Demonstration of the talas (Dugun, Tigun, Chaugun)

Teental, Ektal, Choutal, Dhamar, Jhamptal, Rupak, Dadra, Kaharawa

Unit - IV

Candidate has to learn One Hori & One Bhajan.

PRESCRIBED BOOKS :

- * Raga Sangeeta (Odia) Part - 1 & 2 by Dr. Mohan Charan Senapati.
- * Hindustani Sangeet Lahari (odia), Part - 1, 2, 3, 4 by Dr. Damodar Hota.
- * Raga parichaya (Hindi), Part - 1, 2, 3 by Dr. Harish Chandra Srivastab
- * Raga Shastra Siddhanta (Odia), by Sri Rajanikant Padhi.

+3 FIRST YEAR SECOND SEMESTER**Core Paper - 4****(SANGEETOPATTI & SWARALIPI PADDHATI)**Time : **3 Hrs.**End Semester Theory : **60 Marks**Credit : **06**Mid Semester Theory : **15 Marks****Introduction:**

Advance gayaki knowledge and techniques of both Classical and various semiclassical repertoire in Hindustani Music.

Learning objectives:

Origin of music and evolution. Idea of singing dadra, thumri, kajree, taranas. Also Introducing new raags and details knowledge of notation systems.

Outcomes:

Ability to perform different classical raagas and semiclassical forms.

Ability to write and read taalās, songs and its notations with different notation systems.

Able to understand the origin, historical aspects and evolution of music.

UNIT- I

(A) Basic knowledge of the followings

Bol-Bant, Sargam-Bant, Tarana, Dadra, Kajree, Hori

(B) Comparative studies

Shruti - Swara

Thaat - Raga

UNIT-II Characteristics of the Ragas.

Kedar, Hameer, Tilak Kamod, Bhimpalasi, Pattdeep.

UNIT-III Knowledge of Indian notation system.

Pt. B.N. Bhatkhande & Pt. B.D. Paluskar.

UNIT-IV Essay

(a) Origin of Music (b) Evolution of Hindustani Music.

PRACTICAL

Credit : **02**

25 Marks

Unit - I Detail knowledge of the Ragas.

Kedar, Hameer

Unit - 2 Chhota Khayal Gaykee of the Ragas

Tilakkamod, Bhimpalasi, Pattadeep.

Unit - 3

Candidate has to learn One "Tarana".

Unit - 4

Candidate has to learn One Kajree or Chaiti from any Raga.

PRESCRIBED BOOKS :-

- * Raga Darshan (Odia) Part - 1 & 2 by Sri Chandan Kumar Jena.
- * Sangeet Kaibalya (Odia) by Dr. Chittaranjan Pani.
- * Sangeet Visharad (Hindi) By. Vasant.
- * Raga Parichaya (Hindi) Part -1, 2, 3 by Dr. Harish Chandra Srivastab.
- * Raga Sangeeta (odia) Part - 1, 2, 3 by Dr. Mohan Charan Senapati.
- * Sangeetanjali (Hindi) Part - 1, 2, 3 by Pt. Omkarnath Thakur.

+3 SECOND YEAR THIRD SEMESTER**Core Paper - 5****(SWARALIPI 'O' LAYAKRIYA)**

Time : **3** Hrs.

End Semester Theory : **60** Marks

Credit : **06**

Mid Semester Theory : **15** Marks

Introduction:

Introducing knowledge of two basic forms of Indian music, layakaries of advance taals, and notation writing and singing bada khayal and its gayaki systems.

Learning Objectives:

Teaching badakhayal and chota khayal bandish and gayaki of new raags.
Understanding of Hindustani and Carnatic music forms.
Layakarries of new taals.

Outcomes:

Ability to perform new raags with badakhayal and chota khayal.
Able to distinguish Carnatic and Hindustani classical music.
Able to write and read different layakaries of new taals.

UNIT-I

Characterstics of the Ragas with Badakhayal Notation of the Bandish.
Malkauns, Bihag

UNIT-II

Characterstics of the Ragas with Chhotakhayal Notation of the Bandish.
Bibhas, Jaunpuri, Jaijaiwanti.

UNIT-III

Knowledge about Hindustani (NorthIndia) and Carnatic (SouthIndia) paddhati in India.

UNIT-IV

Characterstics of the following Talas with Dugun, Tigun & Chaugun.
Jhamptal, Sooltal, Jhoomra, Tewra.

PRACTICAL

Credit : **02**

25 Marks

Unit - 1

Detail gaykee of the following Ragas.
Malkauns, Bihag

Unit - 2

Chhotakhayal gaykee of the following Ragas.
Bibhas, Jaunpuri, Jaijaiwanti

Unit - 3

One Dhrupad & Dhamar in any Raga from the core -5.

Unit - 4

Demonstration of the talas with Dugun, Tigun & Chaugun.
Jhamptal, Sooltal, Jhoomra, Tewra

PRESCRIBED BOOKS :-

- * Sangeet Visharad (Hindi) by Vasant.
 - * Raga Parichaya (Hindi) Part - 1,2,3 by Dr. Harish Chandra Srivastab.
 - * Sangeetanjali (Hindi) Part - 1, 2, 3 by Pt. Omkar Nath Thakur.
 - * Sangeet Kaibalya(o) by Dr. Chittaranjan Pani.
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+3 SECOND YEAR THIRD SEMESTER

Core Paper - 6 (SWARA SAMBAD)

Time : 3 Hrs.

Credit : 06

End Semester Theory : 60 Marks

Mid Semester Theory : 15 Marks

Introduction:

Introducing Swar Sambad, new raagas related to different swarasambads, some semiclassical forms and life sketches of eminent Hindustani classical vocal gurus.

Learning objectives:

What is Swar Sambad and how is it use in Hindustani music.

Some new raagas and semi classical forms and life sketches.

Outcomes:

Ability to know what is swarsambad and which swarsambad is used in which raga.

New raagas with bada khayal and chotakhayal, semi classical forms and life scketches.

UNIT-I

Knowledge about Swara Sambad.

Sadaj Pancham & Sadaj Madhyam Bhav)

UNIT-II

(a) Detail knowledge of the Ragas Rageshree & Todi.

(b) Basic knowledge of the Ragas Puriya, Suddhkalyan, Hindol, Deshkar.

UNIT-III

Knowledge of the following light classical geners.

Tappa, chaiti, Ghazal, Folksong.

UNIT-IV Life Sketch

Pt. Omkarnath Thakur.

Pt. Binayak Rao Pattawardhan

Pt. Dr. Damodar Hota.

PRACTICAL

Credit : 02

25 Marks

Unit - I

Detail knowledge of the Ragas.

Rageshree, Todi.

Unit - 2

Chhota Khayal Gaykee of the Ragas

Puriya, Suddhkalyan, Hindol, Deshkar

Unit - 3

One light classical composition in any Raga.
Chaiti, Ghazal, Folk Song

Unit - 4

Demonstration of the following talas with different laykaries.
Teental, Ektal, Jhamptal, Dhamar, Tewra.

PRESCRIBED BOOKS :-

- * Bharatiya Sangeetara Khayal Sali (Odia) by Dr. Chittaranjan Pani.
- * Raga Parichaya (Hindi) by Dr. Harish Chandra Srivastab.
- * Hamare Sangeet Ratna (Hindi) by Prof. Laxminarayan Garg.
- * Kramik Pustak Malika (Hindi) Part - 1, 2 & 3 by Pt. B. N. Bhatkhande.

+3 SECOND YEAR THIRD SEMESTER

Core Paper - 7

(SWARA ALANKARANA)

Time : 3 Hrs.

Credit : 06

End Semester Theory : 60 Marks

Mid Semester Theory : 15 Marks

Introduction:

Introducing qualities and defects of a vocalist and swarprastar a mathematical aspect of music, shruti swarsthapana, with new raagas and taals.

Learning objectives:

What are the good and bad qualities of a vocalist and its application in performances.
Swar Prastar and its application.
Shruti Swar Sthapana, with new raagas and taals.

Outcomes:

Student will be able to perform better with knowing the qualities of a singer and application of Swar Prastar.
Shruti Swar Sthapana will help to understand swars more and gives better ability to use in performances.
Students will be able to perform new raagas in new taals.

UNIT-I

- (a) Qualities & Defects of the Vocalist.
- (b) Knowledge about Swara Prastar.

UNIT-II

Bada Khayal Notation of the following Ragas.
Suddhakalyan, Jaijaiwanti.

UNIT-III

Chhota Khayal Notation of the following Ragas.
SuddhSarang, Kamod, Multan, Marwa.

UNIT-IV

Detail Knowledge of Shruti Swara Sthapana in Indian Music according to Ancient & Mediaval period.

PRACTICAL

Credit : **02**

25 Marks

Unit - I

Detail knowledge of the Ragas.
Suddha Kalyan, Jaijaiwanti.

Unit - 2

Chhota Khayal Gaykee of the Ragas
Suddh Sarang, Kamod, Multani, Marwa

Unit - 3

Tarana gaykee in any Ragas of this Core.

Unit - 4

Basic knowledge of Indian Music, Major Music festivals, Awards for Music, Pen-name of the vocalist, Traditional compositions.

PRESCRIBED BOOKS :-

- * Sangeetanjali (Hindi) Part - 1, 2, 3, 4 by Pt. Omkarnath Thakur.
- * Raga Parichaya (Hindi) Part - 1, 2, 3, 4 by Pt. Harish Chandra Srivastab.
- * Raga Sangeeta (Odia) Part - 1, 2, 3, 4 by Dr. Mohan Charan Senapati.
- * Sangeet Visharad (Hindi) by Vasant.

+3 SECOND YEAR FOURTH SEMESTER**Core Paper - 8****(SAMAYA SIDDHANTA & VADYA VARGIKARANA)**

Time : **3 Hrs.**

End Semester Theory : **60 Marks**

Credit : **06**

Mid Semester Theory : **15 Marks**

Introduction:

Introducing knowledge of different skills of singing methodology, time theory of raagas and knowledge of instruments.

Learning objectives:

Definition and practical understanding of different skills of singing.

Knowledge of time theory and categories of instruments in Indian music with some new raagas.

Outcomes:

Able to understand and use different vocal skills in performances.

Understanding how time theory works in raagas.

Understanding the classification of instruments.

UNIT-I

Knowledge about following Terms. Upaj, Badhat, Phirat, Khatka, Swar Sangati, Kaku, Abirbhab, Tirobhab, Meend, Kan, Gamak, Murki.

UNIT-II

Time theory of Raga. Roll of Purvanga & Uttaranga Raga in time theory & knowledge of Adhawadarshak Swara.

UNIT-III

Characteristics of the following Ragas with Notations of the Bandishes. Puriya Dhanashree, Goud Sarang, Purvi, Adana, Bhairabi & Darbari Kanada.

UNIT-IV

Classification of Indian Musical Instruments.

PRACTICAL

Credit : **02**

25 Marks

Unit - 1

Detail gayakee of the following Ragas.

Puriya Dhanashree, Goud Sarang.

Unit - 2

Chhota khayal gayakee of the following Ragas.

Purvi, Adana, Bhairabi & Darbari Kanada.

Unit - 3

Demonstration of the following Talas. Tilwada, Deepchandi, Ada Choutal, Punjabi Addha.

Unit - 4

Knowledge of following gayakee styles. Dhrupad/Dhamar, Thumri Kajree, Tappa, Hori.

PRESCRIBED BOOKS :-

- * Sangeet Visharad (Hindi) by Vasant.
 - * Raga Parichaya (Hindi) Part - 1, 2, 3, 4 by Dr. Harish Chandra Srivastab.
 - * Raga Bigyan (Hindi) Part - 1, 2, 3, 4 by Pt. Binayak Rao Pattwardhan.
 - * Kramik Pustak Malika (Hindi) Part - 1, 2, 3, 4 by Pt. B.N. Bhatkhande.
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+3 SECOND YEAR FOURTH SEMESTER

Core Paper - 9 (UTKRISTA RAGA GAYANA)

Time : 3 Hrs.

Credit : 06

End Semester Theory : 60 Marks

Mid Semester Theory : 15 Marks

Introduction:

Introducing knowledge of Grama&Murchana with new raagas, taals and comparative study of old and new raagas.

Learning objectives:

Understanding of Grama & Murchana both theoretically and practically.
Learning new raagas and taals with comparative study.

Outcomes:

Able to understand Grama and use murchana in raagas.
Able to perform new raag and taal.

UNIT-I

Detail knowledge of the following Ragas.
Puriya, Multani.

UNIT-II

Chhota Khayal with Notations Chhayant, Miyan Mallhar, Bahar, Ramkali.

UNIT-III

Knowledge about Grama - Murchhana.

UNIT-IV

Comparative Studies of the following Ragas.

Miyan Mallhar - Bahar

Puriya - Marwa

Bhupali - Deshkar

Kedar - Hameer

PRACTICAL

Credit : 02

25 Marks

Unit - I

Detail knowledge of the following Raga.
Puriya, Multani

Unit - 2

Chhota Khayal Gaykee of the following Ragas. Chhayanat, Miyan Mallhar, Bahar, Ramkali.

Unit - 3

Konwledge about Swara Sangatis in Raga. (Practical Demonstration)

Unit - 4

Characteristics of the following Talas. Pancham Sawari, Gajajhampa.

PRESCRIBED BOOKS :-

- * Raga Parichay (Odia) All parts by Dr. Harish Chandra Srivastab.
- * Raga Sangeeta (odia) All parts By Dr. Mohan Charan Senapati.
- * Sangeetanjali (Hindi) Part - 1, 2, 3, 4, 5 by Pt. Omkar Nath Thakur.
- * Raga Bigyan (Hindi) Part - 1,2,3, 4 by Pt. Binayak Rao Pattwardhan.

+3 SECOND YEAR FOURTH SEMESTER**Core Paper - 10****(GAYKEE IN GHARANA)**

Time : 3 Hrs.

Credit : 06

End Semester Theory : 60 Marks

Mid Semester Theory : 15 Marks

Introduction:

Knowledge of gharanas, necessity and aim of learning music, also life sketches of different eminent artistes, also knowledge of new raagas.

Learning objectives:

Detail analysis of gharana and different gharanas of Indian classical music.
Necessity of studying music and its necessity in society.
Life sketch of eminent artistes from different gharanas.
New raagas and taals.

Outcomes:

Able to know about gharanas and different gharana gayaki styles.
Able to get close with music by understanding of necessity to learn and impact on society.
Idea of new raags, taals and eminent artistes.

UNIT-I

Studies on different Gharana.

UNIT-II

Detail knowledge of following Gharanas Gwalior Gharan, Agra Gharama, Kirana Gharana, Patiala Gharana.

UNIT-III Essay

- (a) Your aim of learning Music.
- (b) Necessity of Music to the Society.

UNIT-IV Life Sketch

Pandit Balwant Rai Bhatt
Ustad Faiyaz Khan
Dr. Mohan Charan Senapati

PRACTICALCredit : **02****25 Marks****Unit - 1**

Detail knowledge of the following Ragas. Darbari Kanada, Miyan Mallhar.

Unit - 2

Chhota Khayal Gayakee of the following. Sohini, Maru Bihag, Ahir Bhairab, Basant.

Unit - 3

Comparison of different Ragas of all previous Cores.

Unit - 4

One Thumree & Tarana in any Raga.

PRESCRIBED BOOKS :-

- * Bharatiya Sangeeta Khayal Salli (Odia) by Dr. Chitaranjan Pani.
- * Raga Sangeeta (Odia) Part - 1, 2, 3, 4, 5 by Dr. Mohan Charan Senapati.
- * Bhabrang Lahari (Hindi) Part - 1, 2 by Pt. Balwant Rai Bhatt.
- * Raga Shastra Siddhanta (odia) by Sri Rajanikant Padhi.

+3 THIRD YEAR FIFTH SEMESTER**Core Paper - 11****(BHARATIYA SANGEET ITIHAS)**Time : **3 Hrs.**End Semester Theory : **60 Marks**Credit : **06**Mid Semester Theory : **15 Marks****Introduction:**

Introducing different varnas of music, classification of raagas, tala system in both Carnatic and Hindustani music, music in different time periods and knowledge of Jati and Prabandha Gayana along with new raagas, taal, layakaries and dhupad, dhamar and chaitis.

Learning objectives:

Giving idea about varnas and its use in Indian Hindustani music, also classification of raagas. Understanding the difference of taal system in both Carnatic and Hindustani Music. Understanding the knowledge of different layakaries, new raagas, taals, dhrupad, dhamar etc.

Outcomes:

Ability to recognize different type of varanas and raagas.
Ability to know taal systems of both Carnatic and Hindustani and its uses.
Ability to know the deepest understanding of ancient music and its evolution till modern time.

UNIT-I

- (a) Detail knowledge of Varna (Sthayi, Arohi, Abarohi, Sanchari)
- (b) Classification of Raga (Suddha, Chhayalag, Sankirna)

UNIT-II

Tala System in Hindustan & Carnatic Music.

UNIT-III

Histry of Indian Music Vedic Music, Ramayana, Mahabharata, Mediaval Period, Modern age (Pre & Post independence)

UNIT-IV

Knowledge about ancient Jati & Prabandha Gayana.

PRACTICAL

Credit : **02**

25 Marks

Unit - I

Detail gaykee of the following Ragas Chayanat, Bhimpalasi.

Unit - II

Chhota Khayal of the following Ragas. Goud Mallhar, Paraj, Kalingada.

Unit - III

Knowledge of following layakaries 2/3, 3/2, 3/4, 4/3.

Unit - IV

One Dhrupad/Dhamar and Tappa/Chaiti in any Raga.

PRESCRIBED BOOKS :-

- * Raga Parichaya (Hindi) Part - 1, 2, 3, 4 by Dr. Harish Chandra Srivastab.
- * Raga Bigan (Hindi) Part - 1, 2, 3, 4, 5 by Pt. Binayak Rao Pattwardhan.
- * Bhabrang Lahari (Hindi) Part - 1, 2 by Pt. Balwant Rai Bhatt
- * Sangeetajali (Hindi) by Pt Omkarnath Thakur.

+3 THIRD YEAR FIFTH SEMESTER**Core Paper - 12****(SWARA RACHANA & NIBANDHA)**

Time : **3 Hrs.**

End Semester Theory : **60 Marks**

Credit : **06**

Mid Semester Theory : **15 Marks**

Introduction:

Introducing different type of raag vargikaranas and how to compose a composition of own, more life sketches and spiritualism in music.

Learning objectives:

To understand the nature of raagas we need to teach raagavargikaran and its types.

How to create own compositions.

Life sketch of eminent artistes and getting inspiration for further musical journey.

How music is making spiritual growth from ancient time.

Outcomes:

- Ability to know raagas with its characteristics.
- Ability to compose own composition.
- Knowing and getting inspiration from life sketches.
- Able to more spiritual with music.

Applied & General Theories

UNIT-I

Detail knowledge of Raga Vargikaranam in Indian Music System.

UNIT-II

Capability to write notation of own Composition in any Raga Set to any Tala.

UNIT-III Life Sketch

Pt. Balakrishna Bua Echalkaranjkar and Bharat Ratna Pt. Bhimsen Joshi.

UNIT-IV Essay

- * Spiritualism in Music
- * A classical Music Evening
- * Contribution of Odisha to Hindustani Music.

PRACTICAL

Credit : **02**

25 Marks

Unit - I

Detail knowledge of the following Ragas. Marwa, Goud Mallhar.

Unit - II

Chhota Khayal gaykee of the followings Hansadhwani, Megh, Shree.

Unit - III

Laykaries of all prescribed Talas from 1st sem to 4th sem.

Unit - IV

Presentation of own Composition in any Raga.

PRESCRIBED BOOKS :-

- * Hamare Sangeet Ratna (Hindi) by Prof. Laxminarayan Garg.
- * Nibandh Sangeet (Hindi) Published by Sangeet Karyalaya, Hathras.
- * Bhabrang Lahari (Hindi) Part- 1, 2, 3 by Pt. Balwant Rai Bhatt.
- * Bharatiya Sangeetara Itihasa (Odia) by Dr. Damodar Hota.

+3 THIRD YEAR SIXTH SEMESTER

Core Paper - 13

(UPASHASTRIYA GAYANA)

Time : 3 Hrs.

Credit : 06

End Semester Theory : 60 Marks

Mid Semester Theory : 15 Marks

Introduction:

Introducing more semiclassical forms, complex raagas and more knowing of eminent artistes.

Learning objectives:

Detail knowledge of semi classical forms and its gayaki styles.

New raagas and taals.

Life sketches of eminent artistes.

Outcomes:

Students will able to recognize different semiclassical forms.

Able to perform newerraagas and taal.

UNIT-I

Detail studies of different Semi-Classical Musical forms of Hindustani music.

UNIT-II

Bada Khayal Notations with detail characterstic of the Ragas. Megh, Lalit.

UNIT-III

Chhota Khayal Notations with detail characterstic of the Ragas Bairagi, Nand, Charukeshi, Jog.

UNIT-IV Life Sketch

Ustad Bade Ghulam Ali Khan.

Pandit Ravi Shankar.

Ustad Bismillah Khan.

PRACTICAL

Credit : 02

25 Marks

Unit - I

Detail gaykee of the following Ragas Megh, Lalit.

Unit - II

Chhota Khayal of the following Ragas. Bairagi, Nand, Charukeshi, Jog.

Unit - III

Demonstration of the following Talas. Rudra, Ganesh, Bramha.

Unit - IV

One Dhrupad or Dhamar in any Prescribed Raga.

PRESCRIBED BOOKS :-

- * Sangeet Visharad (Hindi), by Vasant.
- * Hamare Sangeet Ratna (Hindi) by Prof. Laxminarayan Garg.
- * Bharatiya Sangeeta re Khayal Sali (Odia) by Dr. Chittaranjan Pani.
- * Nibandh Sangeet (Hindi) Published by Sangeet Karyalaya, Hatras.

+3 THIRD YEAR SIXTH SEMESTER**Core Paper - 14****ATI - TAAR, (SHASTRAM & VIDHANA)**

Time : 3 Hrs.

Credit : 06

End Semester Theory : 60 Marks

Mid Semester Theory : 15 Marks

Introduction:

Introducing the knowledge of Geeta Govinda, and ancient texts on music, principles of raagas and life sketches.

Learning Objectives:

Detail knowledge of Geeta Govinda and its writer Kavi jayadev.

Natya shastra and Sangeet Ratnakar contributions towards music.

Principles of ragas and life sketch.

Outcomes:

Ability to sing Geeta Govinda and knowledge about kavi Jayadev.

Learning more about music from these ancient texts like Natyashastra and Sangeet Ratnakar.

Knowing the principles of raagas.

Different new raags, taals and layakaries.

UNIT-I

Detail study of Sri Geeta Govinda of Kavi Jayadev.

UNIT-II

Contribution of Natyashastra & Sangeeta Ratnakara to Indian Classical Music.

UNIT-III

Fourty basic principles of Raga in Hindustani Sangeet Paddhati.

UNIT-IV Life Sketch

Ustad Amir Khan

Vidushi Sunanda Pattnaik

PRACTICALCredit : **02****25 Marks****Unit - I**

Detail knowledge of following Ragas. Jaunpuri, Basant.

Unit - II

Chhota Khayal gaykee of the following Ragas.

Gorakh Kalyan, Kalawati, Bhinnasadaj.

Unit - III

Knowledge of kuad laya & Biad Laya with different Tyahis.

Unit - IV

Any Astapadi of Shri Geeta Govinda of Kavi Jaydev.

PRESCRIBED BOOKS :-

- * Hamare Sangeet Ratna (Hindi) by Prof. Laxminarayan Garg.
- * Bharat Ke Sangeet Siddhant (Hindi) by Pt. K.C. Brihaspati.
- * Bharatiya Sangeeta re Khayal Sali (Odia) by Dr. Chittaranjan Pani.
- * Raga Parichaya (Hindi) Part - 3, 4 by Dr. Harish Chandra Srivastab.

+3 THIRD YEAR FIFTH SEMESTER**DSE - 1****TABLA**Time : **3 Hrs.**End Semester Theory : **60 Marks**Credit : **06**Mid Semester Theory : **15 Marks****Introduction:**

Introducing origin of tabla, its structure, varnas bols, thekas and kaida, mukhda, rela, tyahietc

Learning objectives:

Knowledge of tabla origin, its structure and how to play taal as in tabla with the knowledge of playing a taal on tabla.

Outcomes:

Able to play basic taal as in tabla, and able to play kaidamukhda in one taal.

UNIT-I

Origin & Historical development of "Tabla".

UNIT-II

Physical structure of Tabla.

UNIT-III

Knowledge about basic "Varnas", "Bols" & Thekas.

UNIT-IV

Knowledge about following terms. Kaida, Mukhda, Rela, Tyahi.

PRACTICAL

Credit : **02**

25 Marks

Unit - I

Ability of Playing Theka in Teental, Ektal, Jhamptal.

Unit - II

Ability of playing two simple Kaida in Tal-Teental.

Unit - III

One Mukhuda & Tukuda in Tal - Teental.

Unit - IV

Playing two tyahi (Damdar & Bedamdar) set to Teental.

PRESCRIBED BOOKS :-

- * Tala Prakash (Hindi) by Pt. Laxminarayan Garg.
- * Tala Martand (Hindi) by Satya Narayan Basist.
- * Tala Kosh (Hindi) by G.R. Srivastab.
- * Tala Binod (Odia) Binod Bihari Rout.

+3 THIRD YEAR FIFTH SEMESTER**DSE - 2****TABLA**

Time : **3** Hrs.

End Semester Theory : **60** Marks

Credit : **06**

Mid Semester Theory : **15** Marks

Introduction:

Introducing classification of different percussion instruments, different gharanas and eminent artiste belongs to those gharanas.

Learning objectives:

- Classification of different percussion instruments.
- Gharanas and artistes related to those gharanas.
- Comparative study of gharanas.
- Playing new taal on tabla.

Outcomes:

Ability to play new taals, and knowing about gharanas will give profound knowledge of tabla.

UNIT-I

Brief Knowledge about Abanaddha Vadya (Percussion Instrument).

UNIT-II

Brief knowledge about all Gharanas of Tabla.

UNIT-III

Comparative Study of Delhi Gharana & Banaras Gharana.

UNIT-IV Life Sketch

Pt. Shanta Prasad (Gudei Maharaj)

Ustad Karamatullah Khan

PRACTICAL

Credit : **02**

25 Marks

Unit - I

Two Kaida each set to Teental & Jhamptal.

Unit - II

One Tukda set to Jhamptal.

Unit - III

Playing two tyahis (Damdar & Bedamdar) Set to Jhamptal.

Unit - IV

Playing Different Thekas of Teental, Ektal, Choutal, Dadra, Dhamar, Rupak, Kaharawa.

PRESCRIBED BOOKS :-

- * Tala Prakash (Hindi) by Pt. Laxminarayan Garg.
- * Tala Martand (Hindi) part - 1, 2, 3 by G.R. Srivastab.
- * Tala Kosh (Hindi) by G.R. Srivastab.
- * Tala Binod (Odia) Binod Bihari Rout.

+3 THIRD YEAR SIXTH SEMESTER**DSE - 3****HARMONIUM**

Time : **3** Hrs.

Credit : **06**

End Semester Theory : **60** Marks

Mid Semester Theory : **15** Marks

Introduction:

Introducing harmonium, its importance in music, and playing harmonium.

Learning objectives:

Origin and history of harmonium.

Physical structure, its importance in music like accompaniment in both classical and light music.

Playing some compositions.

Outcomes:

- Ability to play harmonium.
- Ability to accompaniment.
- Able to know about famous artistes in harmonium.

UNIT-I

Origin of the Harmonium.

UNIT-II

Physical structure of the Harmonium.

UNIT-III

Importance of the Harmonium as an accompanying instrument with classical & light music.

UNIT-IV Life Sketch

- Pandit Gyan Prakash Ghosh.
- Pandit Tulsidas Borker.

PRACTICAL

Credit : **02**

25 Marks

Unit - I

Knowledge of playing basic alankars & Ragas.

Unit - II

Knowledge of Playing basic chords according to Western Music system.

Unit - III

Idea of accompanying with "Khayal".

Unit - IV

Knowledge of playing Some famous compositions in Indian Music system.

PRESCRIBED BOOKS :-

- * Learn to play on Harmonium (English) by Pankaj Publication.
- * The Harmonium Handbook (English) by Satyaki Kraig Brockschidt.
- * Raga Shastra Siddhanta (Odia) by Sri Rajanikant Padhi.

+3 THIRD YEAR SIXTH SEMESTER**DSE - 4****PROJECT & VIVA**

Time : **3** Hrs.

Credit : **06**

Introduction:

Introducing students to do own researches on different topics in musical field. Which will give better understanding on publishing research papers. It also helps to determine an area of interest, can discover their passion for research and may start their career as a researcher.

Learning objectives:

- To help students to learn how to develop research designs in the study of music.
- To guide students to understand the previous research in their field of interest and review them to arrive at a research problem.
- To make students to learn the methods of writing a research report.

Course Outcome

- Project paper work presentation - 80 Marks
- Viva - 20 Marks

+3 SECOND YEAR THIRD SEMESTER

GE - 3

HINDUSTANI VOCAL

Time : 3 Hrs.

End Semester Theory : 60 Marks

Credit : 06

Mid Semester Theory : 15 Marks

Introduction:

Basic information of musical terminology, knowledge of basic alankars , raags and taals.

Learning objectives:

Basic alankar (Sudha and Vikrut), Concept of raags and taals.

Outcome:

Ability to sing basic swar, raags. And understanding of basic taals and basic terminology of music.

UNIT-I

- a) Definitions -
Dhwani, Nada, Swara, Sangeeta, Raga, Thaata, Alaap, Taan, Badi, Sambadi, Tala, Laya.
- b) Detail Knowledge of the following forms
Khayal, Dhrupad, Dhamar, Thumree, Kajree, Bhajan.

UNIT-II

Shastriya parichaya with notations of the Bandish of the following Ragas Kalyan, Bhupali, Khamaj, Kafi, Durga, Brindabani Sarang, Bhairab.

UNIT-III

Detail knowledge of following Talas. Teental, Ektal, Jhamptal, Choutal.

UNIT-IV

Knowledge about Indian Notation system. (Pt. B.N. Bhatkhande & Pt. B.D. Paluskar Notation System)

PRACTICALCredit : **02****25** Marks**Unit - I**

Bilambit Bandish of the following Ragas. Kalyan, Bhupali.

Unit - II

Chhotakhayal gaykee of the following Ragas.

Kafi, Durga Khamaj, Bhairab, Brindabani Sarang.

Unit - III

Demonstration of the following Talas- Teental, Ektal, Choutal, Jhamptal, Dhamar.

Unit - IV

One Bhajan or Patriotic Song in any Raga.

PRESCRIBED BOOKS :-

- * Raga Darshan (Odia) Part - 1, 2 by Sri Chandan Kumar Jena.
- * Raga Parichaya (Hindi) Part - 1, 2 by Dr. Harish Chandra Srivastab.

+3 SECOND YEAR FOURTH SEMESTER**GE - 4****HINDUSTANI VOCAL**Time : **3** Hrs.End Semester Theory : **60** MarksCredit : **06**Mid Semester Theory : **15** Marks**Introduction:**

knowledge of different forms of Hindustani classical music (Khayal, Dhrupad, Dhamar, Thumri, Bhajan). Knowledge of different renowned Musicians

Learning Objectives:

New different raags.
Life sketches.

Outcomes:

Ability of performing new basic raagas.
Getting idea of contribution of different scholars in Hindustani classical music.

UNIT-I

Characterstics of the following Ragas. Asawari, Tilang, Bihag, Pattdeep, Desh, Malkauns, Bageshree, Bhairabi.

UNIT-II

Characterstics of the following Talas. Rupak, Sooltal, Tewra, Jhamptal.

UNIT-III Life Sketch

Pt. Bishnu Narayan Bhatkhande

Pt. Bishnu Digamber Paluskar

Pt. Dr. Damodar Hota.

UNIT-IV

Origin & Evolution of Indian Music.

PRACTICAL

Credit : **02**

25 Marks

Unit - I

Detail knowledge of the following Ragas.

Kalyan, Bhupali.

Unit - II

Chhota khayal gaykee of the following Ragas.

Asawari, Tilang, Bihag, Pattadeep, Desh, Malkauns, Bageshree, Bhairabi.

Unit - III

Demonstration of the following Talas with Dugun & Chaugun Layakaries.

Rupak, Sooltal, Teental, Jhamptal, Choutal, Tewra, Dhamar, Ektal.

Unit - IV

Candidate has to learn one Dhrupad in any Prescribed Ragas.

PRESCRIBED BOOKS :-

- * Raga Darshan (Odia) Part - 1, 2 by Sri Chandan Kumar Jena.
- * Hindustani Sangeet Lahari (Odia) Part - 1, 2, 3 by Dr. Damodar Hota.

ODIA

+3 FIRST YEAR FIRST SEMESTER

Core Course - I (C-1)

Time : 3 Hrs.
Credit : 06

End Semester Theory : 80 Marks
Mid Semester Theory : 20 Marks

ଓଡ଼ିଆ ସାହିତ୍ୟର ଇତିହାସ (ସପ୍ତମରୁ ଷୋଡ଼ଶ ଶତାବ୍ଦୀ ପର୍ଯ୍ୟନ୍ତ) ପ୍ରଥମ ପଢ଼

- ୧ମ ଏକକ / ୟୁନିଟ୍ - ୧ : ପ୍ରାକ୍-ସାରଳା ସାହିତ୍ୟ (ଚର୍ଯାଗୀତିକା, ନାଥ ସାହିତ୍ୟ) । ସାମାଜିକ, ଧାର୍ମିକ, ସାହିତ୍ୟିକ ଓ ଭାଷାତାତ୍ତ୍ୱିକ ମୂଲ୍ୟାୟନ ।
- ୨ୟ ଏକକ / ୟୁନିଟ୍ - ୨ : ସାରଳା ସାହିତ୍ୟର ସାମାଜିକ, ସାଂସ୍କୃତିକ ଓ ସାହିତ୍ୟିକ ମୂଲ୍ୟ ।
- ୩ୟ ଏକକ / ୟୁନିଟ୍ - ୩ : ବଳରାମ ଦାସ ଓ ଜଗନ୍ନାଥ ଦାସ (ବିଶେଷ ଅଧ୍ୟୟନ) ।
- ୪ର୍ଥ ଏକକ / ୟୁନିଟ୍ - ୪ : ଅନନ୍ତ ଦାସ, ଯଶୋବନ୍ତ ଦାସ ଓ ଅଚ୍ୟୁତାନନ୍ଦ ଦାସ (ବିଶେଷ ଅଧ୍ୟୟନ) ।

ସହାୟକ ଗ୍ରନ୍ଥସୂଚୀ:

୧. ଓଡ଼ିଆ ସାହିତ୍ୟର ଇତିହାସ- ସୂର୍ଯ୍ୟନାରାୟଣ ଦାଶ (୧ମ ଓ ୨ୟ ଭାଗ) - ଗ୍ରନ୍ଥ ମନ୍ଦିର, କଟକ ।
୨. ଓଡ଼ିଆ ସାହିତ୍ୟର ଆଦିପର୍ବ - ସୁରେନ୍ଦ୍ର ମହାନ୍ତି - କଟକ ଷ୍ଟୁଡେଣ୍ଟସ୍ ସୋର, କଟକ ।
୩. ଚର୍ଯା ଗୀତିକା - ଖଗେଶ୍ୱର ମହାପାତ୍ର, ଫ୍ରେଣ୍ଡସ୍ ପବ୍ଲିଶର୍ସ, କଟକ ।
୪. ଓଡ଼ିଶାର ନାଥ ସାହିତ୍ୟ - ବଂଶୀଧର ମହାନ୍ତି, ଫ୍ରେଣ୍ଡସ୍ ପବ୍ଲିଶର୍ସ, କଟକ ।
୫. ଓଡ଼ିଆ ସାହିତ୍ୟର ସଂକ୍ଷିପ୍ତ ପରିଚୟ - ବୃନ୍ଦାବନ ଚନ୍ଦ୍ର ଆଚାର୍ଯ୍ୟ, ଗ୍ରନ୍ଥ ମନ୍ଦିର, କଟକ ।
୬. ଓଡ଼ିଆ ସାହିତ୍ୟର ଇତିହାସ, ପ୍ରଥମ ଭାଗ, ବୈଷ୍ଣବ ଚରଣ ସାମଲ, ଫ୍ରେଣ୍ଡସ୍ ପବ୍ଲିଶର୍ସ, କଟକ ।
୭. ଓଡ଼ିଆ ସାହିତ୍ୟର ମଧ୍ୟପର୍ବ - ସୁରେନ୍ଦ୍ର ମହାନ୍ତି, କଟକ ଷ୍ଟୁଡେଣ୍ଟସ୍ ସୋର, କଟକ ।
୮. ପଞ୍ଚସଖା ଓଡ଼ିଆ ସାହିତ୍ୟ - ଦେବେନ୍ଦ୍ର ମହାନ୍ତି, ଫ୍ରେଣ୍ଡସ୍ ପବ୍ଲିଶର୍ସ, କଟକ ।
୯. ଓଡ଼ିଆ ସାହିତ୍ୟର ଉନ୍ନେଷ ଓ ଉତ୍ତରଣ - ଦେବେନ୍ଦ୍ର ମହାନ୍ତି, ଫ୍ରେଣ୍ଡସ୍ ପବ୍ଲିଶର୍ସ, କଟକ ।
୧୦. ଓଡ଼ିଆ ସାହିତ୍ୟର ଇତିହାସ - ବଂଶୀଧର ମହାନ୍ତି (୧ମ ଓ ୨ୟ ଭାଗ) ଫ୍ରେଣ୍ଡସ୍ ପବ୍ଲିଶର୍ସ, କଟକ ।

+3 FIRST YEAR FIRST SEMESTER

Core Course - II (C-2) - Odia

Time : 3 Hrs.
Crdit : 06

End Semester Theory : 80 Marks
Mid Semester Theory : 20 Marks

ମଧ୍ୟଯୁଗୀୟ ଓଡ଼ିଆ ସାହିତ୍ୟ ଦ୍ୱିତୀୟ ପତ୍ର

- ୧ମ ଏକକ / ୟୁନିଟ୍ - ୧ : ମଧ୍ୟଯୁଗୀୟ ଓଡ଼ିଆ ସାହିତ୍ୟର ପୃଷ୍ଠଭୂମି (ସାମାଜିକ, ସାଂସ୍କୃତିକ, ରାଜନୈତିକ ଓ ଧର୍ମୀୟ ପୃଷ୍ଠଭୂମି) ।
- ୨ୟ ଏକକ / ୟୁନିଟ୍ - ୨ : ମଧ୍ୟଯୁଗୀୟ କାବ୍ୟର ଆଙ୍ଗିକ ବୈଚିତ୍ର୍ୟ (ବିଷୟ ବିନ୍ୟାସ, ଭାଷା, ଛନ୍ଦ ବୈଚିତ୍ର୍ୟ, ବର୍ଣ୍ଣନା ବୈଚିତ୍ର୍ୟ ଓ ଆଳଂକାରିକତା) ।
- ୩ୟ ଏକକ / ୟୁନିଟ୍ - ୩ : ମଧ୍ୟଯୁଗୀୟ କାବ୍ୟର ଆତ୍ମିକ ବିଭବ (ରସ, ସୌନ୍ଦର୍ଯ୍ୟଚେତନା, ଭାବାଦର୍ଶନ) ।
- ୪ର୍ଥ ଏକକ / ୟୁନିଟ୍ - ୪ : ମଧ୍ୟଯୁଗୀୟ ଓଡ଼ିଆ ଗୀତି ପରମ୍ପରା (ଚଂପୁ, ଚଉପଦୀ, ଚଉତିଶା, ଭଜନ ଓ ଜଣାଣ)

ସହାୟକ ଗ୍ରନ୍ଥସୂଚୀ:

୧. ଓଡ଼ିଆ ସାହିତ୍ୟର ଇତିହାସ - ସୂର୍ଯ୍ୟନାରାୟଣ ଦାଶ (୪ର୍ଥ ଭାଗ) - ଗ୍ରନ୍ଥ ମନ୍ଦିର, କଟକ ।
୨. ଭଞ୍ଜୀୟ କାବ୍ୟ ଭାବନା - ବେଣୀମାଧବ ପାଢ଼ୀ, ବ୍ରହ୍ମପୁର ।
୩. ଉପେନ୍ଦ୍ର ଭଞ୍ଜ ସାହିତ୍ୟ ଏକ ଅଧ୍ୟୟନ - ଜୟକୃଷ୍ଣ ମିଶ୍ର, ଓଡ଼ିଶା ରାଜ୍ୟ ପାଠ୍ୟ ପୁସ୍ତକ ପ୍ରଣୟନ ଓ ପ୍ରକାଶନ ସଂସ୍ଥା, ଭୁବନେଶ୍ୱର ।
୪. ମଧ୍ୟକାଳୀନ ଓଡ଼ିଆ ସାହିତ୍ୟ - କୃଷ୍ଣ ଚରଣ ସାହୁ, ଫ୍ରେଣ୍ଡ୍‌ସ୍ ପବ୍ଲିଶର୍ସ, କଟକ ।
୫. ଭଞ୍ଜ ସାହିତ୍ୟର ବିଭା ଓ ବିଭବ - ସଚ୍ଚିଦାନନ୍ଦ ମିଶ୍ର, ଓଡ଼ିଶା ବୁକ୍ ଷୋର ।
୬. ଓଡ଼ିଆ ଗୀତିକାବ୍ୟ - ଜାନକୀବଲ୍ଲଭ ମହାନ୍ତି, ଫ୍ରେଣ୍ଡ୍‌ସ୍ ପବ୍ଲିଶର୍ସ, କଟକ ।
୭. କାବ୍ୟ କୌଶଳ - ସୁଦର୍ଶନ ଆଚାର୍ଯ୍ୟ, ଫ୍ରେଣ୍ଡ୍‌ସ୍ ପବ୍ଲିଶର୍ସ, କଟକ ।

+3 FIRST YEAR SECOND SEMESTER

Core Course - III (C-3) - Odia

Time : 3 Hrs.
Crdit : 06

End Semester Theory : 80 Marks
Mid Semester Theory : 20 Marks

ଆଧୁନିକ ଓଡ଼ିଆ ସାହିତ୍ୟ ତୃତୀୟ ପତ୍ର

- ୧ମ ଏକକ / ୟୁନିଟ୍ - ୧ : ଆଧୁନିକ ଓଡ଼ିଆ ସାହିତ୍ୟର ପୃଷ୍ଠଭୂମି ଓ ନବଜାଗରଣ (ଇଂରାଜୀ ଶିକ୍ଷା ବିସ୍ତାର, ପତ୍ରପତ୍ରିକା ପ୍ରକାଶନ, ମୁଦ୍ରଣଯନ୍ତ୍ର ପ୍ରତିଷ୍ଠା ଓ ଭାଷା ସୁରକ୍ଷା ଆନ୍ଦୋଳନ)
- ୨ୟ ଏକକ / ୟୁନିଟ୍ - ୨ : ଆଧୁନିକ ଓଡ଼ିଆ ସାହିତ୍ୟର ପ୍ରମୁଖ ସ୍ରଷ୍ଟା (ରାଧାନାଥଙ୍କ କାବ୍ୟ, ଗଙ୍ଗାଧରଙ୍କ କାବ୍ୟ, ମଧୁସୂଦନ ରାଓଙ୍କ କବିତା ଓ ଫକୀରମୋହନଙ୍କ ଉପନ୍ୟାସ ଓ ଗଳ୍ପ)

- ୩ୟ ଏକକ / ୟୁନିଟ୍ - ୩ : ଓଡ଼ିଆ ସାହିତ୍ୟରେ ସତ୍ୟବାଦୀ ଧାରା ।
 ୪ର୍ଥ ଏକକ / ୟୁନିଟ୍ - ୪ : ଓଡ଼ିଆ ସାହିତ୍ୟରେ ସବୁଜ ଧାରା ଓ ପ୍ରଗତିବାଦୀ ଧାରା ।

ସହାୟକ ଗ୍ରନ୍ଥସୂଚୀ:

୧. ଓଡ଼ିଆ ସାହିତ୍ୟର ଇତିହାସ (୧୮୦୩ - ୧୯୨୦) ନଟବର ସାମନ୍ତରାୟ, ବାଣୀ ଭବନ, ଭୁବନେଶ୍ୱର ।
୨. ଓଡ଼ିଆ ସାହିତ୍ୟର ଇତିହାସ - ପ୍ରେମାନନ୍ଦ ମହାପାତ୍ର, ସତ୍ୟନାରାୟଣ ବୁକ୍ ଷୋର, କଟକ ।
୩. ମେହେର ସାହିତ୍ୟରେ ମାନବୀୟ ମହନୀୟତା - ମଣୀନ୍ଦ୍ର କୁମାର ମେହେର, ଗ୍ରନ୍ଥ ମନ୍ଦିର, କଟକ ।
୪. କାବ୍ୟଶିଳ୍ପୀ ଗଙ୍ଗାଧର - ଗୋବିନ୍ଦ ଚନ୍ଦ୍ର ଉଦ୍‌ଗତା ।
୫. ଓଡ଼ିଆ ସାହିତ୍ୟରେ ରାଧାନାଥ ଓ ସତ୍ୟବାଦୀ ଯୁଗ, ବୈଷ୍ଣବ ଚରଣ ସାମଲ, ପ୍ରେକ୍ଷା ପବ୍ଲିଶର୍ସ, କଟକ ।
୬. ସବୁଜରୁ ସାଂପ୍ରତିକ - ନିତ୍ୟାନନ୍ଦ ଶତପଥୀ, ଗ୍ରନ୍ଥ ମନ୍ଦିର, କଟକ ।
୭. ଓଡ଼ିଆ ସାହିତ୍ୟର ପ୍ରଗତିବାଦୀ ଧାରା - ବିଜୟ କୁମାର ଶତପଥୀ, ଓଡ଼ିଆ ବୁକ୍ ଷୋର, କଟକ ।

+3 FIRST YEAR SECOND SEMESTER

Core Course - IV (C-4) - Odia

Time : 3 Hrs.
 Credit : 06

End Semester Theory : 80 Marks
 Mid Semester Theory : 20 Marks

ସ୍ୱାଧୀନତା ପରବର୍ତ୍ତୀ ଓଡ଼ିଆ ସାହିତ୍ୟ

ଚତୁର୍ଥ ପତ୍ର

- ୧ମ ଏକକ / ୟୁନିଟ୍ - ୧ : ସ୍ୱାଧୀନତା ପରବର୍ତ୍ତୀ ଓଡ଼ିଆ କବିତା ।
 ୨ୟ ଏକକ / ୟୁନିଟ୍ - ୨ : ସ୍ୱାଧୀନତା ପରବର୍ତ୍ତୀ ଓଡ଼ିଆ କଥା ଓ ସାହିତ୍ୟ ।
 ୩ୟ ଏକକ / ୟୁନିଟ୍ - ୩ : ସ୍ୱାଧୀନତା ପରବର୍ତ୍ତୀ ଓଡ଼ିଆ ନାଟକ ଓ ଏକାଙ୍କିକା ।
 ୪ର୍ଥ ଏକକ / ୟୁନିଟ୍ - ୪ : ସ୍ୱାଧୀନତା ପରବର୍ତ୍ତୀ ଓଡ଼ିଆ ଗଦ୍ୟ ସାହିତ୍ୟ (ପ୍ରବନ୍ଧ, ଜୀବନୀ, ଆତ୍ମଜୀବନୀ ଓ ସମାଲୋଚନା)

ସହାୟକ ଗ୍ରନ୍ଥସୂଚୀ:

୧. ସବୁଜର ସାଂପ୍ରତିକ : ନିତ୍ୟାନନ୍ଦ ଶତପଥୀ, ଗ୍ରନ୍ଥମନ୍ଦିର, କଟକ ।
୨. ସତୁରୀରୁ ସହସ୍ରାକା : ନିତ୍ୟାନନ୍ଦ ଶତପଥୀ ।
୩. ଶହେ ବର୍ଷର ଓଡ଼ିଆ କ୍ଷୁଦ୍ରଗଳ୍ପ ଏକ ତାତ୍ତ୍ୱିକ ବିଶ୍ଳେଷଣ : କବିତା ବାରିକ, ବିଦ୍ୟାପୁରୀ, କଟକ ।
୪. ଉପନ୍ୟାସ ସାହିତ୍ୟର ପରିଚୟ : ପଠାଣି ପଟ୍ଟନାୟକ ଓ ଭୋଳାନାଥ ରାଉତ (୧ମ ଓ ୨ୟ ଭାଗ) ଓଡ଼ିଶା ବୁକ୍ ଷୋର, କଟକ ।
୫. ଓଡ଼ିଆ କ୍ଷୁଦ୍ର ଗଳ୍ପର ଇତିବୃତ୍ତି : ବୈଷ୍ଣବ ଚରଣ ସାମଲ, ବୁକ୍ ଆଣ୍ଡ୍ ବୁକ୍ସ, କଟକ ।
୬. ସ୍ୱାଧୀନତା ପରବର୍ତ୍ତୀ ଓଡ଼ିଆ ସାହିତ୍ୟର ଭୂମି ଓ ଭୂମିକା : ସଂ. ବୈଷ୍ଣବ ଚରଣ ସାମଲ, ଓଡ଼ିଶା ବୁକ୍ ଷୋର, କଟକ ।
୭. ଓଡ଼ିଆ ନାଟକର ଉତ୍ତର ଆଧୁନିକ ପର୍ବ : ହେମନ୍ତ କୁମାର ଦାସ, ବିଦ୍ୟାପୁରୀ, କଟକ ।
୮. ସ୍ୱାଧୀନତାପରେ ଓଡ଼ିଆ ନାଟକ : ନାରାୟଣ ସାହୁ, ଓ.ରା.ପା.ପ୍ର. ଓ ପ୍ରକାଶନ ସଂସ୍ଥା, ଭୁବନେଶ୍ୱର ।
୯. ଓଡ଼ିଆ ନାଟ୍ୟ ସାହିତ୍ୟ : ସର୍ବେଶ୍ୱର ଦାସ, ଓ.ରା.ପା.ପ୍ର. ଓ ପ୍ରକାଶନ ସଂସ୍ଥା, ଭୁବନେଶ୍ୱର ।

୧୦. ଓଡ଼ିଆ ନାଟକର ଉତ୍ତର ଓ ବିକାଶ : ରଘୁକର ଚକ୍ରନ୍ତି ।
 ୧୧. ଓଡ଼ିଆ ଐତିହାସିକ ନାଟକର ମୂଳସୂତ୍ର : ନୀଳାଦ୍ରିଭୂଷଣ ହରିଚନ୍ଦନ ।
 ୧୨. ନାଟକର ବ୍ୟାପ୍ତି ଓ ଦୀପ୍ତି : ସଂଘମିତ୍ରା ମିଶ୍ର, ଅଗ୍ରଦୂତ, କଟକ ।
 ୧୩. ନାଟ୍ୟ ସୃଷ୍ଟି ଓ ନାଟ୍ୟ ଦୃଷ୍ଟି : ବିଷ୍ଣୁପ୍ରିୟା ଓତା, ଶିଶୁକଲମ, ଭୁବନେଶ୍ୱର ।
 ୧୪. ଓଡ଼ିଆ ସାହିତ୍ୟର ଇତିହାସ : ବାଉରୀ ବନ୍ଧୁ କର, ଫ୍ରେଣ୍ଡସ୍ ପବ୍ଲିଶର୍ସ, କଟକ ।
 ୧୫. ଓଡ଼ିଆ ରଚିତ ସାହିତ୍ୟ : ଲାବଣ୍ୟ ନାୟକ ।
 ୧୬. ଓଡ଼ିଆ ସମାଲୋଚନା ସାହିତ୍ୟ : ଅସିତ କବି ।

+3 SECOND YEAR THIRD SEMESTER

Core Course - V (C-5) - Odia

Time : 3 Hrs.
 Crdit : 06

End Semester Theory : 80 Marks
 Mid Semester Theory : 20 Marks

ଓଡ଼ିଆ ଭାଷା ଓ ଲିପିର ଐତିହାସିକ ବିକାଶକ୍ରମ ପଞ୍ଚମ ପତ୍ର

- ପ୍ରଥମ ଏକକ / ୟୁନିଟ୍ - ୧ : ଓଡ଼ିଆ ଭାଷାର ଉତ୍ତର ଓ ବିକାଶ କ୍ରମ ।
 ଦ୍ୱିତୀୟ ଏକକ / ୟୁନିଟ୍ - ୨ : ଓଡ଼ିଆ ଲିପିର ଐତିହାସିକ ବିବର୍ତ୍ତନ ।
 ତୃତୀୟ ଏକକ / ୟୁନିଟ୍ - ୩ : ଓଡ଼ିଆ ଶିଳାଲେଖର ଭାଷା (ଶିଳାଲେଖ, ତାମ୍ରଲେଖ ଓ ପ୍ରାଚୀନ ସମ୍ବନ୍ଧ) ।
 ଚତୁର୍ଥ ଏକକ / ୟୁନିଟ୍ - ୪ : ଚର୍ଯ୍ୟାପଦ ଓ ସାରଳା ସାହିତ୍ୟର ଭାଷା ।

ସହାୟକ ଗ୍ରନ୍ଥସୂଚୀ :

୧. ଓଡ଼ିଆ ଭାଷା ଉଦ୍ଭେଦ ଓ ବିକାଶ - ବାସୁଦେବ ସାହୁ, ଫ୍ରେଣ୍ଡସ୍ ପବ୍ଲିଶର୍ସ, କଟକ ।
 ୨. ଓଡ଼ିଆ ଧ୍ୱନିତତ୍ତ୍ୱ ଓ ଶବ୍ଦ ସଂଭାର - ଧନେଶ୍ୱର ମହାପାତ୍ର, ଫ୍ରେଣ୍ଡସ୍ ପବ୍ଲିଶର୍ସ, କଟକ ।
 ୩. ଓଡ଼ିଆ ଭାଷା ଓ ଲିପି କ୍ରମ ବିକାଶ - କୁଞ୍ଜବିହାରୀ ତ୍ରିପାଠୀ, ଓ.ରା.ପା.ପ୍ର. ଓ ପ୍ରକାଶନ ସଂସ୍ଥା, ଭୁବନେଶ୍ୱର ।
 ୪. ଓଡ଼ିଆ ଭାଷାତତ୍ତ୍ୱର ରୂପଚିତ୍ର - ନଟବର ଶତପଥୀ, ବିଜୟିନୀ ପବ୍ଲିକେଶନ, କଟକ ।
 ୫. ଧ୍ୱନି ବିଜ୍ଞାନ - ଗୋଲୋକ ବିହାରୀ ଧଳ, ଓ.ରା.ପା.ପ୍ର. ଓ ପ୍ରକାଶନ ସଂସ୍ଥା, ଭୁବନେଶ୍ୱର ।
 ୬. ଓଡ଼ିଆ ଭାଷାତତ୍ତ୍ୱର ପରିଚୟ - ପ୍ରଫେସର ପ୍ରେମାନନ୍ଦ ମହାପାତ୍ର, ପ୍ରାଚୀ ସାହିତ୍ୟ ପ୍ରତିଷ୍ଠାନ, କଟକ ।

+3 SECOND YEAR THIRD SEMESTER

Core Course - VI (C-6) - Odia

Time : 3 Hrs.
Crdit : 06

End Semester Theory : 80 Marks
Mid Semester Theory : 20 Marks

ଭାଷାର ସଂଜ୍ଞା, ସ୍ୱରୂପ, ଓଡ଼ିଆ ଭାଷାର ବୈଶିଷ୍ଟ୍ୟ ଓ ବିବିଧତା

ଷଷ୍ଠ ପଢ଼

- ପ୍ରଥମ ଏକକ / ୟୁନିଟ୍ - ୧ : ଭାଷାର ସଂଜ୍ଞା, ସ୍ୱରୂପ ଓ ପ୍ରକାରଭେଦ ।
ଦ୍ୱିତୀୟ ଏକକ / ୟୁନିଟ୍ - ୨ : ଭାଷାର ଉତ୍ପତ୍ତି ସଂପର୍କୀୟ ବିଭିନ୍ନ ସିଦ୍ଧାନ୍ତ ।
ତୃତୀୟ ଏକକ / ୟୁନିଟ୍ - ୩ : ଓଡ଼ିଆ ଭାଷାର ଆଞ୍ଚଳିକ ରୂପ ।
ଚତୁର୍ଥ ଏକକ / ୟୁନିଟ୍ - ୪ : ଓଡ଼ିଆ ଭାଷା ଉପରେ ବିଭିନ୍ନ ଭାଷା ର ପ୍ରଭାବ (ଦ୍ରାବିଡ଼, ଅଷ୍ଟ୍ରିକ ଯାବନିକ ଓ ଇଂରାଜୀ)

ସହାୟକ ଗ୍ରନ୍ଥସୂଚୀ :

୧. ଭାଷାବିଜ୍ଞାନର ରୂପରେଖ - ବାସୁଦେବ ସାହୁ , ଫ୍ରେଣ୍ଡ୍‌ସ୍ ପବ୍ଲିଶର୍ସ, କଟକ ।
୨. ଭାଷାଶାସ୍ତ୍ର ପରିଚୟ - ଗୋଲୋକ ବିହାରୀ ଧଳ, ଓ.ରା.ପା.ପ୍ର. ଓ ପ୍ରକାଶନ ସଂସ୍ଥା, ଭୁବନେଶ୍ୱର ।
୩. ଓଡ଼ିଆ ଭାଷା ସୃଷ୍ଟି ଓ ବିକାଶ - ଉପେନ୍ଦ୍ର ପ୍ରସାଦ ଦଳାଇ, ଏ.କେ.ମିଶ୍ର, ପବ୍ଲିଶର୍ସ, କଟକ ।
୪. ଓଡ଼ିଆ ଭାଷା ଉଲ୍ଲେଖ ଓ ବିକାଶ - ବାସୁଦେବ ସାହୁ, ଫ୍ରେଣ୍ଡ୍‌ସ୍ ପବ୍ଲିଶର୍ସ, କଟକ ।
୫. ଭାଷା ଭାବନା - ସଂ. ବିଜୟଲକ୍ଷ୍ମୀ ମହାନ୍ତି, ବିଦ୍ୟା ପ୍ରକାଶନୀ, ଭୁବନେଶ୍ୱର ।
୬. ଓଡ଼ିଆ ଭାଷା ଓ ଭାଷା ବିଜ୍ଞାନ - ଦେବୀ ପ୍ରସନ୍ନ ପଟ୍ଟନାୟକ, ଗ୍ରନ୍ଥମନ୍ଦିର, କଟକ ।

+3 SECOND YEAR THIRD SEMESTER

Core Course - VII (C-7) - Odia

Time : 3 Hrs.
Crdit : 06

End Semester Theory : 80 Marks
Mid Semester Theory : 20 Marks

ଓଡ଼ିଆ ବ୍ୟାବହାରିକ ବ୍ୟାକରଣ

ସପ୍ତମ ପଢ଼

- ପ୍ରଥମଏକକ / ୟୁନିଟ୍ - ୧ : ଓଡ଼ିଆ ବର୍ଣ୍ଣ ବିଚାର, ବାକ୍ୟର ଗଠନ ରୀତି ଓ ପ୍ରକାରଭେଦ ।
ଦ୍ୱିତୀୟ ଏକକ/ ୟୁନିଟ୍ - ୧ : କାରକ, ବିଭକ୍ତି, କୃଦନ୍ତ ଓ ତର୍କିତ ।
ତୃତୀୟ ଏକକ / ୟୁନିଟ୍ - ୩ : ଉପସର୍ଗ, ସନ୍ଧି ଓ ସମାସ ।
ଚତୁର୍ଥ ଏକକ / ୟୁନିଟ୍ - ୪ : ଓଡ଼ିଆ ଶବ୍ଦ ସମାହାର ।

ସହାୟକ ଗ୍ରନ୍ଥସୂଚୀ :

୧. ସର୍ବସାର ବ୍ୟାକରଣ - ନାରାୟଣ ମହାପାତ୍ର ଓ ଶ୍ରୀଧର ଦାସ, ନିୟୁ ଷ୍ଟୁଡେଣ୍ଟ୍‌ସ୍ ଷୋର, କଟକ ।
୨. ଆଧୁନିକ ଓଡ଼ିଆ ବ୍ୟାକରଣ - ଧନେଶ୍ୱର ମହାପାତ୍ର, କିତାବ ମହଲ, କଟକ ।
୩. ବ୍ୟାବହାରିକ ଓଡ଼ିଆ ବ୍ୟାକରଣ - ବିଜୟ ପ୍ରସାଦ ମହାପାତ୍ର, ବିଦ୍ୟାପୁରୀ, କଟକ ।
୪. ଓଡ଼ିଆ ଭାଷା ଚର୍ଚ୍ଚାର ପରଂପରା - ପ୍ରଫେସର ଗଗନେନ୍ଦ୍ର ନାଥ ଦାସ, ଓଡ଼ିଆ ଗବେଷଣା ପରିଷଦ, କଟକ ।

+3 SECOND YEAR FOURTH SEMESTER

Core Course - VIII (C-8) - Odia

Time : 3 Hrs.
Crdit : 06

End Semester Theory : 80 Marks
Mid Semester Theory : 20 Marks

ଓଡ଼ିଆ ଲୋକସଂସ୍କୃତି ଓ ଲୋକ ସାହିତ୍ୟ

ଅଷ୍ଟମ ପଢ଼ା

ପ୍ରଥମ ଏକକ / ୟୁନିଟ୍ - ୧ :	ଲୋକ ସଂସ୍କୃତି ଓ ଲୋକସାହିତ୍ୟର ସଂଜ୍ଞା, ସ୍ୱରୂପ ଓ ପ୍ରକାରଭେଦ ।
ଦ୍ୱିତୀୟ ଏକକ / ୟୁନିଟ୍ - ୨ :	ଓଡ଼ିଆ ଲୋକଗୀତର ସ୍ୱରୂପ, ପ୍ରକାରଭେଦ ଓ ବିଭିନ୍ନ ଦିଗ ।
ତୃତୀୟ ଏକକ / ୟୁନିଟ୍ - ୩ :	ଓଡ଼ିଆ ଲୋକକାହାଣୀ ସ୍ୱରୂପ ଓ ପ୍ରକାରଭେଦ ।
ଚତୁର୍ଥ ଏକକ / ୟୁନିଟ୍ - ୪ :	ଓଡ଼ିଆ ଲୋକନାଟକର ସ୍ୱରୂପ ଓ ପ୍ରକାରଭେଦ (ପାଳା, ଦାସକାଠିଆ, ଦଣ୍ଡନାଟ, ଛଉନାଟ, ଲୀଳା, ଦଧି, ଡାଳଖାଇ ଓ କରମା) ।

ସହାୟକ ଗ୍ରନ୍ଥସୂଚୀ :

୧. ଲୋକଧାରା, ଲୋକସଂସ୍କୃତି ଓ ଲୋକସାହିତ୍ୟ - କୁମୁଦ ରଞ୍ଜନ ପାଣିଗ୍ରାହୀ, ସୁଖଦୁଖ ପବ୍ଲିକେଶନ, ସମ୍ବଲପୁର ।
୨. ଲୋକସଂସ୍କୃତି ଓ ଲୋକ ସାହିତ୍ୟ - କୃଷ୍ଣଚନ୍ଦ୍ର ପ୍ରଧାନ, ବିଦ୍ୟାପୁରୀ, କଟକ ।
୩. ଲୋକସାହିତ୍ୟ ତତ୍ତ୍ୱ - ଶ୍ୟାମ ସୁନ୍ଦର ମହାପାତ୍ର, ଓଡ଼ିଶା ବୁକ୍ ଷୋର, କଟକ ।
୪. ଓଡ଼ିଆ ଲୋକଗୀତ ସଂଗ୍ରହ - କୁଞ୍ଜବିହାରୀ ଦାସ, ବିଶ୍ୱ ଭାରତୀ ପ୍ରକାଶନ ।
୫. ପଲ୍ଲୀଗୀତି ସଂଗ୍ରହ - କୁଞ୍ଜବିହାରୀ ଦାସ, (୧ମ, ୨ୟ ଓ ୩ୟ ଭାଗ) ।
୬. ଲୋକସଂସ୍କୃତି - ଲୋକସାହିତ୍ୟ - ନାରାୟଣ ସାହୁ, ଚିନ୍ମୟ ପ୍ରକାଶନ, କଟକ ।
୭. ଓଡ଼ିଶାର ଦଣ୍ଡ ନାଟ - ସନ୍ତୋଷ କୁମାର ଶତପଥୀ, କେଦାର ପ୍ରିଣ୍ଟିଙ୍ଗ୍ ପ୍ରେସ, ଭୁବନେଶ୍ୱର ।
୮. ଓଡ଼ିଆ ଲୋକନାଟ୍ୟ - କଲଚରାଲ ଏକାଡେମୀ, ରାଉରକେଲା ।
୯. ପଶ୍ଚିମ ଓଡ଼ିଶାର ଲୋକସଂସ୍କୃତି - ଡ. ସୁଶୀଳ କୁମାର ବାର୍ମା ।
୧୦. ପଶ୍ଚିମ ଓଡ଼ିଶାର ଲୋକଗୀତ -ଦ୍ୱାରିକାନାଥ ନାୟକ, ଓଡ଼ିଶା ବୁକ୍ ଷୋର, କଟକ ।
୧୧. ଲୋକବିଶ୍ୱାସ ଓ ଲୋକାଚାର - ଡ. ସଦାନନ୍ଦ ନାୟକ, ଓଡ଼ିଶା ବୁକ୍ ଷୋର, ବ୍ରହ୍ମପୁର ।
୧୨. ଉତ୍କଳ ଗାଉଁଲି ଗୀତ - ଚକ୍ରଧର ମହାପାତ୍ର, ଫେଣ୍ଡସ୍, ପବ୍ଲିଶର୍ସ, କଟକ ।
୧୩. ଉତ୍କଳ ଗ୍ରାମ୍ୟ ଗୀତି - ଚକ୍ରଧର ମହାପାତ୍ର, ଓଡ଼ିଆ ସାହିତ୍ୟ ଏକାଡେମୀ ।

+3 SECOND YEAR FOURTH SEMESTER

Core Course - IX (C-9) - Odia

Time : 3 Hrs.
Crdit : 06

End Semester Theory : 80 Marks
Mid Semester Theory : 20 Marks

ସାହିତ୍ୟର ତତ୍ତ୍ୱ (ପ୍ରାଚ୍ୟ ଓ ପାଶ୍ଚାତ୍ୟ)

ନବମ ପଢ଼ା

ପ୍ରଥମ ଏକକ / ୟୁନିଟ୍ - ୧	:	ରସ ଓ ଧ୍ୱନି ।
ଦ୍ୱିତୀୟ ଏକକ / ୟୁନିଟ୍ - ୨	:	ରୀତି, ବକ୍ତୋକ୍ତି ଓ ଅଳଂକାର ।
ତୃତୀୟ ଏକକ / ୟୁନିଟ୍ - ୩	:	କ୍ଳାସିକିଜମ୍, ରୋମାଣ୍ଟିସିଜମ୍ ।
ଚତୁର୍ଥ ଏକକ / ୟୁନିଟ୍ - ୪	:	ପ୍ରତୀକବାଦ, ଚିତ୍ରକଳ୍ପ ।

ସହାୟକ ଗ୍ରନ୍ଥସୂଚୀ :

୧. ଅଳଙ୍କାର ପ୍ରସଙ୍ଗ - ଗୋବିନ୍ଦ ଚନ୍ଦ୍ର ଉଦ୍‌ଗାତା, ଫେଣ୍ଡସ୍ ପବ୍ଲିଶର୍ସ, କଟକ ।
୨. ଭାରତୀୟ ସାହିତ୍ୟ ତତ୍ତ୍ୱ - ବନମାଳୀ ରଥ, ଓ.ରା.ପା.ପ୍ର. ଓ ପ୍ରକାଶନ ସଂସ୍ଥା, ଭୁବନେଶ୍ୱର ।
୩. ଓଡ଼ିଆ କାବ୍ୟ କୌଶଳ - ସୁଦର୍ଶନ ଆଚାର୍ଯ୍ୟ, ଫେଣ୍ଡସ୍ ପବ୍ଲିଶର୍ସ, କଟକ ।
୪. ପାଶ୍ଚାତ୍ୟ ସାହିତ୍ୟ ଓ ସମୀକ୍ଷା ତତ୍ତ୍ୱ - କୃଷ୍ଣଚନ୍ଦ୍ର ପ୍ରଧାନ, ପ୍ରାଚୀ ସାହିତ୍ୟ ପ୍ରତିଷ୍ଠାନ, କଟକ ।
୫. ସାହିତ୍ୟର ସୂତ୍ରାପତ୍ତ - ବିଭୂତି ପଟ୍ଟନାୟକ, ଫେଣ୍ଡସ୍ ପବ୍ଲିଶର୍ସ, କଟକ ।

+3 SECOND YEAR FOURTH SEMESTER**Core Course - X (C-10) - Odia**

Time : 3 Hrs.
Crdit : 06

End Semester Theory : 80 Marks
Mid Semester Theory : 20 Marks

**ଓଡ଼ିଆ କବିତା ପ୍ରାଚୀନରୁ ଆଧୁନିକ
ଦର୍ଶନ ପତ୍ର**

- ପ୍ରଥମ ଏକକ / ୟୁନିଟ୍ - ୧ : ସାରଳା ମହାଭାରତ (ଦୂର୍ଯ୍ୟୋଧନଙ୍କ ରକ୍ତନଦୀ ସତ୍ତରଣ) ।
- ଦ୍ୱିତୀୟ ଏକକ / ୟୁନିଟ୍ - ୨ : ଭାଗବତ (୨୪ ଗୁରୁ ପ୍ରସଙ୍ଗ) - ଜଗନ୍ନାଥ ଦାସ ।
- ତୃତୀୟ ଏକକ / ୟୁନିଟ୍ - ୩ : ଦାନକୃଷ୍ଣ ଦାସଙ୍କ ରସକଲ୍ଲୋଳ (୧ମ ଛାନ୍ଦ) ଓ ଉପେନ୍ଦ୍ର ଭଞ୍ଜଙ୍କ କୋଟି ବ୍ରହ୍ମାଣ୍ଡ ସୁନ୍ଦରୀ (୧ମ ଛାନ୍ଦ)
- ଚତୁର୍ଥ ଏକକ / ୟୁନିଟ୍ - ୪ : ଆଧୁନିକ କବିତା ।
- ମହାଯାତ୍ରା- (ସପ୍ତମ ସର୍ଗର ଅମର୍ଷୀଙ୍କ ଉଦ୍‌ବୋଧନ)- ରାଧାନାଥ ରାୟ
ମଙ୍ଗଳେ ଅଲଳା ଉଷା - ଗଙ୍ଗାଧର ମେହେର
ବନ୍ଦୀର ସାକ୍ଷ୍ୟ ଅନୁଚିତ୍ରା - ଗୋପବନ୍ଧୁ ଦାସ
ପ୍ରତିମା ନାୟକ - ସଚ୍ଚିଦାନନ୍ଦ ରଉତରାୟ

ସହାୟକ ଗ୍ରନ୍ଥସୂଚୀ :

୧. ସାରଳା ମହାଭାରତ (ଗଦା ପର୍ବ - ସାରଳା ଦାସ) ।
୨. ଅବଧୂତ ଓ ଯଦୁରାଜା ସମ୍ବାଦ - ବୈଷ୍ଣବ ଚରଣ ସାମଲ, ଫେଣ୍ଡସ୍ ପବ୍ଲିଶର୍ସ, କଟକ ।
୩. କହେ କୃଷ୍ଣ ଦାସ କବି - କୃଷ୍ଣ ଚରଣ ସାହୁ, ବିଦ୍ୟାପୁରୀ, କଟକ ।
୪. ରସକଲ୍ଲୋଳ, ସଂପାଦନା - ଦେବେନ୍ଦ୍ର ମହାନ୍ତି ।
୫. ଦୁର୍ଲଭ ଦାନକୃଷ୍ଣ - ଡ. ଜ୍ୟୋତିରଞ୍ଜନ ସାମଲ, ବିଜୟିନୀ ପବ୍ଲିକେଶନ, କଟକ ।
୬. ତପସ୍ୱିନୀ ଓ ମେହେର ସାହିତ୍ୟ - ଗୌରୀ କୁମାର ବ୍ରହ୍ମା ।

+3 THIRD YEAR FIFTH SEMESTER**Core Course - XI (C-11) - Odia**

Time : 3 Hrs.

End Semester Theory : 80 Marks

Crdit : 06

Mid Semester Theory : 20 Marks

ଓଡ଼ିଆ ନାଟକ ଓ ଏକାଙ୍କିକା**ଏକାଦଶ ପତ୍ର**

ପ୍ରଥମ ଏକକ / ୟୁନିଟ୍ - ୧ : ରକ୍ତମାଟି - କାଳୀଚରଣ ପଟ୍ଟନାୟକ ।

ଦ୍ୱିତୀୟ ଏକକ / ୟୁନିଟ୍ - ୨ : ତଟନିରଞ୍ଜନା - ବିଜୟ ମିଶ୍ର ।

ତୃତୀୟ ଏକକ / ୟୁନିଟ୍ - ୩ : କୋକୁଆ - ବିଜୟ କୁମାର ଶତପଥୀ ।

ଚତୁର୍ଥ ଏକକ / ୟୁନିଟ୍ - ୪ : ଏକାଙ୍କିକା - ସ୍ମୃତି ବିଭ୍ରାଟ - ପ୍ରାଣବନ୍ଧୁ କର ଓ ଛଦ୍ମବେଶୀ - ବିଶ୍ୱଜିତ ଦାସ ।

ସହାୟକ ଗ୍ରନ୍ଥସୂଚୀ:

୧. ରକ୍ତମାଟି - କାଳୀଚରଣ ପଟ୍ଟନାୟକ ।

୨. ନନ୍ଦିକା କେଶରୀ - ମନୋରଞ୍ଜନ ଦାସ କିମ୍ବା ତଟ ନିରଞ୍ଜନା - ବିଜୟ ମିଶ୍ର ।

୩. କୋକୁଆ - ବିଜୟ କୁମାର ଶତପଥୀ, ଅଗ୍ରଦୂତ, କଟକ କିମ୍ବା ଭୂଷା - ମଙ୍ଗଳୁଚରଣ ବିଶ୍ୱାଳ ।

୪. ଅଶ୍ରୁ ନୁହେଁ ଅନଳ - ହେମନ୍ତ କୁମାର ଦାସ ।

୫. ସ୍ୱାଧୀନତୋତ୍ତର ଓଡ଼ିଆ ନାଟକର ମନସ୍ତାତ୍ତ୍ୱିକ ବିଶ୍ଳେଷଣ, ରକ୍ଷିତା ରାଉତରାୟ, ବିଜୟିନୀ ପବ୍ଲିକେଶନ, କଟକ ।

(ଚତୁର୍ଥ ପତ୍ର ନିମନ୍ତେ ପ୍ରଦତ୍ତ ସହାୟକ ପୁସ୍ତକଗୁଡ଼ିକ ଅନୁସରଣୀୟ)

+3 THIRD YEAR FIFTH SEMESTER**Core Course - XII (C-12) - Odia**

Time : 3 Hrs.

End Semester Theory : 80 Marks

Crdit : 06

Mid Semester Theory : 20 Marks

ଓଡ଼ିଆ କଥା ସାହିତ୍ୟ**ଦ୍ୱାଦଶ ପତ୍ର**

ପ୍ରଥମ ଏକକ / ୟୁନିଟ୍ - ୧ : ଓଡ଼ିଆ କଥାସାହିତ୍ୟର ବିକାଶକ୍ରମ ।

ଦ୍ୱିତୀୟ ଏକକ / ୟୁନିଟ୍ - ୨ : ଛ'ମାଣ ଆଠଗୁଣ୍ଠ - ଫକୀର ମୋହନ ସେନାପତି ।

ତୃତୀୟ ଏକକ / ୟୁନିଟ୍ - ୩ : ଦାନାପାଣି - ଗୋପୀନାଥ ମହାନ୍ତି

ଚତୁର୍ଥ ଏକକ / ୟୁନିଟ୍ - ୪ : ଗଜ ସାହିତ୍ୟ -

ପାଠ୍ୟ ଗଜ : ଦେବତାର ବିଧାତା - ଗୋଦାବରୀଶ ମହାପାତ୍ର

ମାଂସର ବିଳାପ - କାଳିନ୍ଦୀ ଚରଣ ପାଣିଗ୍ରାହୀ

ମଧୁବନର ମେଘର - ମନୋଜ ଦାସ

ସହାୟକ ଗ୍ରନ୍ଥସୂଚୀ:

୧. ଓଡ଼ିଆ ଉପନ୍ୟାସ ସାହିତ୍ୟର ପରିଚୟ, ସଂ ପଠାଣି ପଟ୍ଟନାୟକ ଓ ଭୋଳାନାଥ ରାଉତ, ଓଡ଼ିଶା ବୁକ୍ ସୋର, କଟକ ।

୨. ଓଡ଼ିଆ କ୍ଷୁଦ୍ରଗଜ ଉନ୍ମେଷ ଓ ଉତ୍ତରଣ - ବୈଷ୍ଣବ ଚରଣ ସାମଲ, ପ୍ରେକ୍ଷା ପବ୍ଲିଶର୍ସ, କଟକ ।

୩. ଛ'ମାଣ ଆଠଗୁଣ୍ଠ - ଫକୀର ମୋହନ ସେନାପତି ।

୪. ଛ'ମାଣ ଆଠଗୁଣ୍ଠ - ଭିନ୍ନ ଦୃଷ୍ଟି, ଭିନ୍ନ ବ୍ୟାଖ୍ୟା, ପଞ୍ଚାନନ ମିଶ୍ର, ବିଜୟିନୀ ପବ୍ଲିକେଶନ, କଟକ ।
 ୫. ଦାନାପାଣି - ଗୋପୀନାଥ ମହାନ୍ତି କିମ୍ବା ନୟନତାରା - ଦୟାନିଧି ମିଶ୍ର ।
 ୬. କଥାଶିଳ୍ପୀ ମନୋଜ ଦାସ - ଶତ୍ରୁଘ୍ନ ପାଣ୍ଡବ, ଫ୍ରେଣ୍ଡସ୍ ପବ୍ଲିଶର୍ସ, କଟକ ।
 ୭. ମନସ୍ତୀ ମନୋଜ - ମଣୀନ୍ଦ୍ର କୁମାର ମେହେର, ଫ୍ରେଣ୍ଡସ୍ ପବ୍ଲିଶର୍ସ, କଟକ ।
 ୮. ଓଡ଼ିଆ ଉପନ୍ୟାସର ସମାଜତାତ୍ତ୍ୱିକ ଆଲୋଚନା - କଳକାଶ ପଟ୍ଟନାୟକ, ବିଦ୍ୟାପୁରୀ, କଟକ ।

+3 THIRD YEAR SIXTH SEMESTER

Core Course - XIII (C-13) - Odia

Time : 3 Hrs.
Crdit : 06

End Semester Theory : 80 Marks
Mid Semester Theory : 20 Marks

ଓଡ଼ିଆ ଗଦ୍ୟ ସାହିତ୍ୟ

ପ୍ରୟୋଗ ପତ୍ର

- ପ୍ରଥମ ଏକକ / ୟୁନିଟ୍ - ୧ : ଆତ୍ମଜୀବନୀ, ଭ୍ରମଣ କାହାଣୀ ଓ ସମାଲୋଚନା ତତ୍ତ୍ୱ (ସଂଜ୍ଞା, ସ୍ୱରୂପ ଓ ପ୍ରକାରଭେଦ) ।
 ଦ୍ୱିତୀୟ ଏକକ / ୟୁନିଟ୍ - ୨ : ମୋ ଫୁଟା ଡଙ୍ଗାର କାହାଣୀ - ଫତୁରାନନ୍ଦ ।
 (ସପ୍ତମ ଓ ଅଷ୍ଟମ : ସାହିତ୍ୟିକ ଜୀବନ ଓ ସାହିତ୍ୟିକ ସ୍ୱୀକୃତି)
 ତୃତୀୟ ଏକକ / ୟୁନିଟ୍ - ୩ : ପର୍ଯ୍ୟଟନ ଆତ୍ମକାର ଓଡ଼ିଆ ଢେଙ୍କି - ଭୁବନେଶ୍ୱର ବେହେରା ।
 ଚତୁର୍ଥ ଏକକ / ୟୁନିଟ୍ - ୪ : ପ୍ରବନ୍ଧ - ଭାଷା ଓ ଜାତୀୟତା - ଗୋପବନ୍ଧୁ ଦାସ ।
 ମୁଁ ସତ୍ୟଧର୍ମୀ କହୁଛି - ଚନ୍ଦ୍ରଶେଖର ରଥ
 ବିବେକାନନ୍ଦ : ଏକ ଗୁହ୍ୟମୁକ୍ତିର ପ୍ରୟାସ - ଚିତ୍ତରଞ୍ଜନ ଦାସ

ସହାୟକ ଗ୍ରନ୍ଥସୂଚୀ :

୧. ମୋ ଫୁଟା ଡଙ୍ଗାର କାହାଣୀ - ଫତୁରାନନ୍ଦ ।
 ୨. ପର୍ଯ୍ୟଟନ ଆତ୍ମକାର ଓଡ଼ିଆ ଢେଙ୍କି - ଭୁବନେଶ୍ୱର ବେହେରା ।
 ୩. ଜୀବନ ସାହିତ୍ୟ ଏକ ଅଧ୍ୟୟନ - ପଠାଣି ପଟ୍ଟନାୟକ, ଓଡ଼ିଶା ପା.ପୁ.ପ୍ର. ଓ ପ୍ର. ସଂସ୍ଥା, ଭୁବନେଶ୍ୱର ।
 ୪. ସମାଲୋଚନାର ଦିଗଦିଗନ୍ତ - ଖଗେଶ୍ୱର ମହାପାତ୍ର, ଫ୍ରେଣ୍ଡସ୍ ପବ୍ଲିଶର୍ସ, କଟକ ।
 ୫. ସାହିତ୍ୟ ଓ ସମାଲୋଚନା - କୁଞ୍ଜବିହାରୀ ଦାଶ, ଓଡ଼ିଶା ବୁକ୍ ଷୋର, କଟକ ।

+3 THIRD YEAR SIXTH SEMESTER

Core Course - XIV (C-14) - Odia

Time : 3 Hrs.
Crdit : 06

End Semester Theory : 80 Marks
Mid Semester Theory : 20 Marks

ଓଡ଼ିଆ ଭାଷାର ବ୍ୟାବହାରିକ ପ୍ରୟୋଗ

ଚତୁର୍ଥକ ପତ୍ର

- ପ୍ରଥମ ଏକକ / ୟୁନିଟ୍ - ୧ : ଭାଷଣ କଳା, ଦଳଗତ ଆଲୋଚନା ଓ ସାକ୍ଷାତକାର ।
 ଦ୍ୱିତୀୟ ଏକକ / ୟୁନିଟ୍ - ୨ : ସମ୍ବାଦ ପ୍ରସ୍ତୁତି ଓ ଫିଚର ରଚନା ।
 ତୃତୀୟ ଏକକ / ୟୁନିଟ୍ - ୩ : କାର୍ଯ୍ୟାଳୟରେ ଓଡ଼ିଆ ଲିଖନ ବିଧି : ନଥି ପ୍ରସ୍ତୁତି, ଟିପ୍ପଣୀ, ଚିଠା ପ୍ରସ୍ତୁତି, ଅଧିସୂଚନା
 ଚତୁର୍ଥ ଏକକ / ୟୁନିଟ୍ - ୪ : ଓଡ଼ିଆ ଭାଷାର କମ୍ପ୍ୟୁଟରୀକରଣ, ସଫ୍ଟୱେୟାର ଏବଂ ହାର୍ଡୱେୟାର, ଓଡ଼ିଆ ଫଣ୍ଟସ୍, କୀ-ବୋର୍ଡ୍, ଓଡ଼ିଆ ପ୍ରୋସେସିଂ, ଓଡ଼ିଆରେ ଇଣ୍ଟରନେଟର ବ୍ୟବହାର, ଓଡ଼ିଆ ସାମାଜିକ ୱେବସାଇଟ୍ ।

ସହାୟକ ଗ୍ରନ୍ଥସୂଚୀ:

୧. ଯୋଗାଯୋଗମୂଳକ ମାତୃଭାଷା - ବିରଞ୍ଚି ନାରାୟଣ ସାମଲ, ସତ୍ୟନାରାୟଣ ବୁକ୍ ଷୋର, କଟକ ।
୨. ଭାଷଣ କଳା ଓ ଅନ୍ୟାନ୍ୟ ପ୍ରସଙ୍ଗ - କୃଷ୍ଣଚନ୍ଦ୍ର ପ୍ରଧାନ, ସତ୍ୟନାରାୟଣ ବୁକ୍ ଷୋର, କଟକ ।
୩. ସମ୍ବାଦପତ୍ର ଓ ଗଣମାଧ୍ୟମ - ମୃଣାଳ ଚାଟାର୍ଜୀ, ଶେଫାଳୀ କମ୍ପ୍ୟୁନିକେଶନ, ସଞ୍ଚାରମାର୍ଗ, ଡେକାନାଲ ।
୪. ପ୍ରାୟୋଗିକ ଭାଷା ଓ ବିଜ୍ଞାପନର ଦିଗବିଦିଗ - କେ.ବି. ପଟ୍ଟନାୟକ, ଓ.ରା.ପା.ପ୍ର ଓ ପ୍ରକାଶନ ସଂସ୍ଥା, ଭୁବନେଶ୍ୱର ।
୫. ସଂଯୋଗ ଅନୁବିଧି - ସତ୍ୟେଶ କୁମାର ତ୍ରିପାଠୀ, ନାଳନ୍ଦା, କଟକ ।
୬. କାର୍ଯ୍ୟାଳୟ ନଥି - ଓଡ଼ିଶା ଭାଷା ପ୍ରତିଷ୍ଠାନ, ଭୁବନେଶ୍ୱର ।
୭. ଓଡ଼ିଆରେ କମ୍ପ୍ୟୁଟର ଶିକ୍ଷା - ରୁଦ୍ରନାରାୟଣ ମହାପାତ୍ର, ସତ୍ୟନାରାୟଣ ବୁକ୍ ଷୋର, କଟକ ।
୮. ଓଡ଼ିଆ ଭାଷାରେ କମ୍ପ୍ୟୁଟରର ପ୍ରୟୋଗ - ସୁଧାର ଚନ୍ଦ୍ର ମହାନ୍ତି, ଏ.କେ.ମିଶ୍ର ପବ୍ଲିକେଶନସ୍, ଭୁବନେଶ୍ୱର ।
୯. କମ୍ପ୍ୟୁଟରରେ ଓଡ଼ିଆ ଭାଷାର ବ୍ୟବହାର ଓ ପ୍ରୟୋଗ, ରୁଦ୍ରପ୍ରସାଦ ମିଶ୍ର, ଅଜନ୍ତା ପବ୍ଲିଶର୍ସ, ଜଗତସିଂହପୁର ।

+3 THIRD YEAR FIFTH SEMESTER**DSE - I - Odia**

Time : 3 Hrs.

Credit : 06

End Semester Theory : 80 Marks

Mid Semester Theory : 20 Marks

ଶୃଙ୍ଖଳାକୈନ୍ଦ୍ରିକ ଇଚ୍ଛାଧୀନ ପାଠ**ଓଡ଼ିଶାର ସାଂସ୍କୃତିକ ଇତିହାସ ଓ ଓଡ଼ିଆ ସାହିତ୍ୟ (ସମ୍ମାନ)**

- ପ୍ରଥମ ଏକକ / ମ୍ୟୁନିଟ୍ - ୧ : ଓଡ଼ିଶାର ସଂକ୍ଷିପ୍ତ ଇତିହାସ
- ଦ୍ୱିତୀୟ ଏକକ / ମ୍ୟୁନିଟ୍ - ୨ : ଓଡ଼ିଶାରେ ବୌଦ୍ଧ ସଂସ୍କୃତି, ଶୈବ ସଂସ୍କୃତି ଓ ବୈଷ୍ଣବ ସଂସ୍କୃତି ।
- ତୃତୀୟ ଏକକ / ମ୍ୟୁନିଟ୍ - ୩ : ଜଗନ୍ନାଥ ସଂସ୍କୃତି ଓ ଆଦିବାସୀ ସଂସ୍କୃତି ।
- ଚତୁର୍ଥ ଏକକ / ମ୍ୟୁନିଟ୍ - ୪ : ଓଡ଼ିଆ ଓଷା ବ୍ରତ ଓ ପର୍ବପର୍ବାଣୀ

ସହାୟକ ଗ୍ରନ୍ଥସୂଚୀ:

୧. ଓଡ଼ିଶାର ସାଂସ୍କୃତିକ ଇତିହାସ - ସଂସ୍କୃତି ବିଭାଗ, ଓଡ଼ିଶା ।
୨. ଓଡ଼ିଶାର ସାଂସ୍କୃତିକ ଇତିହାସ - ପ୍ରବୋଧ କୁମାର ମିଶ୍ର, ବିଦ୍ୟାପୁରୀ, କଟକ ।
୩. ଓଡ଼ିଆ ସାହିତ୍ୟର ସାମାଜିକ ଓ ସାଂସ୍କୃତିକ ଇତିହାସ - ଚିତ୍ତରଞ୍ଜନ ଦାସ, ଓ.ରା.ପା.ପ୍ର. ଓ ପ୍ରକାଶନ ସଂସ୍ଥା, ଭୁବନେଶ୍ୱର ।
୪. ଓଡ଼ିଶାର ଧର୍ମଧାରା - କାଦୁଚରଣ ମିଶ୍ର, ଓ.ରା.ପା.ପ୍ର. ଓ ପ୍ରକାଶନ ସଂସ୍ଥା, ଭୁବନେଶ୍ୱର ।
୫. ବୈଷ୍ଣବ ସାହିତ୍ୟ ତତ୍ତ୍ୱ - ଆଶୁତୋଷ ପଟ୍ଟନାୟକ, ପ୍ରେକ୍ଷା ପବ୍ଲିଶର୍ସ, କଟକ ।
୬. ଓଡ଼ିଆ ସାହିତ୍ୟର ଶୈବଧର୍ମ - କୃଷ୍ଣଚନ୍ଦ୍ର ପ୍ରଧାନ, ପ୍ରେକ୍ଷା ପବ୍ଲିଶର୍ସ, କଟକ ।
୭. ଓଡ଼ିଆ ସାହିତ୍ୟରେ ଶ୍ରୀଜଗନ୍ନାଥ - ବାସୁଦେବ ସାହୁ, ପ୍ରେକ୍ଷା ପବ୍ଲିଶର୍ସ, କଟକ ।
୮. ଲୀଳାମୟ ନୀଳାଦ୍ରୀଶ - ସଂପାଦନା, ଭୁବନେଶ୍ୱର ଭଞ୍ଜ ଭାରତୀ (୧ମ ଭାଗ ଓ ୨ୟ ଭାଗ) ।
୯. ଓଡ଼ିଆ ବ୍ରତ ସାହିତ୍ୟ - ଅରବିନ୍ଦ ପଟ୍ଟନାୟକ, ଓଡ଼ିଶା ସାହିତ୍ୟ ଏକାଡେମୀ ।
୧୦. ଓଡ଼ିଶାର ଧର୍ମଧାରା - ଡ. ପ୍ରଦୀପ୍ତ କୁମାର ପଣ୍ଡା ।

+3 THIRD YEAR FIFTH SEMESTER

DSE - II - Odia

Time : 3 Hrs.
Crdit : 06

End Semester Theory : 80 Marks
Mid Semester Theory : 20 Marks

ଓଡ଼ିଆ ଶିଶୁ ସାହିତ୍ୟ ଓ ବିଜ୍ଞାନଭିତ୍ତିକ ସାହିତ୍ୟ (ସମ୍ମାନ)

ଦ୍ଵିତୀୟ ପତ୍ର

- ପ୍ରଥମ ଏକକ / ୟୁନିଟ୍ - ୧ : ଓଡ଼ିଆ ଶିଶୁ ସାହିତ୍ୟର ସ୍ଵରୂପ ଓ ପ୍ରକାରଭେଦ ।
ଦ୍ଵିତୀୟ ଏକକ / ୟୁନିଟ୍ - ୨ : ଓଡ଼ିଆ ବିଜ୍ଞାନଭିତ୍ତିକ ସାହିତ୍ୟର ସ୍ଵରୂପ ଓ ବିକାଶଧାରା ।
ତୃତୀୟ ଏକକ / ୟୁନିଟ୍ - ୩ : ପୃଥିବୀ ବାହାରେ ମଣିଷ - ଗୋକୁଳାନନ୍ଦ ମହାପାତ୍ର ।
ଚତୁର୍ଥ ଏକକ / ୟୁନିଟ୍ - ୪ : ମଙ୍ଗଳ ପଥେ - ପ୍ରଫେସର ଅରୁଣ ଚନ୍ଦ୍ର ସାହୁ

ସହାୟକ ଗ୍ରନ୍ଥସୂଚୀ:

୧. ଓଡ଼ିଆ ଶିଶୁ ସାହିତ୍ୟର ଇତିବୃତ୍ତି - ମନୀନ୍ଦ୍ର ମହାନ୍ତି, ଫ୍ରେଣ୍ଡସ୍ ପବ୍ଲିଶର୍ସ, କଟକ ।
୨. ପୃଥିବୀ ବାହାରେ ମଣିଷ - ଗୋକୁଳାନନ୍ଦ ମହାପାତ୍ର ।
୩. ମଙ୍ଗଳ ପଥେ - ପ୍ରଫେସର ଅରୁଣ ଚନ୍ଦ୍ର ସାହୁ ।
୪. ଓଡ଼ିଆ ସାହିତ୍ୟ - ମହେଶ୍ଵର ମହାନ୍ତି ।
୫. ଆଧୁନିକ ଓଡ଼ିଆ ଶିଶୁ ସାହିତ୍ୟ - ଜାନକୀ ବଲ୍ଲଭ ମହାନ୍ତି, ଗ୍ରନ୍ଥ ମନ୍ଦିର, କଟକ ।

+3 THIRD YEAR SIXTH SEMESTER

DSE - III - Odia

Time : 3 Hrs.
Crdit : 06

End Semester Theory : 80 Marks
Mid Semester Theory : 20 Marks

ଓଡ଼ିଆ ପଦ୍ୟ ସାହିତ୍ୟ (ସମ୍ମାନ)

ତୃତୀୟ ପତ୍ର

- ପ୍ରଥମ ଏକକ / ୟୁନିଟ୍ - ୧ : ଜଗନ୍ନାଥ ଜଣାଣ - କବିସୂର୍ଯ୍ୟ ବଳଦେବ ରଥ
ଆକାଶ ପ୍ରତି - ମଧୁସୂଦନ ରାଓ
ଯାତ୍ରା ସଂଗୀତ - ବୈକୁଣ୍ଠନାଥ ପଟ୍ଟନାୟକ
ମୌସୁମୀ - ରାଧାମୋହନ ଗଡ଼ନାୟକ
- ଦ୍ଵିତୀୟ ଏକକ / ୟୁନିଟ୍ - ୨ : କ୍ଷୁଦ୍ରଗଳ୍ପ:
ଡିମିରିଫୁଲ - ଅଖିଳ ମୋହନ ପଟ୍ଟନାୟକ
ଭଙ୍ଗା ଖେଳନା - କିଶୋରୀ ଚରଣ ଦାଶ
ଅନ୍ଧ ରାତିର ସୂର୍ଯ୍ୟ - ମହାପାତ୍ର ନୀଳମଣି ସାହୁ
ବାସିମତ୍ତା - ସୁରେନ୍ଦ୍ର ମହାନ୍ତି
- ତୃତୀୟ ଏକକ / ୟୁନିଟ୍ - ୩ : ପ୍ରବନ୍ଧ ଓ ସମାଲୋଚନା -
ମହାସ୍ଵେତ - ବିଶ୍ଵନାଥ କର
ଚିତ୍ରଗ୍ରୀବର ଉଚିତ ଅଭିମାନ - ଗୋଲକ ବିହାରୀ ଧଳ
ତିନୋଟି ସମାଲୋଚନା - ବାଉରୀ ବନ୍ଦୁ କର (ପାଠ୍ୟାଂଶ - ନଟବର ସାମନ୍ତରାୟ)
ଫ୍ରେଣ୍ଡସ୍ ପବ୍ଲିଶର୍ସ, କଟକ

ଚତୁର୍ଥ ଏକକ / ୟୁନିଟ୍ - ୪ : ଉପନ୍ୟାସ - ମାଟିର ମଣିଷ - କାଳିନ୍ଦୀ ଚରଣ ପାଣିଗ୍ରାହୀ

ସହାୟକ ଗ୍ରନ୍ଥସୂଚୀ:

୧. ଓଡ଼ିଆ ଉପନ୍ୟାସ ସାହିତ୍ୟର ପରିଚୟ, ସଂ. ପଠାଣୀ ପଟ୍ଟନାୟକ ଓ ଭୋଳାନାଥ ରାଉତ, ଓଡ଼ିଶା ବୁକ୍ ଷୋର, କଟକ ।
୨. କାଳିନ୍ଦୀ ଚରଣଙ୍କ କଥା ସାହିତ୍ୟ - ବିଷ୍ଣୁପ୍ରିୟା ଓତା, ପ୍ରେକ୍ଷା ପବ୍ଲିଶର୍ସ, କଟକ ।
୩. ଓଡ଼ିଆ ପ୍ରବନ୍ଧ ସାହିତ୍ୟ - ବାଉରୀବନ୍ଧୁ କର ।
୪. ଓଡ଼ିଆ ସମାଲୋଚନା ସାହିତ୍ୟ - ଓଡ଼ିଶା ସାହିତ୍ୟ ଏକାଡେମୀ ।
୫. ମାଟିର ମଣିଷ - କାଳିନ୍ଦୀ ଚରଣ ପାଣିଗ୍ରାହୀ ।

+3 THIRD YEAR SIXTH SEMESTER

DSE - IV - Odia

Time : 3 Hrs.

Credit : 06

End Semester Theory : 80 Marks

Mid Semester Theory : 20 Marks

ପ୍ରବନ୍ଧ ପ୍ରସ୍ତୁତି ଓ ଉପସ୍ଥାପନା (ସମ୍ମାନ)

ଚତୁର୍ଥ ପତ୍ର

କିମ୍ପା

ସମାଲୋଚନା, ଅନୁବାଦ, ସମ୍ପାଦନା, ଗବେଷଣା

ସହାୟକ ଗ୍ରନ୍ଥସୂଚୀ:

୧. ଗବେଷଣା ଅନୁବାଦ ସମ୍ପାଦନା କଳା - ସଂ ନାରାୟଣ ସାହୁ, ସତ୍ୟନାରାୟଣ ବୁକ୍ ଷୋର, କଟକ ।
୨. ଗବେଷଣା ପ୍ରବିଧି - ଡ. ସୁବୋଧ ଚାଟାର୍ଜୀ, ବିଦ୍ୟାପୁରୀ, କଟକ ।
୩. ଗବେଷଣା ପ୍ରକରଣ - ସଂପାଦନା ଓ ଅନୁବାଦ ପ୍ରବିଧି - କୃଷ୍ଣଚନ୍ଦ୍ର ପ୍ରଧାନ ଓ ନିର୍ମଳା କୁମାରୀ ରାଉତ ।

+3 SECOND YEAR THIRD SEMESTER

GE - III - Odia

Time : 3 Hrs.

Credit : 06

End Semester Theory : 80 Marks

Mid Semester Theory : 20 Marks

ଅନ୍ତର୍ବିଷୟ ଇଚ୍ଛାଧୀନ ପାଠ

ଗଣମାଧ୍ୟମ, ବେତାର କଳା ଓ ବିଜ୍ଞାପନ କଳା

ତୃତୀୟ ପତ୍ର

ପ୍ରଥମ ଏକକ / ୟୁନିଟ୍ - ୧ : ଗଣମାଧ୍ୟମ ଓ ତା'ର ପ୍ରକାର ଭେଦ ।

ଦ୍ୱିତୀୟ ଏକକ / ୟୁନିଟ୍ - ୨ : ବିଜ୍ଞାପନର ପରିଭାଷା, ପରିସର ଓ ଉଦ୍ଦେଶ୍ୟ ।

ତୃତୀୟ ଏକକ / ୟୁନିଟ୍ - ୩ : ସ୍ତମ୍ଭ ଲିଖନ ଓ ଫିଚର ଲିଖନ ।

ଚତୁର୍ଥ ଏକକ / ୟୁନିଟ୍ - ୪ : ପତ୍ରଲିଖନ (ବାଣିଜ୍ୟିକ, କାର୍ଯ୍ୟାଳୟ ଭିତ୍ତିକ, ବ୍ୟକ୍ତିଗତ ଓ ସମ୍ପାଦକଙ୍କୁ ପତ୍ର) ।

ସହାୟକ ଗ୍ରନ୍ଥସୂଚୀ:

୧. ଓଡ଼ିଆ ସାହିତ୍ୟକୁ ଆକାଶବାଣୀର ଦାନ - ବ୍ରଜମୋହନ ମହାନ୍ତି, ଓଡ଼ିଶା ବୁକ୍ ଷୋର ।

୨. ସମ୍ଭାବପତ୍ର ଓ ଗଣମାଧ୍ୟମ - ମୃଣାଳ ଚାଟ୍ଟାର୍ଜୀ, ଶେଫାଳୀ କମ୍ପ୍ୟୁନିକେଶନ, ଭେଙ୍କାନାଳ ।
 ୩. ସମ୍ଭାବ ଓ ସାମ୍ବାଦିକତା - ଚନ୍ଦ୍ରଶେଖର ମହାପାତ୍ର, ଓ.ରା.ପା.ପ୍ର. ଓ ପ୍ରକାଶନ ସଂସ୍ଥା, ଭୁବନେଶ୍ୱର ।
 ୪. ସଂଯୋଗ ଅନୁବିଧି - ସନ୍ତୋଷ କୁମାର ତ୍ରିପାଠୀ, ନାଳନ୍ଦା, କଟକ ।
 ୫. ଯୋଗାଯୋଗ ମୂଳକ ମାତୃଭାଷା - ବିରଞ୍ଚି ନାରାୟଣ ସାମଲ ।
 ୬. ଯୋଗାଯୋଗର ଭାଷା - ସୁଧୀର ଚନ୍ଦ୍ର ମହାନ୍ତି, ପ୍ରାଚୀ ପ୍ରକାଶନ, କଟକ ।

+3 SECOND YEAR FOURTH SEMESTER

GE - IV - Odia

Time : 3 Hrs.
Credit : 06

End Semester Theory : 80 Marks
Mid Semester Theory : 20 Marks

- ପ୍ରଥମ ଏକକ / ୟୁନିଟ୍ - ୧ : ଗନ୍ଧ ସାହିତ୍ୟ :
 ବୁଢ଼ା ଶଙ୍ଖାରି - ଲକ୍ଷ୍ମୀକାନ୍ତ ମହାପାତ୍ର
 ମାଗୁଣୀର ଶଗଡ଼ - ଗୋଦାବରୀଶ ମହାପାତ୍ର
 ଶିକାର - ଭଗବତୀ ଚରଣ ପାଣିଗ୍ରାହୀ
- ଦ୍ୱିତୀୟ ଏକକ / ୟୁନିଟ୍ - ୨ : ଉପନ୍ୟାସ ସାହିତ୍ୟ :
 ଶାସ୍ତି - କାହ୍ନୁଚରଣ ମହାନ୍ତି, ଫ୍ରେଣ୍ଡ୍‌ସ୍ ପବ୍ଲିଶର୍ସ, କଟକ ।
- ତୃତୀୟ ଏକକ / ୟୁନିଟ୍ - ୩ : ନାଟକ :
 ଶେଷ କଥା - ଡଃ ନାରାୟଣ ସାହୁ, ସତ୍ୟନାରାୟଣ ବୁକ୍ ଷୋର, କଟକ ।
- ଚତୁର୍ଥ ଏକକ / ୟୁନିଟ୍ - ୪ : ରମ୍ୟ ରଚନା :
 ବାଇ ମହାନ୍ତି ପାଞ୍ଜି (ପ୍ରଥମ ବିଡ଼ା) - ଗୋପାଳ ଚନ୍ଦ୍ର ପ୍ରହରାଜ
 ବଗୁଆ - ଗୋବିନ୍ଦ ତ୍ରିପାଠୀ
 ସାଧୁ ସଙ୍ଗ - ଚୌଧୁରୀ ହେମକାନ୍ତ ମିଶ୍ର

ସହାୟକ ଗ୍ରନ୍ଥସୂଚୀ :

୧. କାହ୍ନୁଚରଣ ବିଶେଷାଙ୍କ, କୋଣାର୍କ, ଓଡ଼ିଶା ସାହିତ୍ୟ ଏକାଡେମୀ ।
 ୨. ଓଡ଼ିଆ କ୍ଷୁଦ୍ରଗଳ୍ପର ଇତିହାସ, ବୈଷ୍ଣବ ଚରଣ ସାମଲ, ଫ୍ରେଣ୍ଡ୍‌ସ୍ ପବ୍ଲିଶର୍ସ, କଟକ ।
 ୩. ଓଡ଼ିଆ କଥାସାହିତ୍ୟର କଥା ଓ ରମ୍ୟରଚନା - ମହାପାତ୍ର ନୀଳମଣି ସାହୁ, ଓଡ଼ିଶା ବୁକ୍ ଷୋର, କଟକ ।
 ୪. ଶାସ୍ତି - କାହ୍ନୁଚରଣ ମହାନ୍ତି, ଫ୍ରେଣ୍ଡ୍‌ସ୍ ପବ୍ଲିଶର୍ସ, କଟକ ।
 ୫. ଉତ୍ତର ସତୁରୀ ଓଡ଼ିଆ ନାଟକ - ହେମନ୍ତ କୁମାର ଦାସ, ଗ୍ରନ୍ଥ ମନ୍ଦିର, କଟକ ।
 ୬. ଶେଷ କଥା - ନାରାୟଣ ସାହୁ, ସତ୍ୟନାରାୟଣ ବୁକ୍ ଷୋର, କଟକ ।

PHILOSOPHY

+3 FIRST YEAR FIRST SEMESTER

Core Course -1 GENERAL PHILOSOPHY

Time : 3 Hrs.

Credit : 06

End Semester Theory : 80 Marks

Mid Semester Theory : 20 Marks

COURSE OBJECTIVES:

- * To familiarize students with major branches of philosophy such as metaphysics, epistemology, ethics, logic, and aesthetics.
- * To develop critical thinking skills through engagement with philosophical texts and arguments.
- * To encourage students to reflect on their own beliefs and assumptions, and to engage in reasoned discussion and debate.
- * To introduce students to key historical figures and movements in the history of philosophy.

Unit -1:

Definition, Nature & Function of Philosophy, and Philosophy in relation to other modes of thinking like Science & Religion.

Unit-II:

Metaphysics: Monism, Pluralism, Realism, Idealism, Metaphysical issues: Substance, Universal, Mind & Body

Unit-III:

Problem of knowledge: What is knowledge? Sources of knowledge: Empiricism, Rationalism, Theories of Truth: Correspondence, coherence and pragmatic theory

Unit - IV:

Problems of Ethics: (1) Theories of Goodness: The good and the evil (2) Theories of conduct: Egoism & Altruism.

Prescribed Books:

1. John Hospers: An Introduction to Philosophical Analysis (relevant portions)
2. J.N. Sinha Introduction to Philosophy

Reference books:

1. G.T.W. Patrick: Introduction to Philosophy
 2. A.C. Ewing: The Fundamental Questions of Philosophy
 3. GW. Cunningham: Problems of Philosophy. Richard Taylor: Metaphysics
 4. W. Hamlyn: Metaphysics
-

COURSE OUTCOMES:

- * Students will demonstrate an understanding of basic philosophical concepts and terminology.
- * Students will be able to analyze and evaluate philosophical arguments using logical reasoning and evidence.
- * Students will develop the ability to articulate their own philosophical viewpoints and engage in respectful dialogue with others.
- * Students will gain insight into the historical development of philosophical thought and its relevance to contemporary issues.

+3 FIRST YEAR FIRST SEMESTER

Core Course -2
LOGIC AND SCIENTIFIC METHOD

Time : 3 Hrs.

Crdit : 06

End Semester Theory : 80 Marks

Mid Semester Theory : 20 Marks

COURSE OBJECTIVES:

- * To further develop students' understanding of advanced principles of logic, scientific methodology, and critical thinking.
- * To explore more complex concepts and applications within these domains.
- * To prepare students for advanced study in related fields.
- * To foster their ability to engage with complex scientific and logical reasoning.

Unit-I

Definition of Logic, Laws of Thought, Deductive and Inductive Arguments, Validity & Soundness of Arguments.

Unit-II

Classification of propositions (from standpoint of Quality & Quantity), Distribution of Terms, Square of oppositions, Existential Import of Propositions, Interpretation of categorical proposition.

Unit-III

Inference- Immediate Inference (Conversion and Obversion), Mediate Inference- (Syllogism): Figure and moods, Testing of validity of Arguments by Syllogistic Rules.

Unit-IV

Inductive Reasoning and Scientific Enquiry: Causation and Mill's Experimental Methods

Reference book:

1. Copi, Cohen & Mac Mahan-Introduction to Logic and Scientific Method
2. Alex Rosenberg- Philosophy of Science: A Contemporary Introduction
3. John Hospers: An Introduction to Philosophical Analysis

COURSE OUTCOMES:

- * Students will demonstrate proficiency in advanced logical techniques, including modal logic, nonclassical logics, and meta-logic.
- * Students will be able to analyze and construct formal proofs, including proofs in propositional and predicate calculus.
- * Students will explore the philosophical underpinnings of the scientific method, including debates about induction, falsification, and scientific realism.
- * Students will critically evaluate historical and contemporary perspectives on the nature of scientific knowledge and its relation to empirical evidence.

+3 FIRST YEAR SECOND SEMESTER

Core Course -3

SYSTEMS OF INDIAN PHILOSOPHY

Time : 3 Hrs.

Credit : 06

End Semester Theory : 80 Marks

Mid Semester Theory : 20 Marks

COURSE OBJECTIVES:

- * To explore the diverse philosophical traditions that have developed in India, including but not limited to, Vedanta, Samkhya, Yoga, Nyaya, Vaisheshika, Mimamsa, and Buddhism.
- * To examine the foundational texts, doctrines, and methodologies of each major philosophical system.
- * To analyze the key concepts, theories, and debates within each philosophical tradition.
- * To understand the historical, cultural, and religious contexts that have shaped the development of Indian philosophy.

Unit-I:

Salient Features of Indian Philosophy, Basic concepts like Rta, Rna, Carvakas- Epistemology and Metaphysics (Lokayatamata)

Unit-II:

Jainism-Syadvada, Anekantavada, Jaina ethics (concept of Triratna)

Unit-III:

Buddhism: Four Noble Truths, Doctrine of Momentariness, Dependent Origination, No Soul Theory, Nirvana

Unit - IV:

Samkhya-Dualistic System: Purusa, Prakriti, Theory of Causation, Theory of Evolution, Astanga Yoga of Patanjali

Prescribed Books:

1. Dutta&Chatterjee-An Introduction to Indian Philosophy
 2. C. D. Sharma - A Critical Survey of Indian Philosophy
-

Reference Books:

1. R.K. Puligandla-Fundamentals of Indian Philosophy.
2. M. Hiriyana-Outlines of Indian Philosophy
3. J. N. Sinha-Indian Philosophy
4. S. Radhakrishnan-Indian Philosophy (Vol. 1 & 2)

COURSE OUTCOMES:

- * Students will gain a comprehensive understanding of the major philosophical systems in India, including their origins, evolution, and interconnections.
- * Students will be able to analyze and interpret primary texts from diverse Indian philosophical traditions.
- * Students will be able to critically evaluate the philosophical arguments, concepts, and methodologies presented within each system.
- * Explore the contemporary relevance and applicability of Indian philosophical ideas to modern issues.

+3 FIRST YEAR SECOND SEMESTER

Core Course - 4 SYMBOLIC LOGIC

Time : 3 Hrs.

Credit : 06

End Semester Theory : 80 Marks

Mid Semester Theory : 20 Marks

COURSE OBJECTIVES:

- * To master the symbolic representation of logical statements and arguments using formal logic notation.
- * To understand the syntax and semantics of propositional and predicate logic, including truth tables, logical connectives, quantifiers, and formal semantics.
- * To develop the ability to construct and analyse formal proofs using deductive systems, inference rules, and logical principles.
- * To apply symbolic logic techniques to solve complex problems in various domains, including mathematics, computer science, philosophy, linguistics, and artificial intelligence.

Unit -I:

Chapter-I Introduction

Chapter-II-The Calculus of Propositions

Unit - II:

Chapter-III Calculus of Propositions (Sec 1 to 6)

Unit - III:

Chapter - IV Calculus of Propositions (Sec 7 to 9)

The Elements of Predicate Calculus (Section 1 to 9 of chapter V)

Unit - IV:

Appendix (Sec-1 to Sec-4)

Prescribed Books:

1. Basson & O' Corner: Introduction to Symbolic Logic

COURSE OUTCOMES:

- * Students will demonstrate proficiency in analytical thinking and problem-solving skills through the application of symbolic logic techniques.
- * Students will develop strong logical reasoning and argumentation skills, enabling them to evaluate and construct sound arguments based on formal logical principles.
- * Students will gain an interdisciplinary perspective on the applications and significance of symbolic logic.
- * Students will improve communication skills by effectively articulating logical ideas.

+3 SECOND YEAR THIRD SEMESTER

Core Course -5 ETHICS

Time : 3 Hrs.
Crdit : 06

End Semester Theory : 80 Marks
Mid Semester Theory : 20 Marks

COURSE OBJECTIVES:

- * To demonstrate an understanding of major ethical theories.
- * To develop the ability to critically analyse ethical dilemmas and complex moral issues.
- * To apply ethical theories and principles to real-world situations.
- * To cultivate skills in ethical decision-making, considering competing moral claims and evaluating the consequences of different courses of action.

Unit-1:

Definition, Nature & Scope of Ethics, Ethics in relation to Politics, Sociology and Religion

Unit-II:

Distinction between moral and non-moral action, Moral and factual judgement. Object of Moral judgement

Unit-III:

Theories of Morality: Hedonism, Utilitarianism, Rigorism, Perfectionism

Unit - IV:

Theories of punishment; Retributive, Reformative and Preventive theory.

Prescribed Book:

- (1) J. N. Sinha-A Manual of Ethics
-

Reference Books:

- (1) W. Frankena-Ethics
- (2) William Lily-An Introduction to Ethics

COURSE OUTCOMES:

- * Students will demonstrate the ability to engage in ethical reasoning, critically evaluating moral arguments and applying ethical principles to resolve ethical dilemmas.
- * Students will develop strong critical thinking skills, including the ability to analyze, evaluate, and synthesize complex ethical arguments and perspectives.
- * Students will cultivate a heightened awareness of ethical issues and a recognition of the moral dimensions inherent in various personal, professional, and societal contexts.
- * Students will be prepared to assume leadership roles with a strong ethical foundation, demonstrating integrity, responsibility, and a commitment to ethical decision-making in their professional and personal lives.

+3 SECOND YEAR THIRD SEMESTER

Core Course - 6

HISTORY OF GREEK PHILOSOPHY

Time : 3 Hrs.

Credit : 06

End Semester Theory : 80 Marks

Mid Semester Theory : 20 Marks

COURSE OBJECTIVES:

- * To demonstrate an understanding of the major philosophical concepts and themes that emerged within ancient Greek philosophy.
- * To analyze and interpret primary texts from prominent Greek philosophers such as Plato, Aristotle, Socrates, and the Pre-Socratic thinkers.
- * To trace the historical development of Greek philosophy from its origins in the Pre-Socratic period through the Classical and Hellenistic periods.
- * To develop the ability to critically evaluate the arguments and theories presented by ancient Greek philosophers.

Unit-1:

Nature of Greek Philosophy: What is Philosophy? Origin development and Salient features of early Greek Thought

Unit - II:

Pre-Socratic Thought: The Being of Parmenides. Becoming of Heraclitus and Atomism of Democritus

Unit - III:

Socrates: Problem before Socrates, Dialectical method, epistemology and ethics of Socrates.

Unit - IV:

Plato: Theory of Knowledge, Theory of Idea, and Theory of Soul Aristotle: Theory of Form and Matter, Theory of Causation.

Prescribed Book:

- (1) W. T. Stace-Greek Philosophy

Reference Books:

1. Burnet-Greek Philosophy
2. B.A. G, Fuller - A History of Greek Philosophy
3. B. Russell-A History of Western Philosophy
4. Y. Masih-A Critical History of Philosophy

COURSE OUTCOMES:

- * Students will develop an awareness of the historical and cultural context in which ancient Greek philosophy emerged.
- * Students will enhance their critical thinking skills through the examination and evaluation of philosophical arguments and texts.
- * Students will attain a level of philosophical literacy that enables them to engage with foundational texts and ideas in the history of philosophy.
- * Students will appreciate the interdisciplinary nature of ancient Greek philosophy, recognizing its influence on subsequent philosophical traditions as well as its connections to literature, science, art, and politics.

+3 SECOND YEAR THIRD SEMESTER

Core Course - 7

SYSTEMS OF INDIAN PHILOSOPHY - II

Time : 3 Hrs.

Credit : 06

End Semester Theory : 80 Marks

Mid Semester Theory : 20 Marks

COURSE OBJECTIVES:

- * To provide students with an advanced-level exploration of key philosophical systems such as Vedanta, Nyaya, Vaisheshika, and Buddhism.
- * To encourage students to conduct in-depth analyses of philosophical texts, arguments, and methodologies associated with each philosophical system.
- * To understand the historical, cultural, and socio-political contexts that have influenced the development and evolution of Indian philosophical systems.
- * To develop skills in interpreting and analyzing complex philosophical texts, including the application of hermeneutical methods to understand nuanced meanings and interpretations.

Unit - 1

Upanisadic view of Atman and Brahman, Vidya and Avidya, Para vidya and Aparavidya

Unit-II:

Nyaya theory of Inference, Prama and Aprama, Concept of God

Unit-III:

Vaishesika: Categories (Padarthas), Nyaya: Pramanas

Unit - IV:

Sankara and Ramanuja's view on Maya, Jiva, Isvara, Brahman and Liberation

Prescribed Books:

1. Dutta and Chatterjee: An Introduction to Indian Philosophy

Reference Books:

2. J.N Sinha: Indian Philosophy
3. RK Puligandla: Fundamentals of Indian Philosophy
4. S. Radhakrishnan: Indian Philosophy (Vol-Iana)

COURSE OUTCOMES:

- * Students will develop a deep appreciation for the cultural, intellectual, and spiritual heritage of India, as reflected in its diverse philosophical traditions.
- * Students will enhance their analytical and critical thinking skills through the rigorous study and examination of complex philosophical texts.
- * Students will cultivate ethical sensitivity and awareness by exploring the ethical dimensions embedded within Indian philosophical traditions.
- * Students will develop a nuanced understanding of cross-cultural encounters and dialogues through the examination of Indian philosophical systems.

+3 SECOND YEAR FOURTH SEMESTER

Core Course - 8

CONTEMPORARY INDIAN PHILOSOPHY

Time : 3 Hrs.

Credit : 06

End Semester Theory : 80 Marks

Mid Semester Theory : 20 Marks

COURSE OBJECTIVES:

- * To gain insight into the philosophical contributions and ideas of contemporary Indian philosophers.
- * To explore the diverse philosophical perspectives and worldviews represented by figures like Vivekananda, Tagore, Radhakrishnan, Ambedkar, etc., considering their unique backgrounds, influences, and intellectual contexts.
- * To investigate how these philosophers engaged with pressing social, cultural, and political issues.
- * To assess the relevance and impact of their philosophical ideas and teachings in contemporary Indian society.

Unit -1:

Tagore: Nature of man God, Reality and Religion, Vivekananda: The concept of man, Universal Religion and Practical Vedanta

Unit-II:

Sri Aurobindo: World, Maya, Evolution and Reality (Sacchidananda), Integral yoga

Unit-III:

Gandhi: Truth, God and Non-violence, Ideal social order Dr B.R. Ambedkar: Vision of a just society

Unit - IV:

S. Radhakrishnan: Man. Reality and Religion. J Krishnamurti: Man and Nature, Human Crisis

Prescribed Book:

1. B.K Lal: Contemporary Indian Philosophy

Reference Books:

1. H. Sahoo (Ed): Contemporary Indian Philosophy
2. T.M.P Mahadevan and V. Saroja: Contemporary Indian Philosophy

COURSE OUTCOMES:

- * Students gain a deeper understanding of the philosophical contributions of contemporary Indian thinkers.
- * Students will know Contemporary thinkers' relevance to broader philosophical discourse, cultural identity, and social transformation.
- * Students will foster personal and intellectual growth by engaging with profound philosophical questions.
- * Students will develop their interest by these philosophers and reflecting on their relevance to contemporary life and individual well-being.

+3 SECOND YEAR FOURTH SEMESTER

Core Course - 9

HISTORY OF MODERN EUROPEAN PHILOSOPHY

Time : 3 Hrs.

Credit : 06

End Semester Theory : 80 Marks

Mid Semester Theory : 20 Marks

COURSE OBJECTIVES:

1. To provide students with a comprehensive understanding of the major philosophical thinkers, and ideas that emerged in Europe from the Renaissance to the Enlightenment.
 2. To examine the impact of the Scientific Revolution on European philosophy, including shifts in epistemology, methodology, and the relationship between science, religion, and philosophy.
 3. To explore the philosophical contributions of key figures such as Francis Bacon, René Descartes, John Locke, Gottfried Wilhelm Leibniz, David Hume, and Immanuel Kant, among others.
 4. To analyze key philosophical themes and debates that characterize early modern European thought, including empiricism, rationalism, skepticism, the nature of knowledge, the mind-body problem, and the nature of reality.
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Unit - I

Bacon: Theory of Idola, Inductive Method Descartes: Universal Doubt, Cogito-Ergo-Sum, Existence of God

Unit - II

Spinoza: Substance, Attribute and Modes Leibnitz: Theory of Monads, Pre-established harmony

Unit-III

Locke: Refutation of Innate ideas, Sources of knowledge Berkeley: Subjective

Unit - IV

Kant: Reconciliation between empiricism and Rationalism Possibility of Synthetic-a priori judgment

Prescribed Book:

1. R.K Pati: History of Modern European Philosophy

Reference Books:

1. Y. Masih: History of Western Philosophy
2. Ira Sen Gupta: A History of Western Philosophy
3. Frank Thilly: History of Western Philosophy

COURSE OUTCOME:

- * Students will acquire a comprehensive knowledge of the major philosophical movements, thinkers, and texts that have shaped early modern European philosophy.
- * Students will develop advanced critical thinking skills through analysis, and evaluation.
- * Students will appreciate the interdisciplinary nature of early modern European philosophy.
- * Students will improve written and oral communication skills by articulating and defending interpretations.

+3 SECOND YEAR FOURTH SEMESTER

Core Course - 10

PHILOSOPHY OF LANGUAGE

Time : 3 Hrs.

Credit : 06

End Semester Theory : 80 Marks

Mid Semester Theory : 20 Marks

COURSE OBJECTIVES:

- * To develop a deep understanding of the nature and structure of language, including its syntax, semantics, pragmatics, and usage in communication.
 - * To explore theories of meaning and reference, including theories of truth, reference, intentionality, and the relationship between language and reality.
 - * To examine the mechanisms and processes involved in linguistic communication, including speech acts, implicature, presupposition, and conversational implicature.
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- * To investigate the relationship between language and thought, including debates surrounding linguistic relativity, conceptual schemes, and the nature of mental representation.

Unit- I

Word Meaning: Meaning of the word “meaning”, Ambiguity and Vagueness

Unit- II

Definitions: Denotative, Connotative and Ostensive Defining and Accompanying Characteristics Stipulative, Reportive and Persuasive definition

Unit - III

Sentence Meaning: Proposition and sentence Word Meaning and sentence meaning. Criteria of sentence meaning

Unit - IV

Concept: Nature and source Truth: Correspondence, Coherence and Truth as it works

Prescribed book:

1. John Hospers: An Introduction to Philosophical Analysis

Reference Books:

1. Alston: Philosophy of Language
2. Das P: Life Language & Reality: An Introduction to Philosophy of Language

COURSE OUTCOMES:

1. Students will develop critical thinking skills through the analysis, evaluation, and interpretation of complex philosophical arguments, theories, and methodologies within the philosophy of language.
 2. Students will Enhance conceptual clarity by gaining a deeper understanding of key concepts and distinctions within the philosophy of language, including meaning, reference, truth, and interpretation.
 3. Students will improve written and oral communication skills by articulating and defending interpretations, analyses, and critiques of philosophical ideas and debates in the philosophy of language.
 4. Students will acquire proficiency in conducting independent research on topics related to the philosophy of language.
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+3 THIRD YEAR FIFTH SEMESTER

Core Course - 11

WESTERN CLASSICS: MEDITATIONS OF RENE DESCARTES

Time : 3 Hrs.

Credit : 06

End Semester Theory : 80 Marks

Mid Semester Theory : 20 Marks

COURSE OBJECTIVES:

- * To gain insight into Descartes' method of systematic doubt and the philosophical project he undertakes in the "Meditations on First Philosophy".
- * To examine Descartes' method of radical doubt as a means to establish a firm foundation for knowledge and certainty.
- * To investigate Descartes' dualistic metaphysics, particularly the distinction between mind and body, and the implications of this dualism for his theory of knowledge and perception.
- * To analyze Descartes' famous cogito argument ("I think, therefore I am") and its role in establishing the certainty of the thinking self as the foundation of knowledge.

Unit-1

Meditation I: Sceptical Doubts Meditation II: Cogito-ergo-sum, Sum- res-cogitans, The Wax argument

Unit - II

Meditation III: Clear and Distinct perceptions Theory of Ideas, Existence of God

Unit-III

Meditation IV: God is no deceiver, will, intellect and possibility of Error Meditation V: Essence of Material things, Existence of God

Unit-IV

Meditation- VI Mind-body Dualism. Primary and Secondary Quality

Prescribed Book:

1. Rene Descartes: Meditations on first Philosophy

Reference Books:

2. Rae Langton: A Study Guide to Descartes Meditations
3. Amelie Rorty: Essays on Descartes Meditations

COURSE OUTCOMES:

- * Students will develop critical thinking skills through the analysis, evaluation, and interpretation of Descartes' philosophical arguments and theories presented in the "Meditations".
- * Students will
- * Students will understand the historical, cultural, and intellectual context in which Descartes wrote the "Meditations", including his influences from earlier philosophical traditions and his impact on subsequent philosophical thought.
- * Students will engage in philosophical inquiry by Descartes in the "Meditations", including the nature of reality, the existence of God, and the foundations of knowledge.

+3 THIRD YEAR FIFTH SEMESTER

Core Course - 12 INDIAN TEXT: ISA UPANISAD

Time : 3 Hrs.

Credit : 06

End Semester Theory : 80 Marks

Mid Semester Theory : 20 Marks

COURSE OBJECTIVES:

- * To gain insight into the foundational principles and philosophical concepts of Vedic philosophy as articulated in the Isha Upanishad.
- * To explore the Upanishadic teachings regarding the nature of ultimate reality (Brahman), the relationship between the individual soul (Atman) and Brahman, and the nature of existence.
- * To examine the Upanishadic perspectives on karma (action) and dharma (duty), including their role in shaping human life and spiritual evolution.
- * To investigate the concept of liberation (moksha) as the goal of human life according to the Isha Upanishad, and the paths (margas) and practices (sadhanas) leading to its attainment.

Unit-I

What are Upanisads? Place of Upanisad in Indian Philosophy and Isa Upanisad

Unit-II

Mantra 1 to 9

Unit - III

Mantra 10 to 14

Unit - IV

Mantra 15 to 18

Prescribed Book:

1. Swami Gambhirananda, Eight Upanisads (vol-1) God and Reality, Advaita Ashrama, Calcutta

Reference Books:

1. S. Radhakrishnan: The Principal Upanisads
2. Satyabadi Mishra: Central Philosophy of the Upanisads
3. Aditya Ku. Mohanty: Upanishads Rediscovered

COURSE OUTCOMES:

- * Students will engage in philosophical by the Isha Upanishad, including the nature of reality, the purpose of human life, and the means of spiritual liberation.
 - * Learners will gain profound wisdom contained within the Upanishadic tradition, and its enduring influence on Indian culture and spirituality.
 - * Learners will acquire skills in interpreting and analyzing ancient philosophical texts, including metaphysical teachings embedded within the Upanishadic verses.
 - * They will integrate philosophical insights gained from the study of the Isha Upanishad with spiritual practice and ethical conduct, fostering holistic development and personal transformation.
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+3 THIRD YEAR SIXTH SEMESTER

Core Course - 13 SOCIAL & POLITICAL PHILOSOPHY

Time : 3 Hrs.
Crdit : 06

End Semester Theory : 80 Marks
Mid Semester Theory : 20 Marks

COURSE OBJECTIVES:

- * To develop a comprehensive understanding of key concepts such as justice, liberty, equality, authority, power, rights, and democracy within the context of social and political philosophy.
- * To analyse different political systems, including democracy, socialism, capitalism, anarchism, and totalitarianism, and evaluate their strengths, weaknesses, and implications for human flourishing and well-being.
- * To explore the ethical foundations of social and political life, including theories of natural law, utilitarianism, deontology, virtue ethics, and contractarianism, and their implications for moral and political decision-making.
- * To investigate theories of distributive justice, social equality, and human rights, and examine issues related to poverty, inequality, discrimination, and social injustice in contemporary society.

Unit-1:

Sociality, Social Science & Social laws, Philosophy of Social Science Relation between Individual & Society (Mechanical, Organic & Idealistic view)

Unit - II:

Political Ideals-Justice, Liberty, Equality Political Doctrines-Humanism, Secularism, Feminism, Philosophy of Ecology

Unit - III:

Democratic Ideals- Democratic Government, Conditions for Successful Functioning of Democracy, Human Rights

Unit - IV:

Political Ideologies-(a) Anarchism (b) Marxism (c) Sarvodaya

Prescribed Books:

1. OP. Gauba - An Introduction to Political Philosophy.

Reference Books:

1. Mackenzie: Social & Political Philosophy
 2. Sukhvir Singh-Social and Political Philosophy
 3. Sushila Ramaswamy- Political Theories: Ideas & Concepts
 4. D.D. Raphael- Problems of Political Philosophy
 5. Patitapaban Das, Social and Political Philosophy
-

COURSE OUTCOMES:

- * Students will develop critical thinking skills through the analysis, evaluation, and interpretation of complex social and political theories, arguments, and methodologies within the field of social and political philosophy.
- * They will foster ethical and political awareness by engaging with philosophical debates surrounding issues of social justice, human rights, democracy, governance, and the common good.
- * Students will appreciate the interdisciplinary nature of social and political philosophy and its connections to other fields such as history, economics, sociology, psychology, law, and public policy.
- * Students will improve written and oral communication skills by articulating and defending interpretations, analyses, and critiques of social and political ideas.

+3 THIRD YEAR SIXTH SEMESTER

Core Course - 14 APPLIED ETHICS

Time : 3 Hrs.

Crdit : 06

End Semester Theory : 80 Marks

Mid Semester Theory : 20 Marks

COURSE OBJECTIVES:

- * To develop a comprehensive understanding of major ethical theories, including consequentialism, deontology, virtue ethics, and ethical relativism, and their application to concrete moral dilemmas.
- * To identify, analyze, and evaluate ethical issues and dilemmas in various domains such as healthcare, business, technology, environment, law, politics, and social justice.
- * To cultivate skills in ethical reasoning and decision-making, including the ability to recognize moral principles, evaluate competing claims, and arrive at well-reasoned ethical judgments.
- * To explore cultural, religious, and philosophical perspectives on morality and ethical values, recognizing the diversity of ethical beliefs and practices across different cultures and traditions.

Unit-I

What is Applied Ethics: Nature & Scope of Applied Ethics- Ethical Theories- Deontology, Utilitarianism, Relativism & Subjectivism

Unit - II:

Taking Life: Animals- Animals rights, Reverence for life Taking Life: Humans - Types of Euthanasia, Abortion

Unit-III:

Environmental Ethics: Anthropocentrism, Non-anthropocentrism, Deep Ecology

Unit - IV:

Professional Ethics: (a) Business Ethics- Rights and Obligations, Justice & Honesty in Ethics. (b) Biomedical Ethics- Hippocratic Oath, Rights and Obligations of Health Care Professionals, Doctor-Patient Relationship.

Prescribed Books:

1. Peter Singer-Practical Ethics

Reference Books:

1. J. Jagadeb-Bio-medical Ethics
2. Tom Regan Animal Rights
3. J. P. Theroux-Ethics: Theory & Practice
4. P.K Mohapatra: Ethics and Society

COURSE OUTCOMES:

- * Students will be able to demonstrate a thorough insight in problems of Applied Ethics, and to discuss different views critically in writing.
- * It will help students to demonstrate an overview to differences, similarities and connections between different views within applied ethics and to give critical assessments of the different views.
- * They will enhance skills in ethical decision-making by applying ethical principles and frameworks to real-world ethical dilemmas.
- * Students will improve written and oral communication skills by articulating and defending ethical positions, analyses, and recommendations in a clear, coherent, and persuasive manner.

+3 THIRD YEAR FIFTH SEMESTER

DSE - 1

PHILOSOPHY OF BHAGVAD GITA

Time : 3 Hrs.

Credit : 06

End Semester Theory : 80 Marks

Mid Semester Theory : 20 Marks

COURSE OBJECTIVES:

- * To develop a comprehensive understanding of the philosophical concepts and principles presented in the Bhagavad Gita within the context of Hindu philosophy and spirituality.
- * To explore the existential dilemmas faced by Arjuna and the timeless wisdom imparted by Lord Krishna in response to Arjuna's moral and spiritual crisis.
- * To examine key philosophical concepts presented in the Bhagavad Gita, including dharma (duty/righteousness), karma (action), yoga (spiritual discipline), jnana (knowledge), bhakti (devotion), and moksha (liberation).
- * To investigate the various paths to spiritual liberation (moksha) outlined in the Bhagavad Gita, including Karma Yoga (the path of selfless action), Bhakti Yoga (the path of devotion), and Jnana Yoga (the path of knowledge).

Unit-I

Dharma:-Vamadharm, Swabhava, Swadharm-Paradharm

Unit - II:

Karma:-Classification of Karma; Agency Niskama Karma, Lokasamgraha, Relation between Karma Yoga and Jnana yoga

Unit - III:

Jnana:- Distinction between Jnana and Viinana. Criteria of True Knowledge (Buddhi Yoga ajnana Yoga), Kshetra, Kshetraina. Purusottama. Sattvika, Rajasika and Tamasika Jnana

Unit - IV:

Bhakti Yoga:- Four kinds of devotee, Characteristics of Ideal Bhakti- Saranagati & Prapattikrupa (grace); Relation between Bhakti Yoga & Jnana Yoga

Prescribed Books:

1. The Bhagabad Gita- S. Radhakrishnan (Trs&Ed)

Reference Books:

1. A. Concept of Yoga in the Gita-S. C. Panigrahi
2. Bhagavad Gita & Modern Life- K. M. Munshi& R. R. Diwakar
3. The Lord Speaks (2016)- B. K. Tripathy
4. Shrimad Bhagavad Gita Bhasya of Sri Sankaracharya-A. G. K. Warriar (Trs)
5. The Ethical Philosophy of Gita-P. N. Srinivasachari

COURSE OUTCOMES:

- * Students will engage in philosophical inquiry and reflection on the profound questions and themes addressed by the Bhagavad Gita.
 - * They will develop cultural and spiritual awareness by gaining an appreciation for the rich heritage and profound wisdom contained within the Bhagavad Gita, and its enduring influence on Indian culture, spirituality, and philosophy.
 - * Students will acquire skills in interpreting and analyzing ancient philosophical texts, including the ability to decipher symbolic language, allegorical narratives, and metaphysical teachings embedded within the verses of the Bhagavad Gita.
 - * Students will integrate philosophical insights gained from the study of the Bhagavad Gita with spiritual practice and ethical conduct, fostering holistic development and personal transformation.
-

+3 THIRD YEAR FIFTH SEMESTER

DSE - 2

PHILOSOPHY OF RELIGION

Time : 3 Hrs.

Credit : 06

End Semester Theory : 80 Marks

Mid Semester Theory : 20 Marks

COURSE OBJECTIVES:

- * To develop a comprehensive understanding of the beliefs, practices, rituals, and experiences associated with various religious traditions and worldviews.
- * To explore different conceptions of ultimate reality, including the nature and existence of God.
- * To examine the nature and significance of religious language, symbolism, myth, ritual, and mystical experiences in conveying religious truths and shaping religious communities.
- * To investigate different epistemological approaches to religious belief and knowledge, including faith, reason, revelation, mystical intuition, and the relationship between faith and reason.

Unit -I

Judaic- Christian Concept of God (Chapter-1) Introduction to Philosophy of Religion Grounds for belief in existence of God (Chapter-2)

Unit-II

Grounds for belief against existence of God (Chapter 3)

Unit-III

The Problem of Evil (Chapter-4)

Unit - IV

Problems of Religious Language

Prescribed Book

1. John Hick-Philosophy of Religion

Reference Books

1. Y. Masih-Introduction to Religious Philosophy
2. Arvind Sharma-Philosophy of Religion

COURSE OUTCOMES:

- * Students will develop critical thinking skills through the analysis, evaluation, and interpretation of religious texts, beliefs, arguments, and practices within the context of philosophical inquiry.
 - * Students will appreciate the interdisciplinary nature of the philosophy of religion.
 - * They will foster ethical and cultural awareness by engaging with diverse religious perspectives and traditions.
 - * Students will improve written and oral communication skills by articulating interpretations, analyses, and critiques of religious ideas and debates in a clear, coherent, and persuasive manner.
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+3 THIRD YEAR SIXTH SEMESTER

DSE - 3 GANDHIAN STUDIES

Time : 3 Hrs.

Credit : 06

End Semester Theory : 80 Marks

Mid Semester Theory : 20 Marks

COURSE OBJECTIVES:

- * To develop a comprehensive understanding of Mahatma Gandhi's life, including his upbringing, education, experiences, and contributions to India's freedom struggle and the world peace movement.
- * To explore Gandhi's philosophical principles, including Satyagraha (nonviolent resistance), Ahimsa (nonviolence), Sarvodaya (welfare of all), Swaraj (self-governance), and trusteeship, and their application to personal, social, and political life.
- * To examine Gandhi's political thought and strategy.
- * To investigate Gandhi's ideas on economic development, including his advocacy for village industries, self-reliance, equitable distribution of resources, and sustainable living practices.

Unit-I:

Gandhi's concept of a Just society. Basic Ideals- Truth, Non-violence, Equality and Human Freedom.

Unit -II:

Gandhi's idea of Social Engineering, Constructive Programme. Fight against social Evils (Injustice, Caste system, Untouchability) upliftment of Women.

Unit - III:

Social Ideals of Gandhi - Sarvodaya, Criticism of industrial civilization, Grama Swaraj, Anarchism, Trusteeship.

Unit - IV:

Method of Social Action, Satyagraha- kinds of Satyagraha, Methods of Satyagraha. Mercy Killing, Ideals of Basic Education. Basic Norms & Method of Education, Education for a Happier & Peaceful Society. World Peace.

Prescribed Book:

1. The Philosophy of Mahatma Gandhi, D.M Datta

Reference Books:

1. Social & Political Thought of M.K. Gandhi
2. Jaya Tanuja Bandopadhyay
3. Mahatma Gandhi-R.R. Diwakar

COURSE OUTCOMES:

- * Students will develop critical thinking skills through the analysis, evaluation, and interpretation of Gandhi's writings, speeches, and actions within the context of historical, political, and social circumstances.
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- * They will foster cultural and historical awareness by engaging with Gandhi's life and work in the context of India's struggle for independence, the global peace movement, and the ongoing quest for social justice and human rights.
- * They will appreciate the interdisciplinary nature of Gandhian Studies and its connections to other fields such as philosophy, political science, history, sociology, economics, literature, and environmental studies.
- * Learners will improve written and oral communication skills by articulating interpretations, analyses, and critiques of Gandhi's ideas and principles in a clear, coherent, and persuasive manner.

+3 THIRD YEAR SIXTH SEMESTER

DSE - 4

PROJECT/DISSERTATION

Time : 3 Hrs.

Credit : 06

End Semester Theory : 80 Marks

Mid Semester Theory : 20 Marks

COURSE OBJECTIVES:

- * To provide an opportunity for students to explore a topic of interest in-depth within their field of study.
- * To make an original contribution to the existing body of knowledge in the field.
- * To involve proposing new theories, developing new methodologies, or offering fresh insights into established concepts.
- * To critically evaluate existing research, methodologies, and theoretical frameworks.
- * To demonstrate student's ability to conduct independent research, analyze complex information, and communicate findings effectively.

COURSE OUTCOMES:

- * Students will produce a completed dissertation document that demonstrates a thorough understanding of the research topic, a coherent argument or research question, a wellorganized structure, and a rigorous methodology and analysis.
 - * Students will make a meaningful contribution to scholarly discourse within the specific field of study by addressing important research questions, advancing theoretical debates, providing empirical evidence, or proposing innovative methodologies.
 - * Students will disseminate research findings through conference presentations, academic publications, online repositories, and other scholarly venues, thereby contributing to the dissemination of knowledge and the advancement of academic discipline.
 - * Students will enhance professional and career development opportunities by demonstrating research competence and analytical skills.
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POLITICAL SCIENCE

Programme Outcomes (PO):

- PO-1 Foundational knowledge of Political Science and a thorough grasp of the theoretical and applied aspects of the discipline (**DOMAIN KNOWLEDGE**)
- PO-2 Critical sensibility to practical experiences, and an awareness of how one's position as a researcher/investigator shapes and impacts the knowledge one produces. (**PRACTICAL KNOWLEDGE**)
- PO-3 Awareness of how training in Political Science helps illuminate aspects of other disciplines within the social sciences, and of the role and place of Political Science in inter-disciplinary research. (**INTER-DISCIPLINARY SENSIBILITY**)
- PO-4 Prepare for higher studies in Political Science like P.G, Ph.D, D.Litt.A sense of inquiry and a capacity for asking relevant and appropriate questions and for problematizing ; the ability to recognise cause-and-effect relationships, define problems, formulate hypotheses, test hypotheses, and analyse, interpret and draw conclusions from data ; the ability to plan, design, and execute research and investigations and concisely report the results thereof (**RESEARCH SKILL**)
- PO-5 Ability to work effectively and respectfully with people from diverse backgrounds; capacity to cooperate with others and make a coordinated effort as part of a group, and work as a member of a team in the interests of a common cause. (**LEADERSHIP/TEAMWORK**)
- PO-6 Capacity to extrapolate from what one has learned and apply one's competencies to solve unfamiliar problems, and to apply one's learning to real-life situations. (**PROBLEM SOLVING AND ANALYSIS**)
- PO-7 An awareness pertaining to the values and beliefs of multiple cultures; a global and cosmopolitan perspective, and a capacity to effectively engage in a multicultural society and interact respectfully with diverse communities and groups (**MULTICULTURAL COMPETENCE**)
- PO-8 Capacity to use Information and Communications Technology (ICT) in a variety of learning situations; the ability to access, evaluate, and use a variety of information sources. (**DIGITAL SKILLS**)

PROGRAMME SPECIFIC OUTCOMES(PSOs):

- PSO-1 Students of the B.A. Programme in Political Science will have a comprehensive understanding of the fundamental concepts, theories and processes underlying this academic discipline.
- PSO-2 Students will develop the capacity to undertake analytical and critical thinking vis-a-vis specific issues and problems in Political Science, as well as other related fields of study.
- PSO-3 Students will be able to leverage their knowledge and skills to craft solutions to problems they encounter in the real world.
- PSO-4 Students will recognize and appreciate the importance of an education in Political Science.
- PSO-5 The programme supports problem solving skills, thinking, creativity through assignments, project work, both individually and in group.
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+3 FIRST YEAR FIRST SEMESTER

Core Paper - 1

UNDERSTANDING POLITICAL THEORY

Time : 3 Hrs.

Credit : 06

End Semester Theory : 80 Marks

Mid Semester Theory : 20 Marks

Introduction:

This course is divided into two sections. Section 'A' introduces the students to the idea of political theory, its history and approaches and an assessment of its critical and contemporary trends. Section 'B' is designed to reconcile political theory and practices through reflections on the ideas and practices related to democracy.

Course Objectives:

- To introduce the students to the idea of political theory, its history and approaches, and an assessment of its critical and contemporary trends.
- To reconcile political theory and practice through reflections on the ideas and practices related to State, Citizenship and Democracy.

UNIT-1: Introducing Political Theory

- (i) What is Politics: Theorizing the 'Political'
- (ii) Traditions of Political Theory: Liberal, Marxist, Anarchist and Conservative
- (iii) Approaches to Political Theory: Normative, Historical, Behavioural and Post-behavioural

UNIT-II: Critical and Contemporary Perspectives in Political Theory

- (i) Theories of Feminism: Feminist and Postmodern
- (ii) Modernism and Post-modernism

UNIT-III: Political theory and Practice

- (i) Democracy: Liberal and Marxist.
- (ii) Procedural Democracy and its critique

UNIT-IV: The Grammar of Democracy

- (i) Deliberative Democracy
- (ii) Participation and Representation

Text Books

- Bhargava, R. and Ashok Acharya (2008) 'Political Theory: An Introduction. New Delhi: Pearson Longman.
 - Vinod, M.J and Deshpande, Meena (2013) 'Contemporary Political Theory', PHI, New Delhi
 - Verma, S. P. (1996) 'Modern Political Theory', Vikash Publishing, 3rd Reprint, New Delhi.
 - Ramaswamy, Sushila (2010), 'Political Theory: Ideas and Concepts', PHI Learning, New Delhi.
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- Bellamy, R. (1993), (ed.) 'Theories and Concepts of Politics'. New York: Manchester University Press.
- Marsh, D. and Stoker, G. (eds.) 'Theory and Methods in Political Science'. London: Macmillan.
- Heywood, Andrew (2016) (Reprint) 'Political Theory: An Introduction', Palgrave, UK.

+3 FIRST YEAR FIRST SEMESTER

Core Paper - 2

CONSTITUTIONAL GOVERNMENT AND DEMOCRACY IN INDIA

Time : 3 Hrs.

End Semester Theory : 80 Marks

Credit : 06

Mid Semester Theory : 20 Marks

Introduction:

This course acquaints students with the Constitutional design of state structures and institutions, and their actual working overtime. The Indian Constitution accommodates conflicting impulses (of liberty and justice, territorial decentralization and a strong union, for instance) within itself. The course traces the embodiment of some of these conflicts in constitutional provisions and shows how these have played out in political practice. It further encourages a study of state institutions in their mutual interaction, and in interaction with the larger extra-constitutional environment.

Course Objectives:

- To acquaint the students with the constitutional design of States' structure and institutions, and their actual working overtime.
- To study how the Constitution of India accommodates conflicting impulses (of liberty and justice, territorial decentralization, and a strong union, for instance) within itself in political practice.
- To study mutual interactions among the state institutions and their interactions with the large extra-constitutional environment.

UNIT-I: The Constituent Assembly and the Constitution

- (i) Formation and working of the Constituent Assembly
- (ii) The Philosophy of the constitution: The Preamble and its Features.
- (iii) Fundamental Rights, Directive Principles of State Policy, Fundamental Duties

UNIT-II: Organs of Government

- (i) The Legislature and the Executive
- (ii) The Judiciary: Supreme Court and High Courts

UNIT-III: Federalism

- (i) Federalism: Centre-State relations
 - (ii) Recent trends in federalism
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UNIT-IV: Decentralization

- (i) Panchayati Raj Institutions: Composition, Powers and functions of Gram Panchayat, Panchayat Samiti and Zilla Parishad.
- (ii) Municipalities: Composition Powers and function of Municipal Corporation, Municipal Council and Notified Area Council

Text Books

- G. Austin, (2010) 'The Indian Constitution: Cornerstone of a Nation', New Delhi, OxfordUniversity Press, 15th print.
- R. Bhargava (ed.) 'Politics and Ethics of the Indian Constitution', New Delhi, OxfordUniversity Press.
- D. Basu, (2012) 'Introduction to the Constitution of India', New Delhi, Lexis Nexis.
- S. Chaube, (2009) 'The Making and Working of the Indian Constitution', New Delhi, National Book Trust.
- G. Austin, (2000) 'Working a Democratic Constitution', New Delhi, Oxford University Press.
- B. Shankar and V. Rodrigues, (2011), 'The Indian Parliament: A Democracy at Work, NewDelhi: Oxford University Press.
- P. Mehta and N. Jayal (2010) (eds.) 'The Oxford Companion to Politics in India', New Delhi, Oxford University Press.

+3 FIRST YEAR SECOND SEMESTER**Core Paper - 3****POLITICAL THEORY-CONCEPTS AND DEBATES**

Time : 3 Hrs.

Credit : 06

End Semester Theory : 80 Marks

Mid Semester Theory : 20 Marks

Introduction:

This course is divided into two sections. Section A helps the student familiarize with the basic normative concepts of political theory. Each concept is related to a crucial political issue that requires analysis with the aid of our conceptual understanding. This exercise is designed to encourage critical and reflective analysis and interpretation of social practices through the relevant conceptual toolkit. Section B introduces the students to the important debates in the subject. These debates prompt us to consider that there is no settled way of understanding concepts and that in the light of new insights and challenges, besides newer ways of perceiving and interpreting the world around us, we inaugurate new modes of Political debates.

Course Objectives:

- To introduce certain key aspects of conceptual analysis in political theory
- To introduce the skills required to engage in debates surrounding the application of the concepts.

UNIT-I: Importance of Freedom

- (i) Negative Freedom and Positive Freedom, Freedom of belief, expression and dissent
- (ii) Equality: Meaning and Types, Egalitarianism: Social Exclusion & Affirmative action

UNIT-II: Indispensability of Justice

- (i) Justice: Meaning and Types
- (ii) Procedural, Distributive and Global Justice.

UNIT-III: The Universality of Rights

- (i) Rights: Natural, Moral and Legal
- (ii) Three Generations of Rights

UNIT-IV: Major debates

- (i) Political obligation: Grounds
- (ii) Cultural Relativism and Multiculturalism.

Text Book

- Verma, S. P. (1996) 'Modern Political Theory', Vikash Publishing, 3rd Reprint, New Delhi.
- Vinod, M.J and Deshpande, Meena (2013) Contemporary Political Theory, PHI, New Delhi
- Ramaswamy, Sushila (2010), 'Political Theory: Ideas and Concepts', PHI Learning, NewDelhi
- Bellamy, R. (1993), (ed.) Theories and Concepts of Politics. New York: Manchester University Press.
- Marsh, D. and Stoker, G. (eds.) 'Theory and Methods in Political Science'. London, Macmillan.
- Heywood, Andrew (2016) (Reprint), 'Political Theory: An Introduction', Palgrave, UK.

+3 FIRST YEAR SECOND SEMESTER

Core Paper - 4

POLITICAL PROCESS IN INDIA

Time : 3 Hrs.

Credit : 06

End Semester Theory : 80 Marks

Mid Semester Theory : 20 Marks

Introduction:

Actual politics in India diverges quite significantly from constitutional legal rules. An understanding of the political process thus calls for a different mode of analysis - that offered by political sociology.

Course Objectives:

This course maps the working of 'modern' institutions, premised on the existence of an individuated society, in a context marked by communitarian solidarities, and their mutual transformation thereby. It also familiarizes students with the working of the Indian state, paying attention to the contradictory dynamics of modern state power.

UNIT-I: Indian party system

- (i) Party System in India: Features and Trends
- (ii) Voting Behaviour and Its determinants: Caste, Class, Gender and Religion.
- (iii) Election Commission: Constitution and Functions, Electoral Reforms

UNIT-II: Regionalism, Religion and Politics

- (i) Regionalism: Causes and its trends,
- (ii) Secularism and Communalism: Debates

UNIT-III: Caste and Politics

- i) Caste and Politics: Politicisation of Caste
- ii) Affirmative Action: Policies, Women, Caste and Marginalized Class

UNIT-IV: The Changing Nature of the India State

- (i) Developmental and Welfare Dimensions
- (ii) Coercive Dimension

Text books

- Kaviraj, Sudipta(2009) 'Politics in India', Oxford University Press, New Delhi
- Kohli, Atul (2004) (ed.) 'The Success of India's Democracy', New Delhi, CambridgeUniversity Press.
- Kothari,R (1970) 'Caste in Indian Politics', Delhi, Orient Longman.
- M. John, (ed) (2008) 'Women in India: A Reader, Penguin , India
- P. Brass, (1999) 'The Politics of India since Independence, New Delhi, Cambridge UniversityPress and Foundation Books.
- P. Mehta and N. Jayal (2010) (eds.) 'The Oxford Companion to Politics in India', New Delhi,Oxford University Press.
- Z. Hasan (2002) (ed.) 'Parties and Party Politics in India', New Delhi: Oxford UniversityPress.
- Z. Hasan, E. Sridharan and R. Sudarshan (2002) (eds.) 'India's Living Constitution: Ideas,Practices, Controversies', New Delhi, Permanent Black.

+3 SECOND YEAR THIRD SEMESTER**Core Paper - 5****INTRODUCTION TO COMPARATIVE GOVERNMENT AND POLITICS**

Time : 3 Hrs.

Crdit : 06

End Semester Theory : 80 Marks

Mid Semester Theory : 20 Marks

Introduction:

This is a foundational course in comparative politics. The purpose is to familiarizestudents with the basic concepts and approaches to the study of comparative politics. Morespecifically the course will focus on examining politics in a historical framework while engaging withvarious themes of comparative analysis in developed and developing countries.

Course Objectives:

- To understand the difference between the Comparative Politics and Comparative Government.
- To understand nature, scope, and approaches of Comparative Politics.
- To understand relevant theories of Comparative Politics.
- To understand Comparative Political System.

UNIT-1: Understanding Comparative Politics

- (i) Meaning, Nature, scope and Evolution
- (ii) Approaches to the study of Comparative Politics

UNIT-II: Historical context of modern government

- (i) Capitalism: meaning and development
- (ii) Globalization: Features & impact

UNIT-III: Historical context of Modern Government- II

- (i) Socialism: Meaning, Types and its growth
- (ii) Rise and Decline of Communism as a Ruling Ideology
- (iii) Colonialism and decolonization: meaning, context, forms of colonialism

UNIT-IV: Themes of Comparative Politics

- (i) A comparative study of Governments of USA & China
- (ii) US: President, Congress, Supreme Court
- (iii) China: People's Congress, National Assembly, Role of Communist Party of China

Text books:

- Bhagwan, Vishnoo et al (2012) 'World Constitutions', Sterling Publishers , New Delhi
 - Chilcote, Ronald (1994) 'Theories of Comparative Politics: The Search for a Paradigm Reconsidered', Westview Press, Boulder.
 - G. Ritzer, (2002) 'Globalization: A Basic Text'. London, Wiley-Blackwell.
 - Huntington, Samuel, (1968) 'Political Order in Changing Societies', Yale University Press, New Haven.
 - Kapur, A.C and K.K. Mishra (2010) 'Select Constitutions', S. Chand, New Delhi
 - Suresh. R(2010), 'Economy and Society : Evolution of Capitalism', Sage , New Delhi
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+3 SECOND YEAR THIRD SEMESTER

Core Paper - 6

INTRODUCTION TO PUBLIC ADMINISTRATION

Time : 3 Hrs.

Credit : 06

End Semester Theory : 80 Marks

Mid Semester Theory : 20 Marks

Introduction:

The course provides an introduction to the discipline of public administration. This paper encompasses public administration in its historical context with an emphasis on the various classical and contemporary administrative theories. The course also explores some of the recent trends, including feminism and ecological conservation and how the call for greater democratization is restructuring public administration. The course will also attempt to provide the students a comprehensive understanding on contemporary administrative developments.

Course Objectives:

- The student will be able to understand an overview of the discipline and how it is different from private administration.
- The student will be introduced to the evolution of the discipline, its changing contours through a study of the different theories, ranging from the classical, neo-classical and contemporary theories.
- The students will be better equipped to analyse processes of leadership and conflict management that have become increasingly significant in contemporary administration.
- The student learns about major contemporary approaches in public administration.

UNIT-1 : Public Administration as a Discipline

- (i) Meaning, Scope and Significance of the Discipline, Public and Private Administration
- (ii) Evolution of Public Administration

UNIT-II: Theoretical Perspectives -Classical Theories

- (i) Scientific management (F. W. Taylor), Ideal-type bureaucracy (Max Weber)
- (ii) Administrative Management (Gullick, Urwick and Fayol)

UNIT-III: Neo-Classical and Contemporary Theories

- (i) Human Relations theory (Elton Mayo), Rational decision-making (Herbert Simon)
- (ii) Ecological approach (Fred Riggs), Innovation and Entrepreneurship (Peter Drucker)

UNIT-IV: Public Policy and Major Approaches in Public Administration

- (i) Public Policy-Concept and approaches, Formulation, implementation and evaluation
- (ii) New Public Administration, New Public Management, New Public Service Approach
- (iii) Good Governance, Feminist Perspectives in Governance

Readings

- B. Chakrabarty and M. Bhattacharya (eds), 'Administrative Change and Innovation: A Reader', New Delhi, Oxford University Press.
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- Basu, Rumki, (2014) 'Public Administration: Concepts and Theories', Sterling Publishers, New Delhi
- D. Ravindra Prasad, Y. Pardhasaradhi, V. S. Prasad and P. Satyrnarayana, (2010) (eds.) 'Administrative Thinkers', Sterling Publishers.
- J. Shafritz, and A. Hyde, (2004) (eds.) 'Classics of Public Administration', 5th Edition. Belmont, Wadsworth.
- M. Bhattacharya, (2008) 'New Horizons of Public Administration', 5th Revised Edition. New Delhi, Jawahar Publishers.
- M. Bhattacharya, (2011) 'New Horizons of Public Administration', New Delhi: Jawahar Publishers.
- M. Bhattacharya, (2012) 'Restructuring Public Administration: A New Look', New Delhi, Jawahar Publishers,
- N. Henry, (2013) 'Public Administration and Public Affairs', 12th edition. New Jersey, Pearson,
- Shafritz, J. and Hyde, A. , (1997) (eds.) 'Classics of Public Administration', 4th Edition. ForthWorth, Hartcourt Brace, TX.

+3 SECOND YEAR THIRD SEMESTER

Core Paper - 7

PERSPECTIVES ON INTERNATIONAL RELATIONS

Time : 3 Hrs.

Credit : 06

End Semester Theory : 80 Marks

Mid Semester Theory : 20 Marks

Introduction:

This paper seeks to equip students with the basic intellectual tools for understanding International Relations. It introduces students to some of the most important theoretical approaches for studying international relations. The course begins by historically contextualizing the evolution of the international state system before discussing the agency-structure problem through the levels-of-analysis approach. After having set the parameters of the debate, students are introduced to different theories in International Relations. It provides a fairly comprehensive overview of the major political developments and events starting from the twentieth century. Students are expected to learn about the key milestones in world history and equip them with the tools to understand and analyze the same from different perspectives. A key objective of the course is to make students aware of the implicit Euro-centricism of International Relations by highlighting certain specific perspectives from the Global South.

Course Objectives:

- To enable students to understand the different perspectives and historical background in the study of International Relations.
 - Unit wise the course starts with evaluation of international state system and level of analysis approach to contextualize state at the heart of International Relation.
 - Hence, mainstream theories are considered in the next part. However, the alternate discourses are also equally emphasized in the course, focusing on critical theory and
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presence of these theoretical explanations is examined in the broader context of World Wars, Cold War and Post-Cold War World.

UNIT-I: Studying International Relations

- (i) International Relations: Meaning, Scope and Evolution, Emergence of International State System
- (ii) National Interest-Key Determinant of International Relations
- (iii) Power-Cornerstone of International Relations

UNIT-II: Theoretical Perspectives

- (i) Classical Realism & Neo-Realism, Liberalism & Neo-liberalism
- (ii) Marxist Approaches, Feminist Perspectives, Euro-centricism & Perspective from the Global South

UNIT-III: An Overview of Twentieth Century IR History-I

- (i) World War I: Causes & Consequences, significance of Bolshevik Revolution
- (ii) Rise of Fascism / Nazism, World war II-Causes & Consequences

UNIT-IV: An Overview of Twentieth Century IR -II

- (i) Cold War Evolution & Different Phases (4 Lectures) Disintegration of USSR
- (ii) Emergence of the Third World, End of the Cold War

Text books

- Basu, Rumki (2012) (ed.) 'International Politics: Concepts, Theories and Issues', New Delhi.
 - Baylis & S. Smith (2002) (eds.), 'The Globalization of World Politics', Oxford University Press, UK, 4th edition, 2007 W.Bello, Deglobalization, Zed Books, London.
 - M. Nicholson, (2002) 'International Relations: A Concise Introduction', New York, Palgrave.
 - P. Viotti and M. Kauppi, (2007) 'International Relations and World Politics: Security, Economy, Identity', Pearson Education.
 - R. Jackson and G. Sorensen, (2007) 'Introduction to International Relations: Theories and Approaches', 3rd Edition, Oxford, Oxford University Press.
 - S. Joshua. Goldstein and J. Pevehouse, (2007) 'International Relations', New York, Pearson Longman.
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+3 SECOND YEAR FOURTH SEMESTER

Core Paper - 8

POLITICAL PROCESSES AND INSTITUTIONS IN COMPARATIVE PERSPECTIVE

Time : 3 Hrs.
Credit : 06

End Semester Theory : 80 Marks
Mid Semester Theory : 20 Marks

Introduction:

In this course students will be trained in the application of comparative methods to the study of politics. The course is comparative in both what we study and how we study. In the process the course aims to introduce undergraduate students to some of the range of issues, literature, and methods that cover comparative political.

Course Objectives:

- To understand, comprehend and analyze the complex nature and functioning of the political systems, political institutions and corresponding issues to these both in a country specific case of India and cross-country perspectives.
- To demonstrate critical thinking about key issues of political system of different forms, political process and public policy.
- To use the contents and sub-units of the course as yardsticks for comparing these political systems and processes

UNIT-I: Approaches to Studying Comparative Politics

- (i) Political Culture –Meaning, Types &relevance.
- (ii) New Institutionalism –Meaning, Background, Significance

UNIT-II: Election & Party System

- (i) Definition and procedures: Types of election system (First Past the Post, Proportional Representation, Mixed Representation)
- (ii) Party System -Evolution, Theories and types

UNIT-III: Nation-state

- (i) Nation-state; Meaning and Evolution in West Europe
- (ii) Nation and State; Debates in Post-colonial contexts

UNIT-IV: Democratization in Post- colonial societies

- (i) Democratization in Post-authoritarian countries and in Post-communist countries
- (ii) Federalism: Meaning and Features, Federation & Confederation: Debates around territorial division of power.

Text Books

- A. Heywood, (2002) 'Politics', New York, Palgrave.
 - J. Bara and M. Pennington, (eds.) Comparative politics. New Delhi: Sage Publications.
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- J. Bara and Pennington. (2009) (eds.) 'Comparative Politics: Explaining Democratic System' Sage Publications, New Delhi.
- J. Ishiyama, and M. Breuning, (2011) (eds) '21st Century Political Science: A Reference Book', Los Angeles, Sage Publications.
- M. Lichback and A. Zuckerman, (eds.) 'Comparative Political: Rationality, Culture, and Structure'. Cambridge, Cambridge University Press.

+3 SECOND YEAR FOURTH SEMESTER

Core Paper - 9

PUBLIC POLICY AND ADMINISTRATION IN INDIA

Time : 3 Hrs.
Crdit : 06

End Semester Theory : 80 Marks
Mid Semester Theory : 20 Marks

Introduction:

The paper seeks to provide an introduction to the interface between public policy and administration in India. The essence of public policy lies in its effectiveness in translating the governing philosophy into programs and policies and making it a part of the community living. It deals with issues of decentralization, financial management, citizens and administration and social welfare from a non-western perspective.

Course Objectives:

- To provide a theoretical and practical understanding of the concepts and methods that can be employed in the analysis of public policy.
- To understand policy as well as understand politics as it is shaped by economic changes.
- The course will be useful for students who seek an integrative link to their understanding of political science, economic theory and the practical world of development and social change.

UNIT-I: Public Policy

- Definition, characteristics and models
- Public Policy Process in India

UNIT-II: Decentralization

- Meaning, significance, types and approaches to decentralization.
- Local Self Governance: Rural and Urban

UNIT-III: Budget and Social Welfare Administration

- Concept and Significance of Budget, Budget cycle in India, Types of Budgeting
- Concept and Approaches of Social Welfare.
- Social Welfare Policies:
 - Education:** Right to Education,
 - Health:** National Health Mission,

- (c) **Food:** Right to Food Security,
- (d) **Employment:** MNREGA

UNIT-I V: Citizen and Administration Interface

- (i) Public Service Delivery System;
- (ii) Redressal of Public Grievances: RTI, Lokpal, Citizens' Charter and e-Governance

Text books:

- Basu Rumki (2015) 'Public Administration in India Mandates, Performance and Future Perspectives', New Delhi, Sterling Publishers
- Bidyut Chakrabarty, (2007) 'Reinventing Public Administration: The Indian Experience', Orient Longman,
- Henry, N. (1999) 'Public Administration and Public Affairs', New Jersey, Prentice Hall
- Jean Dreze and Amartya Sen, (1995) 'India, Economic Development and Social Opportunity', Oxford, Oxford University Press.
- R.B. Denhardt and J.V. Denhardt, (2009) 'Public Administration', New Delhi, Brooks/Cole
- Satyajit Singh and Pradeep K. Sharma (2007) (eds.) 'Decentralization: Institutions and Politics in Rural India', Oxford University Press, New Delhi.
- Singh, S. and Sharma, P. (2007) (eds.) 'Decentralization: Institutions and Politics in Rural India'. New Delhi, Oxford University Press.
- Vasu Deva, (2005) 'E-Governance In India: A Reality', Commonwealth Publishers.
- Vijaya Kumar, (2012) 'Right to Education Act 2009: Its Implementation as to Social Development in India', Delhi: Akansha Publishers.

+3 SECOND YEAR FOURTH SEMESTER

Core Paper - 10 GLOBAL POLITICS

Time : 3 Hrs.
Credit : 06

End Semester Theory : 80 Marks
Mid Semester Theory : 20 Marks

Introduction:

This course introduces students to the key debates on the meaning and nature of globalization by addressing its political, economic, social, cultural and technological dimensions. In keeping with the most important debates within the globalization discourse, it imparts an understanding of the working of the world economy, its anchors and resistances offered by global social movements while analyzing the changing nature of relationship between the state and transnational actors and networks. The course also offers insights into key contemporary global issues such as the proliferation of nuclear weapons, ecological issues, international terrorism, and human security before concluding with a debate on the phenomenon of global governance.

Course Objectives:

- This paper gives insights on globalisation: concepts and perspectives and contemporary global issues such as proliferation of nuclear weapons, ecology, international terrorism and human security etc.

UNIT-I: Globalization: Conceptions

- (i) Understanding Globalization and its Alternative Perspectives, Non-Proliferation Regimes
- (ii) Global Economy: Its significance & anchors of Global Political Economy: IMF, World Bank, WTO, TNCs

UNIT-II: Globalization: Perspectives

- (i) Political Debates on Sovereignty and Territoriality
- (ii) Cultural and Technological Dimension
- (iii) Global Resistances (Global Social Movements and NGOs)
- (iv) Ecological Issues: International Environmental Agreements, Climate Change

UNIT-III: Contemporary Global Issues-I

- (i) Proliferation of Nuclear Weapons
- (ii) International Terrorism: Non-State Actors and State Terrorism; Post 9/11 developments

UNIT-IV: Contemporary Global Issues-II

- (i) Migration & Human Security
- (ii) Global Shifts: Power and Governance

Text. Books

- G. Ritzer, (2010) 'Globalization: A Basic Text', Sussex: Wiley-Blackwell.
 - M. Strager, (2009) 'Globalization: A Very Short Introduction', London, Oxford University Press.
 - Heywood, (2011) 'Global Politics', New York, Palgrave-McMillan.
 - J. Baylis, S. Smith and P. Owens (2011) (eds.) 'Globalization of World Politics: An Introduction to International Relations', New York, Oxford University Press.
 - W. Ellwood, (2005) 'The No-nonsense Guide to Globalization', Jaipur, Rawat Publications.
 - D. Held and A. McGrew (2000) (eds.) 'The Global Trans-Formations Reader', Cambridge, Polity Press.
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+3 THIRD YEAR FIFTH SEMESTER

Core Paper - 11

WESTERN POLITICAL PHILOSOPHY

Time : 3 Hrs.

Credit : 06

End Semester Theory : 80 Marks

Mid Semester Theory : 20 Marks

Introduction:

This course goes back to Greek antiquity and familiarizes students with the manner in which the political questions were first posed. Machiavelli comes as an interlude inaugurating modern politics followed by Hobbes and Locke, Rousseau, Marx. This is a basic foundation course for students.

Course Objectives:

- This course goes back to Greek antiquity and familiarizes students with the manner in which the political questions were first posed.
- The course familiarize students to understand the evolution of various themes of political science like justice, democracy, state, power, state of nature, rights, sovereignty and liberty etc.

UNIT-I : Text and Interpretation: Antiquity

- (i) Plato -Justice, Communism, Ideal State
- (ii) Aristotle – State and Govt., Citizenship, Revolution

UNIT-II

- (i) Machiavelli – Child of Renaissance, State Craft, Ethics and Politics
- (ii) Hobbes – Social Contract, Sovereignty, Individualism and Absolutism

UNIT-III

- (i) Locke – Social Contract, Rights, Property and Consent, Liberalism
- (ii) Rousseau – Social Contract, General Will, Democracy and Individualism

UNIT-IV

- (i) J. S. Mill – Utilitarianism, and its Modification, Liberty, Representative Govt.
- (ii) Karl Marx – Dialectical Materialism, Historical materialism, Class War and State

Text Books

- C. Kukathas and G. Gaus, (eds.) 'Handbook of Political Theory', London, Sage Publications Ltd.
 - D. Boucher and P. Kelly (2009), (eds) 'Political Thinkers: From Socrates to the Present' Oxford, Oxford University Press.
 - J. Coleman, (2000) 'A History of Political Thought: From Ancient Greece to Early Christianity, Oxford, Blackwell Publishers.
 - Mukherjee, Subrato and Susheela Ramaswamy(2011) 'History of political Thought: Plato to Marx', PHI Publishers , New Delhi
-

- Okin, S. (1992), 'Women in Western Political Thought', Princeton, Princeton University Press.
- R. Kraut (1996) (ed.) 'The Cambridge Companion to Plato', Cambridge, Cambridge University Press.

+3 THIRD YEAR FIFTH SEMESTER

Core Paper - 12

INDIAN POLITICAL THOUGHT (ANCIENT AND MEDIEVAL)

Time : 3 Hrs.

Credit : 06

End Semester Theory : 80 Marks

Mid Semester Theory : 20 Marks

Introduction:

This course introduces the specific elements of Indian Political Thought spanning over two millennia. The basic focus of study is on individual thinkers whose ideas are however framed by specific themes. The course as a whole is meant to provide a sense of the broad streams of Indian thought while encouraging a specific knowledge of individual thinkers and texts. Selected extracts from some original texts are also given to discuss in class. The list of Reference books is meant for teachers as well as the more interested students.

Course Objectives:

- This paper speaks of the emergence and evolution of Indian political thought over different points of time, including traditional pre-colonial Indian political thought, Ved Vyasa and Manu, Kautilya, Barani and Aggannasutta, Kabir and Abul Faza.

UNIT-I: Traditions of Pre-colonial Indian Political Thought

(i) Brahmanic and Shramanic

(ii) Islamic and Syncretic.

UNIT-II : Ved Vyasa (Shantiparva) and Manu

(i) Ved Vyasa : Rajadharma

(ii) Manu : Social Laws

UNIT-III: Kautilya, Barani and Aggannasutta

(i) Kautilya: Theory of State, Foreign Policy, Role of King

(ii) Aggannasutta- Theory of Kingship

(iii) Barani: Ideal Polity

UNIT-IV :Kabir and Abul Fazal

(i) AbulFazal-Monarchy

(ii) Kabir: Syncretism

Text Books

- A. Appodoroy, (2002) 'Political Thought in India, Delhi, Khama Publication.
- A. B. M, (1976), 'The Foundation of Muslim Rule in India', Allahabad, Central Book Depot.

- Brown, (2003) 'The Verses of Vemana', Asian Educational Services, Delhi.
- Habib, Irfan.(1995) 'Essays in Indian History', New Delhi, Tulika Publications.
- Roy, Himanshu and Singh, M. (2017), 'Indian Political Thought: Themes and Thinker' Second Edition, New Delhi, Pearson.
- S. Saberwal, (2008) 'Spirals of Contention', New Delhi, Routledge, •Sharma, R. S (1991) 'Aspects of Political Ideas Institutions in Ancient India, Delhi, Motilal Banarsidas.
- T. Pantham, and K. Deutsch (1986) (eds.), Political Thought in Modern India, New Delhi, Sage Publications.
- Thapar, Romila, (1997) 'Ashok and the Decline of the Mauryas, ' New York, Oxford University Press.
- V. Mehta, (1992) 'Foundations of Indian Political Thought, New Delhi, Manohar Publications.
- V.P. Varma, (1974) 'Studies in Hindu Political Thought and Its Metaphysical Foundations', New Delhi, Motilal Banarsidas.

+3 THIRD YEAR FIFTH SEMESTER

DSE -1

INTRODUCTION TO HUMAN RIGHTS

Time : 3 Hrs.

Credit : 06

End Semester Theory : 80 Marks

Mid Semester Theory : 20 Marks

Introduction:

This course attempts to build an understanding of human rights among students through a study of specific issues in a comparative perspective. It is important for students to see how debates on human rights have taken distinct forms historically and in the contemporary world. The course seeks to anchor all issues in the Indian context, and pulls out another country to form a broader comparative frame.

Course Objectives:

- To enable the students to understand the issues concerning the rights of citizens in general and the marginalized groups in particular.
- Assess the institutional and policy measures which have been taken in response to the demands of various movements.
- To understand the conceptual dimensions, international trends and the Indian experience from the contents of the course.

UNIT-I:

- (i) Understanding Human Right
- (ii) Three Generations of Rights

UNIT-II

- (i) Universal Declaration of Human Rights

UNIT-III

- (i) Rights in National Constitutions: South Africa and India
-

UNIT-IV

- (i) International Refugee Law,
- (ii) International Humanitarian Law

Text Books

- Alston Philip (1995), 'The United Nations and Human Rights-A Critical Appraisal', Oxford, Clarendon.
- Baxi, Upendra (1995) (ed.), 'The Right to be Human', Delhi, Lancer,
- Beetham, David (1987) (ed.), 'Politics and Human Rights', Oxford, Blackwell.
- Desai, A R. (1986)(ed), 'Violations of Democratic Rights in India', Bombay, PopularPrakashan.
- Evans, Tony (2001), 'The Politics of Human Rights: A Global Perspective', London, PlutoPress.
- Hargopal. G.(1999) 'Political Economy of Human Rights', Hyderabad, Himalaya.
- J. Hoffman and P. Graham, (2006) 'Introduction to Political Theory', Delhi, Pearson.

+3 THIRD YEAR FIFTH SEMESTER**DSE - 2****DEVELOPMENT PROCESS AND SOCIAL MOVEMENTS IN CONTEMPORARY INDIA**

Time : 3 Hrs.
Crdit : 06

End Semester Theory : 80 Marks
Mid Semester Theory : 20 Marks

(Project)

Introduction:

Under the influence of globalization, development processes in India have undergone transformation to produce spaces of advantage and disadvantage and new geographies of power. The high social reproduction costs and dispossession of vulnerable social groups involved in such a development strategy condition new theatres of contestation and struggles. A variety of protest movements emerged to interrogate and challenge this development paradigm that evidently also weakens the democratic space so very vital to the formulation of critical consensus. This course proposes to introduce students to the conditions, contexts and forms of political contestation over development paradigms and their bearing on the retrieval of democratic voice of citizens.

Course Objectives:

- To introduce students to the conditions, contexts and forms of political contestation over development paradigms and their bearing on the retrieval of democratic voice of citizens.

UNIT-I: Development Process since Independence

- (i) Welfare State, Development and the role of Planning commission
 - (ii) Development in the era of Liberalization and Reforms
-

UNIT-II: Development Strategy and its Impact on the Social Structure

- (i) Industrial Development and its impact on organized and unorganized labour
- (ii) Agricultural Development and Agrarian Crisis, Land Reforms and Green Revolution,

UNIT-III: Social Movements

- (i) Social Movements: Meaning and Approaches, New Social Movements
- (ii) Women's Movement, Environmental Movements

UNIT-IV: Social Movements

- (i) Dalit Movement, Tribal Movement,
- (ii) Left wing Extremism: Issues and Challenges

Text Books

- A. Desai, (1986) (ed.), 'Agrarian Struggles in India After Independence', Delhi, Oxford University Press
- A. F. Frankel, (2005) 'India's Political Economy (1947-2004): The Gradual Revolution', Delhi, Oxford University Press.
- B. Nayar, (2007) (ed.), 'Globalization and Politics in India', Delhi, Oxford University Press.
- G. Omvedt, (1983) 'Reinventing Revolution, New Social Movements and the Socialist Tradition in India', New York, Sharpe.
- G. Rath, (2006) (ed.), 'Tribal development in India: The Contemporary Debate', New Delhi, Sage Publications.
- G. Shah, (2004) 'Social Movements in India: A Review of Literature', New Delhi, Sage Publications.
- G. Shah, (ed.), (2002) 'Social Movements and the State'. New Delhi, Sage Publications.
- R. Mukherji (2010) (ed.) 'India's Economic Transition: The Politics of Reforms', Delhi, Oxford University Press.
- S. Roy and K. Debal, (2004) 'Peasant Movements in Post-Colonial India: Dynamics of Mobilization and Identity', Delhi, Sage.

+3 THIRD YEAR SIXTH SEMESTER

Core Paper - 13

CONTEMPORARY POLITICAL PHILOSOPHY

Time : 3 Hrs.

Credit : 06

End Semester Theory : 80 Marks

Mid Semester Theory : 20 Marks

Introduction:

Philosophy and politics are closely intertwined. Students will be exposed to the manner in which the questions of politics have been posed in terms that have implications for larger questions of thought and existence.

Course Objectives:

- Political philosophies are introduced to the students with this subject, including those of Lenin, Mao Zedong, Antonio Gramsci, and John Rawls.
-

UNIT-I

Lenin – Revision of Marxism, Imperialism and Capitalism, Party and Revolution, Contribution

UNIT-II

Mao Zedong (Mao Tse Tung)- Cultural Revolution, Theory of Contradiction, New Democracy, Revolution, Contribution

UNIT-III

Antonio Gramsci– Cultural Hegemony, State and Civil Society, Concept of Organic Intellectual, Notion of Subaltern, Contribution

UNIT-IV

John Rawls– Theory of Justice, Political Liberalism, Veil of Ignorance, Contribution

Reading List

- B. Nelson, (2008) 'Western Political Thought'. New York, Pearson Longman.
- D. Boucher, and P. Kelly, (2003) (eds.) 'Political Thinkers: From Socrates to the Present'. New York, Oxford University Press.
- Gramsci, Antonio(1996), 'Selections from the Prison Notebooks', Orient Longman, Hyderabad
- Hacker, A. (1961), 'Political Theory: Philosophy, Ideology, Science', Macmillan, New York.
- Mukherjee, Subrato and Susheela Ramaswamy(2011) 'History of political Thought: Platoto Marx', PHI Publishers , New Delhi
- Rawls, John (2011), 'A Theory of Justice', Universal Law Publishing Co., New Delhi.
- Sabine, George, H. (1973). 'A History of Political Theory', Oxford and I.B.H. Publishing, New Delhi.
- Wayper. C.L (1989), 'Political Thought', B.I. Publications, Bombay.

+3 THIRD YEAR SIXTH SEMESTER

Core Paper - 14

MODERN INDIAN POLITICAL THOUGHT

Time : 3 Hrs.

Credit : 06

End Semester Theory : 80 Marks

Mid Semester Theory : 20 Marks

Introduction:

Based on the study of individual thinkers, the course introduces a wide span of thinkers and themes that defines the modernity of Indian political thought. The objective is to study general themes that have been produced by thinkers from varied social and temporal contexts. Selected extracts from original texts are also given to discuss in the class. The list of Reference books is meant for teachers as well as the more interested students.

Course Objectives:

- This paper has insights into modern Indian political thought. It includes ideas such as Ram Mohan Roy's liberalism to JP Narayan's total revolution and everything in between.

UNIT-I: Introduction

- (i) Rammohan Roy: Rights, Reform Movement, Liberalism
- (ii) Pandita Ramabai: Gender, critique of orthodoxy
- (iii) Vivekananda: Ideal Society, Humanism, Nationalism

UNIT-II: Gandhi & Ambedkar

- (i) Gandhi: Swaraj, Swadeshi
- (ii) Ambedkar: Social Justice

UNIT-III : Tagore&Savarkar

- (i) Tagore Critique of Nationalism
- (ii) Savarkar: Hindutwa-A critical Assessment

UNIT-IV: Nehru,Lohia and J.P. Narayan

- (i) Nehru: Secularism, Socialism
- (ii) Lohia: Socialism,
J.P.Narayan: Total Revolution

Text books:

- A. Sen, (2003) 'Swami Vivekananda', Delhi, Oxford University Press.
 - D. Dalton, (1982) 'Indian Idea of Freedom: Political Thought of Swami Vivekananda, Aurobindo Ghose, Rabindranath Tagore and Mahatma Gandhi', Academic Press, Gurgaon.
 - G. Omvedt, (2008) 'Ramabai: Women in the Kingdom of God', in Seeking Begumpura: The Social Vision of Anti Caste Intellectuals, New Delhi, Navayana.
 - M. Kosambi (2000) (ed.), 'Pandita Ramabai Through her Own Words: Selected Works', New Delhi, Oxford University Press.
 - Raghuramaraju, (2007) 'Debates in Indian Philosophy: Classical, Colonial, and Contemporary', Delhi, Oxford University Press.
 - S. Sarkar, (1985) 'A Critique on Colonial India', Calcutta, Papyrus.
 - Sh. Kapila (2010) (ed.), 'An intellectual History for India', New Delhi: Cambridge University Press.
 - T. Pantham and K. Deutsch (1986), (eds.) 'Political Thought in Modern India', New Delhi, Sage.
 - V. Mehta and T. Pantham (eds.), (2006) 'A Thematic Introduction to Political Ideas in Modern India: Thematic Explorations, History of Science, Philosophy and Culture in Indian civilization' Vol. 10, Part: 7, New Delhi, Sage Publication.
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+3 THIRD YEAR SIXTH SEMESTER

DSE - 3

INDIA'S FOREIGN POLICY IN A CHANGING WORLD

Time : 3 Hrs.

Credit : 06

End Semester Theory : 80 Marks

Mid Semester Theory : 20 Marks

Introduction:

This course's objective is to teach students the domestic sources and the structural constraints on the genesis, evolution and practice of India's foreign policy. The endeavour is to highlight integral linkages between the 'domestic' and the 'international' aspects of India's foreign policy by stressing on the shifts in its domestic identity and the corresponding changes at the international level. Students will be instructed on India's shifting identity as a postcolonial state to the contemporary dynamics of India attempting to carve its identity as an 'aspiring power'. India's evolving relations with the superpowers during the Cold War and after, bargaining strategy and positioning in international politics facilitate an understanding of the changing positions and development of India's role as a global player since independence.

Course Objectives:

- This paper describes the bases, determinants, post-colonial perspectives of India's foreign policy. It further explains India's relations with the USA, Russia, China and South Asia and India's position as a global power.

UNIT-I : India's Foreign Policy in a changing world

- (i) India's Foreign Policy: Major bases and determinants
- (ii) India's Foreign Policy: Postcolonial Perspective

UNIT-II : India's Relation with USA & Russia

- (i) India's Relations with the USA
- (ii) India's Relation with USSR/Russia,

UNIT-III : India-China Relations, India and South Asia

- (i) India-China Relations
- (ii) India and South Asia: SAARC, Look East Policy, Act East Policy

UNIT-IV : India and Contemporary World

- (i) India as an emerging Global Power, Myth and Reality
- (ii) India in the Contemporary World

Reading List

- Appadorai, A. and M.S. Rajan (1988), 'India's Foreign Policy and Relations', New Delhi, South Asian Publishers Pvt. Ltd.
 - Bahadur, Kalim (ed.) (1986), 'South Asia in transition: Conflicts and Tensions', New Delhi, Patriots.
 - Bandyopadhyaya, J. (2006), 'The making of India's Foreign Policy', New Delhi, Allied Publishers Pvt. Ltd.
 - Banerjee, A.K. (ed.) (1998), 'Security issues in South Asia: Domestic and External Sources of Threats to Security', Calcutta, Minerva.
 - Bidwai, Praful and Achin Vanaik (eds.) (1999), 'South Asia on a Short Fuse: Nuclear Politics and the Future of Global Disarmament', New Delhi, Oxford University Press.
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- D. Scott (2011)(ed.), 'Handbook of India's International Relations', London, Routledge.
- Dutt, V.P.(2007), 'India's Foreign Policy Since Independence', New Delhi, National BookTrust.
- Tellis and S. Mirski (2013) (eds.), 'Crux of Asia: China, India, and the Emerging GlobalOrder', Carnegie Endowment for International Peace, Washington.

+3 THIRD YEAR SIXTH SEMESTER

DSE - 4

DISSERTATION / RESEARCH PROJECT

Time : 3 Hrs.

End Semester Theory : 80 Marks

Crdit : 06

Mid Semester Theory : 20 Marks

Project Paper includes the topic/titles under Development Process and Social Movements in Contemporary India (DSE-II) students may be encouraged to highlight Odisha – Specific problems and solutions.

Introduction:

The research experience of students is greatly enriched by early exposure to conducting research. There are numerous benefits of undergraduate students who get involved in research. They are better off in understanding published works, determine an area of interest, can discover their passion for research and may start their career as a researcher. Further students will be able to develop ability for scientific inquiry and critical thinking, ability in the knowledge base and communication. This course is included to promote above mentioned abilities among the students.

Course Objectives:

- To help students to learn how to develop scientific research designs in the study of public administration.
- To guide students to understand the previous research in their field of interest and review them to arrive at a research problem
- To encourage the students to learn ways to describe and evaluate public policy implementation.
- To help students understand the logic of hypothesis testing in both quantitative and qualitative research.
- To make students to learn the methods of writing a research report.

Unit I

A student is required to carry out a project on an issue of interest to him / her under the guidance and supervision of a teacher. In order to do so s/he must have the knowledge in research methodology and of steps in planning and conducting a research. The supervisors may help the students to go on field study / study tour relevant to their work. Thirty hours of class may be arranged in the routine to help students understand research methodology, and planning, conduction and reporting on the research. An external examiner with the supervisor as the internal examiner will evaluate the research project on the basis of scientific methodology in writing the report, and presentation skill and performance in the viva.

- **Format**

- **Abstract** – 150 words including problem, method and results.
-

- **Introduction** –Theoretical considerations leading to the logic and rationale for the present research
- **Review**- Explaining current knowledge including substantive findings and theoretical and methodological contributions to the topic, objectives and hypotheses of the present research
- **Method** –Design, Sample, Methods of data collection, Procedure
- **Results**- Quantitative analysis of group data— (Raw data should not be attached in Appendix) Graphical representation of data wherever required. Qualitative analysis wherever done should indicate the method of qualitative analysis.
- **Discussion**
 - **References (APA Style) & Appendices**
Project should be in Soft binding. It should be typed in Times New Roman 14 letter size with 1.5 spacing on one side of the paper. Total text should not exceed 50 pages (References & Appendices extra).
 - Two copies of the project should be submitted to the College.
 - **Project - American Psychological Association (APA) – Publication Manual 2006 to be followed for project writing**

Mark distribution for dissertation / Research project

Identification of problem	Review of Literature	Methodology	Analysis	Findings	Viva-voce	Total
10	10	10	25	20	25	100
Broad areas identified for Project:						

Social Movements: Environment, Women, Dalit, Peasant, Social Development, Political Development in Odisha, Political Socialization, Political Participation, Political Modernization and Communication, Decentralized democracy: Rural and Urban Local Self Governance, Functionary of Gram Sabha, Empowerment of Women and other marginals in PRIs, Development, Displacement, Rehabilitation, Resettlement in Odisha, Role of NGOs in Development, Regional Development and Regional Imbalances, Implementation of ORTPS- 2012, RTE-2009, Food Security Act, 2013, FRA, 2007.

+3 SECOND YEAR THIRD SEMESTER

GE - 3

GANDHI AND THE CONTEMPORARY WORLD

Time : 3 Hrs.

Credit : 06

End Semester Theory : 80 Marks

Mid Semester Theory : 20 Marks

Introduction:

Locating Gandhi in a global frame, the course seeks to elaborate Gandhian thought and examine its practical implications. It will introduce students to key instances of Gandhi's continuing influence right up to the contemporary period and enable them to critically evaluate his legacy.

Course Objectives:

- This elective paper has key instances of Gandhi and his influence, his initiatives and legacy, for example, Satyagraha, Swaraj etc.

UNIT-I

Theories: Satyagraha, Ahimsa

UNIT-II

Swaraj, Swadeshi

UNIT-III

Relevance Gandhi: Gandhi & Environment, Gandhi & Women, Gandhi & Social Harmony

UNIT-IV

Gandhi & Global Peace: Gandhian Philosophy in Contemporary World

Text Books

- B. C. Smith (2007), 'Good Governance and Development', Palgrave.
- B. Chakrabarty and M. Bhattacharya, (1998) (eds.) 'The Governance Discourse'. New Delhi, Oxford University Press.
- B. Nayar (1995) (ed.), 'Globalization and Politics in India', Delhi, Oxford University Press.
- Neera Chandhoke, (1995) 'State and Civil Society Explorations In Political Theory', Sage Publishers.
- Panda, Smita Mishra (2008), 'Engendering Governance Institutions: State, Market and Civil Society', Sage Publications.
- Surendra Munshi and Biju Paul Abraham (2004) (eds.), 'Good Governance, Democratic Societies and Globalisation', Sage.
- United Nation Development Programme, (1997) 'Reconceptualising Governance', New York.
- World Bank Report, (1992) 'Governance and Development'.

+3 SECOND YEAR FOURTH SEMESTER

GE - 4

UNITED NATIONS AND GLOBAL CONFLICTS

Time : 3 Hrs.

Credit : 06

End Semester Theory : 80 Marks

Mid Semester Theory : 20 Marks

Introduction:

This course provides a comprehensive introduction to the most important multilateral political organization in international relations. It provides a detailed account of the organizational structure and the political processes of the UN, and how it has evolved since 1945, especially in terms of dealing with the major global conflicts. The course imparts a critical understanding of the UN's performance until now and the imperatives as well as processes of reforming the organization in the context of the contemporary global system.

Course Objectives:

- This Elective paper has an overview of The United Nations, other organisations such as the Security Council, the International Court of Justice and major conflicts in global space since the second world war.

UNIT-I : The United Nations

- (i) An Historical Overview of the United Nations.
- (ii) Principles and Objectives

UNIT-II

- (i) Structures and Functions: General Assembly, Security Council, Economic and Social Council,.
- (ii) ii) The International Court of Justice, The Specialized Agencies (International Labour Organisation (IOL), United Nations Educational, Scientific and Cultural Organisation (UNESCO), World Health Organisation (WHO), UN Programmes Funds: United Nations Children's Fund (UNICEF), United Nations Development Programme (UNDP), United Nations High Commissioner for Refugees (UNHCR)
- ((iii) Peace Keeping, Peace Making and Enforcement, Peace Building and Responsibility to Protect
- (iv) iv) Millennium Development Goals.

UNIT-III Major Global Conflicts since the Second World war

- (i) Korean war - Causes and Effects
- (ii) Vietnam War - Causes and Effects
- (iii) Afghanistan War- Causes and Effects
- (iv) Balkans Serbia and Bosnia:-Causes and Effects

UNIT-IV

Assessment of the United Nations as an International Organisation: Imperatives of Reforms and the Process of Reforms

Text Books

- Basu, Rumki (2014) 'United Nations: Structure and Functions of an international organization', New Delhi, Sterling Publishers
 - Baylis, J. and Smith, S. (2008) (eds.) 'The Globalization of World Politics: An Introduction to International Relations'. 4th edn. Oxford, Oxford University Press.
 - Gareis, S.B. and Warwick, J. (2005) 'The United Nations: an introduction'. Basingstoke, Palgrave.
 - Goldstein, J. and Pevehouse, J.C. (2006) 'International Relations'. 6th edn. New Delhi, Pearson.
 - Saxena, J.N. (1986) et.al. 'United Nations for a Better Worl', New Delhi, Lancers.
 - White, B. et al. (eds.) (2005) 'Issues in World Politics', 3rd edn. New York, Macmillan.
 - Whittaker, D.J. (1997) 'United Nations in the Contemporary World', London, Routledge.
-

PSYCHOLOGY

Program Objective:

This Program provides at developing an understanding of growing discipline of psychology and promoting skillbased education. It facilitates self-discovery in the students and ensure their enthusiastic and effective participation in responding to the needs and challenges of society. The course intends to enable students in developing skills and competencies needed for meeting the challenges and needs of real world effectively.

Program Specific Outcome:

The students should possess the knowledge, skills, and attitudes during the end of the B.A. degree course. Students created keeping in mind the changing nature of the society, educational institutions and workplace and inculcate the required competencies in the students to understand and respond to the same effectively and efficiently.

+3 FIRST YEAR FIRST SEMESTER

Core Paper - 1 INTRODUCTORY PSYCHOLOGY

Time : 3 Hrs.

Credit : 04

End Semester Theory : 60 Marks

Mid Semester Theory : 15 Marks

Introduction:

The course is designed to provide the student a basic understanding of the psychology of human behavior. The students will be given exposure to concepts, terminology, principles, and theories that comprise an introductory course in psychology.

Learning Objectives :

- To help the students know the sources and processes of development of modern scientific psychology.
- To help the students develop a scientific temperament in studying and understanding human behavior.

Expected outcomes : Students will be able to

- Define the term psychology and demonstrate command of the basic terminology, concepts, and principles of the discipline.
 - Gain knowledge of scientific methodology—the variety of ways in which psychological data are gathered and evaluated / interpreted.
 - Identify and compare the major perspectives in psychology: Recognize how each approach views human thought and behavior.
 - Understand the physiological and biochemical links of human behavior.
-

UNIT-I : Introducing Psychology

- (i) Concept and definition of psychology, Roots of psychology, Psychology as a scientific discipline.
- (ii) Key Perspectives in Psychology- Behavioral, Cognitive, Humanistic, Psychodynamic, and Socio-cultural.

UNIT- II: Methods in Psychology

- (i) Natural Observation, Survey and Case Study - Nature, advantages and limitations.
- (ii) Experimental and Correlational methods -Nature, advantages and limitations.

UNIT –III: Biological Bases of Behavior

- (i) Structure and functions of the neurons, Communication within and between neurons, Chemical regulation of the endocrine glands.
- (ii) Structure and functions of the central nervous system and autonomic nervous system

UNIT-IV: States of Mind

- (i) Nature of consciousness; changes in consciousness- sleep-wake schedules
- (ii) Extended states of Consciousness - Hypnosis, Meditation and Hallucinations

PRACTICALCredit : **02****25 Marks**

- (i) **R.L. by Method of Limits:** To find out the R. L. of volar surface of the right arm of a subject by method of limits
- (ii) **D.L. by Method of Constant Stimuli:** To find out the D.L. for lifted weight of your subject by method of constant stimuli.

Text Books:

1. Baron, R. A. (2002). Psychology (5th Edition), New Delhi: Pearson Education.
2. Hilgard & Atkinson- Introduction to Psychology (2003) 14th Edition, Thomson Learning Inc.
3. Mohanty, N., Varadwaj, K. & Mishra, H.C. (2014). Explorations of Human Nature and Strength: Practicals in Psychology, DivyaPrakashani, Samantarapur, Bhubaneswar.

Reference Books:

1. Morgan, C.T., King, R.A., Weisz, J.R., & Schopler, J. (2008). Introduction to psychology (7th edition) Bombay: Tata-McGraw Hill.
 2. Feldman, R.S. (2004). Understanding Psychology (6th Edition), New Delhi, Tata-McGraw Hill.
-

+3 FIRST YEAR FIRST SEMESTER

Core Paper - 2

BASIC DEVELOPMENTAL PROCESSES

Time : 3 Hrs.

Credit: 04

End Semester Theory : 60 Marks

Mid-Semester Theory : 15 Marks

Introduction:

The course is designed to expose students to a basic understanding about the fundamental concerns of developmental psychology and provide examples of the following three dimensions of development: growth, differentiation, and orderly progression.

Learning Objectives:

- To help students gain some key ideas about human development and the perspectives to understand and explain such developments.
- To help the students understand the significance of prenatal period for human development.
- To help the students understand the developmental preparations of the childhood and the implications of developmental milestones for the normal human development.

Expected outcomes: Students will be able to

- Understand the nature, types, and principle of development.
- Understand the processes of formation of life and development during pre- and post-natal periods.
- Understand about the different aspects of preparation for future life.

UNIT-I : Basics of development

- (i) Meaning, nature, and types of development; Principles of development; Factors influencing development
- (ii) Perspectives of development- Psychoanalytic; Mechanistic; Organismic; Humanistic

UNIT- II: Life in formation

- (i) Fertilization, determination of sex, multiple birth; Prenatal development- germinal stage, embryonic stage, fetal stage; Factors influencing prenatal development. Impact of perinatal processes on development
- (ii) Physical and motor developments, Social and emotional developments during childhood.

UNIT –III: Life in preparation

- (i) Physical and motor developments, Social and emotional developments during adolescence.
- (ii) Piaget's stage of cognitive development; Kohlberg's stages of moral development

Unit- IV : Self and identity

- (i) Emergence of self; Structure of the self; Development of personal identity
 - (ii) Development of self-control; Development of gender differences and gender roles
-

PRACTICALCredit : **02****25** Marks

- (i) **Locus of Control:** To assess the Locus of Control of four college students by using Rotter's Locus of Control Scale.
- (ii) **Emotional Intelligence:** To measure the emotional intelligence of four college students by using the Schutte's Emotional Intelligence Scale.

Text Books:

- Sigelman, G.K. & Schaffer, D.R. (1995). Life-span Human Development, Brooks / Cole Publishing Co. Pacific Grove, California
- Berk, L. E. (2010). Child Development (8th Ed.). New Delhi: Prentice Hall.
- Mohanty, N., Varadwaj, K. & Mishra, H.C. (2014). Explorations of Human Nature and Strength: Practicals in Psychology, Divya Prakashani, Samantarapur, Bhubaneswar.

Reference Books:

- Papalia, Diane E., Sally Wendos Olds (2006). Human Development. 9th Edition. New Delhi: Tata McGraw Hill
- Baron, R. A. (2002). Psychology (5th Edition), New Delhi, Pearson Education.

+3 FIRST YEAR SECOND SEMESTER**Core Paper - 3****BASIC PSYCHOLOGICAL PROCESSES**Time : **3** Hrs.End Semester Theory : **60** MarksCredit: **04**Mid-Semester Theory : **15** Marks**Introduction:**

The course is designed to provide the student a basic understanding of the psychological processes from sensation to thought and communication. The student will be given exposure to the concepts, terminology, principles, and theories relating to each of the mental processes that constitute human psychology.

Learning Objectives:

- To help the students to understand the mental processes to begin with sensation and perception up to how it results in thoughts and communication.
- To help the students gather knowledge about the structural and functional dynamics of each of the mental processes and their interconnectedness.

Expected outcomes: Students will be able to

- Understand the bases of sensory actions and the processes of integration of sensory actions in creating and interpreting perceptual events.
 - Gain knowledge of the important processes and principles of human learning as well as the structural functional attributes of human memory to help conserve the learning outcomes.
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- Understand the structural and functional properties of language and the way it helps thought, communication, problem solving and decision making through development of concepts, ideas, images, and so on.

UNIT-I: Sensation and Perception

- (i) Basics of sensation- Sensory receptors (eye and ear), transduction, sensory thresholds, and sensory adaptation
- (ii) Nature of perceptual process- Figure and ground, Grouping (Gestalt laws), Perceptual constancies, and illusions, Perception of distance and depth.

UNIT- II: Learning and Memory

- (i) Nature and principles of classical conditioning, operant conditioning, and observational learning
- (ii) The Atkinson and Shiffrin Model of Memory; Types of Memory- episodic, semantic and procedural; Causes of forgetting- interference, repression, and amnesia

UNIT –III: Language and Communication

- (i) Properties and structure of language, Linguistic hierarchy, Language acquisition- predisposition, Nature of effective communication
- (ii) Stages of language development; critical period controversy; speech error and its implications

UNIT- IV: Thinking and Reasoning

- (i) Thinking process; concepts, categories and prototypes, Decision making and factors of influencing decision making.
- (ii) Inductive and deductive reasoning; Problem solving approaches; Steps in problem solving

PRACTICAL

Credit : **02**

25 Marks

- (i) **Learning Curve:** To demonstrate the Learning Curve as a function of Learning trials using Non-sense Syllables.
- (ii) **Serial Position Effect:** To demonstrate the serial position effect on memory in learning a list of nonsense syllables.

Text Books:

- Baron, R. A. (2002). Psychology (5th Edition), New Delhi, Pearson Education.
- Feldman, R.S. (2004). Understanding Psychology (6th Edition), New Delhi, Tata Mc. Graw Hill.
- Dash, U.N., Dash, A.S., Mishra, H.C., Nanda, G.K. & Jena, N. (2004). Practical Exercises in Psychology: Learning about Yourself and Others. Panchasila, Bhubaneswar
- Mohanty, N., Varadwaj, K. & Mishra, H.C. (2014). Explorations of Human Nature and Strength: Practicals in Psychology, Divya Prakashani, Samantarapur, Bhubaneswar.

Reference Books:

- Morgan, C.T., King, R.A., Weisz, J.R., & Schopler, J. (2008). Introduction to psychology (7th edition) Bombay: Tata-McGraw Hill.
-

+3 FIRST YEAR SECOND SEMESTER

Core Paper - 4

PROCESSES OF HUMAN EMPOWERMENT

Time : 3 Hrs.

Credit: 04

End Semester Theory : 60 Marks

Mid-Semester Theory : 15 Marks

Introduction:

Human empowerment is ultimately an individual condition of gaining the power to control and modulate changes in one's own life those are considered important to one's identity and adjustment. The purpose of the course is to introduce to the students the basics of human empowerment and how the empowerment processes are strengthened and improved.

Learning Objectives:

- To help students gain ideas about intelligence and personality as foundations of human empowerment.
- To make students understand how motivation and emotion are empowering processes to human development.
- To help students gain insight into human behavior as products of empowerment.

Expected outcomes: Students will be able to

- Know the structural components and functional dynamics of both intelligence and personality.
- Understand the significance of emotion and motivation in behavior management.
- Understand significant aspects of social behavior as resulting in happiness, well-being and personal growth.

UNIT-I: Basics of empowerment

- (i) Intelligence- Heredity, environment, and intelligence, Theories of Gardner, Stenberg, & PASS
- (ii) Measuring Intelligence: intelligence tests; Interpretation of test score, Cross-cultural issues in testing intelligence

UNIT- II: Sources of Power (1)

- (i) Personality- Freud's theory, and Social cognitive theory
- (ii) Personality-Trait and type approach, Biological and sociocultural determinants, Psychometric and projective assessment.

UNIT –III: Sources of Power(2)

- (i) Motivation-Drive theory, Arousal theory, Expectancy theory, Maslow's need hierarchy
- (ii) Emotion-Theories of James-Lange, Cannon-Bard, & Schachter-Singer

UNIT –IV: Proving empowered

- (i) Social behavior- Meaning of attribution and errors in attribution, Meaning of social cognition and processing of social information
 - (ii) Positive Psychology-Scope and aims, Nature and characteristics of happiness, Subjective well-being and personal growth.
-

PRACTICALCredit : **02****25 Marks**

- (i) **Intelligence test-** To test the non-verbal intelligence of two college students using Raven's Standard Progressive Matrices
- (ii) **Personality Type-** To assess the personality type of a student obtaining responses from the student and two other significant persons in his /her life by using Glazer's test of Personality Type

Text Books:

- Baron, R.A. (1995). Psychology- The Essential Science, Pearson Education Company of India Pvt. Ltd.
- Gerrig, R.J. & Zimbardo, P.G. (2010). Psychology and Life (19th Ed.). Delhi: Allyn & Bacon
- Snyder, C.R. & Shane, J.L. (2005) Handbook of Positive Psychology: Oxford University Press.
- Mohanty, N., Varadwaj, K. & Mishra, H.C. (2014). Explorations of Human Nature and Strength: Practicals in Psychology, DivyaPrakashani, Samantarapur, Bhubaneswar.

Reference Books:

- Baron, R. A. & Byrne, D. (2003). Social Psychology, 10th Edition, Prentice Hall
- Misra, G. (2009). Psychology in India, Vol 1: Basic Psychological Processes and Human Development. India: Pearson
- Dash, U.N., Dash, A.S., Mishra, H.C., Nanda, G.K. & Jena, N. (2004). Practical Exercises in Psychology: Learning about Yourself and Others. Panchasila, Bhubaneswar.

+3 SECOND YEAR THIRD SEMESTER**Core Paper - 5
PSYCHOLOGICAL STATISTICS**Time : **3 Hrs.**End Semester Theory : **60 Marks**Credit: **04**Mid-Semester Theory : **15 Marks****Introduction:**

The course is designed to equip students with knowledge in the fundamentals of statistics and research methods so that they understand the application of statistics to different research problems in psychology.

Learning Objectives:

- To help students develop knowledge and understanding of the application of Statistics within Psychology
 - To help students develop critical thinking for application of appropriate statistical analysis in Psychological research
-

Expected outcomes: Students will be able to understand

- The nature of psychological variables and how to measure them using appropriate scale.
- The processes of describing and reporting statistical data.
- The methods of drawing inferences and conclusions for hypothesis testing by using appropriate statistical analysis.

UNIT-I: Fundamentals of statistics

- (i) Meaning and scope of statistics, Nature of variables- Categorical and Continuous, Levels of Measurement- Nominal, Ordinal, Interval, and Ratio
- (ii) Drawing frequency distribution; Graphical representation of grouped data-Polygon, Histogram, Ogive.

UNIT- II: Measures of Statistics

- (i) Measures of Central Tendency- Characteristics of mean, median and mode; Computation of mean, median, and mode
- (ii) Measures of Variability- Concept of variability, computation of semi-inter quartile range, Standard deviation and variance, Co-efficient of variation

UNIT- III: Sources and Applications

- (i) Concept of Probability; Characteristics of normal probability curve, Applications of NPC, Deviation from NPC- Skewness and Kurtosis
- (ii) Concept of correlation, Product-moment correlation (ungrouped data), Rank order correlation, Chi-square test (Contingency Table)

UNIT –IV: Hypothesis Testing

- (i) Level of significance; Type I and Type II error; Computation of 't' for independent and dependent samples
- (ii) Purpose and assumptions of ANOVA; One-way and two-way ANOVA

PRACTICALCredit : **02****25** Marks

- (i) **Reporting of Statistical Results:** To collect data of 60 (30 boys and 30 girls) High School students about their Annual examination marks in four subjects and to report by descriptive statistical analyses.
- (ii) **Computer Awareness:** To be familiar with software packages of statistics and their applications.

Text Books:

- Aron, A., Aron, E.N., & Coups, E.J. (2007). Statistics for Psychology. (4thEd.) India: Pearson Education, Prentice Hall.
 - Ferguson, G.A. & Takane, Y. (1989). Statistical Analysis in Psychology & Education, Tata McGraw Hill Publishing Company, New Delhi
 - Garrett, H. E. & Woodworth, R.S. (1985). Psychology in Statistics and Education, Vakils, Feffer & Simons Ltd. Mumbai
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- Mohanty, N., Varadwaj, K. & Mishra, H.C. (2014). Explorations of Human Nature and Strength: Practicals in Psychology, DivyaPrakashani, Samantarapur, Bhubaneswar.

Reference Books:

- Mishra, G.C. (2018). Applications of Statistics in Psychology and Education, Kalyani Publisher, New Delhi
- Mohanty, B. and Misra, S. (2017). A text book of Basic Statistics. LaxmiPrakashans, Bhubaneswar, Odisha
- Siegal, S. (1994). Nonparametric Statistics. McGraw Hill, New Delhi

+3 SECOND YEAR THIRD SEMESTER

Core Paper - 6 SOCIAL PSYCHOLOGY

Time : 3 Hrs.
Credit: 04

End Semester Theory : 60 Marks
Mid-Semester Theory : 15 Marks

Introduction:

Social psychology is the scientific study of the nature and causes of human behavior in a social context. This course is designed to introduce the students to the field of social psychology, to explain how social psychologists think about and study human behavior; to introduce the body of knowledge and underlying principles that currently exist in the field and to encourage reflection about the implications of social psychology for the situations we encounter in everyday life.

Learning Objectives:

- To help students develop awareness of the concepts, problems and issues in the discipline of social psychology
- To make students understand the individuals and groups in respect to patterns of social behavior and attitudes
- To help students gain insight into the dynamics of intergroup relationships, conflict, prejudice and cooperation.

Expected outcomes: Students will be able to

- Know the scope of studying social psychology and the methods to gather data in the social context to explain them.
- Understand the significance of social cognition, attitudes, stereotypes and prejudices in explaining human behavior in the social contexts.
- Understand the significant aspects group behavior and social influence that constitute the core of human relationships.

UNIT-I: Introduction

- (i) Nature, goal and scope of social psychology. Methods of Social Psychology- Observation; Questionnaire, Interview, and Experiment
 - (ii) Social Cognition- Perceiving ourselves: self-concept, self-esteem, self-presentation and self-expression; Perceiving others and forming impressions
-

UNIT- II: Attitude, Prejudice and Stereotypes

- (i) Attitudes- Nature, characteristics and functions of attitude; Attitude formation and change; Attitude measurement
- (ii) Prejudice and Stereotypes- Nature and components of prejudice, Acquisition of prejudice, Reduction of prejudice, Nature and Characteristics of stereotype.

UNIT- III: Group and Leadership

- (i) Group - Group structure and function, Task performance: Social facilitation, Social loafing; Conformity, Obedience and social modeling; Group cohesiveness.
- (ii) Leadership- Definitions and functions, Trait, situational, interactional and contingency approaches to leadership; Leadership effectiveness, The charismatic leadership.

UNIT- IV: Social Behavior

- (i) Pro-social behavior- Cooperation and helping, personal, situational and socio-cultural determinants, Theoretical explanations of pro-social behavior
- (ii) Aggression- Theoretical perspectives, Trait, situational and social learning approaches, social and personal determinants of aggression, prevention and control of aggression.

PRACTICAL

Credit : 02

25 Marks

- (i) **Ethical Values:** To assess the ethical values of five adolescents by using Donelson's Ethical Position Questionnaire (EPQ)
- (ii) **Attitude towards Women:** To measure the attitude of three boys and three girls towards Women by using Spence, Helmrich & Stapps' Attitude towards Women scale.

Text Books:

- Baron R. A & Byrne. D. (2003). Social Psychology. 10th Edition, Prentice Hall
- Baron. R.A., Byrne, D. & Bhardwaj. G (2010). Social Psychology (12th Ed). New Delhi: Pearson
- Mohanty, N., Varadwaj, K. & Mishra, H.C. (2014). Explorations of Human Nature and Strength: Practicals in Psychology, DivyaPrakashani, Samantarapur, Bhubaneswar.
- Dash, U.N., Dash, A.S., Mishra, H.C., Nanda, G.K. & Jena, N. (2004). Practical Exercises in Psychology: Learning about Yourself and Others. Panchasila, Bhubaneswar

Reference Books:

- Developments (ICSSR survey of advances in research). New Delhi: Pearson.
 - Misra, G. (1990). Applied Social Psychology. New Delhi: Sage.
 - Misra, G. (2009). Psychology in India, Volume 4: Theoretical and Methodological Implications
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+3 SECOND YEAR THIRD SEMESTER

Core Paper - 7 ENVIRONMENTAL PSYCHOLOGY

Time : 3 Hrs.
Credit: 04

End Semester Theory : 60 Marks
Mid-Semester Theory : 15 Marks

Introduction:

Environmental psychology is an interdisciplinary field focused on the interplay between individuals and their surroundings. The field defines the term environment broadly, encompassing natural environments, social settings, built environments, learning environments, and informational environments. The course is designed to introduce to the students about all these aspects of environment.

Learning Objectives:

- To highlight the simultaneous mutual interaction of environment and behavior.
- To delineate psychological approaches to the study of environment.
- To discuss the impact of ecological degradation and the need for enhanced awareness programs

Expected outcomes: Students will be able to

- Understand the interactional relationships between environment and behavior
- Understand the problems occurring to ecology and environment at the present time
- Understand different psychological approaches to the study of man-environment relationship.

UNIT -I: Environment and Behavior

- (i) Earth as a living system: The Gaia hypothesis, Deep ecology; Man-environment relationship- physical, social, cultural, orientation and product.
- (ii) Effects of Environment on behavior: Noise pollution, Air pollution, Crowding and Population explosion.

UNIT- II: Ecology and Development

- (i) Human behavior and Environmental Problems: Global warming, Greenhouse effect, Energy depletion; Pro-environmental behaviors.
- (ii) Ecosystem and their components; Sustainable development; Resource use: Common property resources. Ecology: Acculturation and psychological adaptation

UNIT –III: Psychological Approaches to environment

- (i) Field theory approach; Eco-cultural Psychology (Berry); Biosocial Psychology (Dawson);
- (ii) Ecological Psychology (Barker); Ecological system approach (Bronfenbrenner)

UNIT- IV: Environmental Assessment

- (i) Socio-psychological dimensions of environmental impact; Environmental deprivation- nature and consequences.
 - (ii) Creating environmental awareness; Social movements- Chipko, Tehri, Narmada.
-

PRACTICALCredit : **02****25 Marks**

- (i) To assess the environmental literacy of 4 college students using Bob Simpson's Environment literacy and awareness survey questionnaire.
- (ii) To assess the environmental attitude, concern and sensitivity of 4 college students using Bob Simpson's Environment literacy and awareness survey questionnaire.

Text Books:

- Dreze, J. and Sen, A. (1992). Indian Development. Delhi: Oxford University Press.
- Gadgil, M. and Guha. R. (1995). Ecology and Equity. New Delhi, Penguin Books
- Mohanty, B. and Misra, S. (2017). A text book on Environmental Psychology. Krupajala Books, Bhubaneswar, Odisha
- Mohanty, N., Varadwaj, K. & Mishra, H.C. (2014). Explorations of Human Nature and Strength: Practicals in Psychology, DivyaPrakashani, Samantarapur, Bhubaneswar.

Reference Books:

- Goldsmith, E. (1991). The way: The ecological World View. Boston: Shambhala

+3 SECOND YEAR FOURTH SEMESTER**Core Paper - 8
PSYCHOPATHOLOGY**Time : **3 Hrs.**End Semester Theory : **60 Marks**Credit: **04**Mid-Semester Theory : **15 Marks****Introduction:**

Psychopathology refers to the study of mental illness. This course is designed to expose students to the key concepts in psychopathology as well as the major theories associated with the etiology and treatment of psychological disorders and disabilities. Students will be able to understand the distinction between normal and abnormal and the qualities that are used to differentiate what is typical versus atypical through citations of different disorders.

Learning Objectives:

- To help students define and understand the basic concepts underlying *psychopathology and the* perspectives which contributed to the development of modern psychopathology.
- To help students understand the assessment techniques for identifying and classifying maladaptive behavior and mental disorders.
- To guide students to gain specific knowledge about different types of mental disorders.

Expected outcomes: Students will be able to

- Understand the differences between normality and abnormality along with the perspectives explaining them.
 - Know the importance and the use of assessment techniques in identifying different forms of maladaptive behavior.
-

- Learn the symptoms, causes and treatment of anxiety disorders, mood disorders and schizophrenia.

UNIT-I: Basics of Pathology

- (i) Concept of abnormality; Perspectives of abnormal behavior- Psychodynamic, Behavioral, Cognitive, Humanistic-Existential, and Sociocultural
- (ii) Classification of maladaptive behavior-DSM-IV; Assessment techniques- Diagnostic tests, Rating scales, History taking interview, Projective tests

UNIT- II: Anxiety and Mood disorder

- (i) Symptoms, causes and treatment of Generalized anxiety disorder, Phobic disorder, Obsessive-Compulsive disorder
- (ii) Depressive disorder –Symptoms, causes and treatment of major depressive disorder, Bipolar affective disorder, and Dysthymia

UNIT- III: Personality Disorders

- (i) Paranoid, Schizoid, Dissociative, Impulsive
- (ii) Borderline, Anxious, Avoidance, Dependent personality

UNIT –IV: Schizophrenia and Therapies

- (i) Characteristics, Major subtypes, Causes and treatment of Schizophrenia
- (ii) Psychodynamic, and Cognitive Behavior therapy.

PRACTICALCredit : **02****25 Marks**

- (i) **Anxiety:** Assessment of Anxiety of a subject by Hamilton Anxiety Rating Scale (HARS)
- (ii) **Depression:** Assessment of Depression Profile of a subject by Beck's Depression Inventory (BDI)

Text Books:

- Carson R.C., Butcher J.N., Mineka, S., & Hooley J.M. (2007). Abnormal Psychology (13th Ed.).ND: Pearson Education.
- Irwin G. Sarason, Barbara Sarason (2005). Abnormal Psychology. New Delhi: Prentice Hall Publication
- Mohanty, N., Varadwaj, K. & Mishra, H.C. (2014). Explorations of Human Nature and Strength: Practicals in Psychology, Divya Prakashani, Samantarapur, Bhubaneswar.

Reference Books:

- Kring,A.M.,Johnson,S.L.,Davison G.C. & Neale J.M. (2010). Abnormal Psychology (11th Ed.).NY: John Wiley.
-

+3 SECOND YEAR FOURTH SEMESTER

Core Paper - 9 EDUCATIONAL PSYCHOLOGY

Time : 3 Hrs.

Credit: 04

End Semester Theory : 60 Marks

Mid-Semester Theory : 15 Marks

Introduction:

This course provides an introduction to concepts, theories, and research in educational psychology. The topics covered include cognitive development during the school years, classroom management, instructional approaches, motivation, assessment, and individual differences.

Learning Objectives:

- To provide students with an overview of the purposes and uses of educational psychology.
- To help students understand human development focusing mainly on the years of formal education including those with ability differences
- To make students understand the ways that educators motivate their students to learn and strive for excellence
- To make students explore the ways that educators manage learning environments to maximize learning and social cohesion

Expected outcomes: Students will be able to

- Define educational psychology and give examples of the different topics educational psychologists study.
- Describe the developmental issues faced by school age children.
- Describe the challenges presented by children with ability differences.
- Explain the role of motivation on learning and classroom behavior.
- Describe classroom management techniques.
- Identify commonly used standardized tests, their strengths and limitations, and use in school settings.

UNIT-I: Foundations of Educational Psychology

- (i) Concepts and principles of educational psychology, The teaching-learning process, Goals of teaching and objectives for learning, transfer of training, reinforcements in learning process
- (ii) Theories of cognitive development-Piaget, Bruner, and Vygotsky.

UNIT- II: Motivation and Classroom Management

- (i) Meaning of motivation, Intrinsic and extrinsic motivation, Approaches to understand classroom motivation, Motivational techniques in classroom teaching
 - (ii) The goals of classroom management, Creating a positive learning environment, Characteristics of an effective teacher, Teacher expectation and students' performance
-

UNIT- III: Creativity and Aptitude

- (i) Nature and characteristics of creativity; Theories of creativity; Fostering creativity among children
- (ii) Nature and characteristics of aptitude; Types of aptitude; Measurement of aptitude; Utility of aptitude tests

UNIT –IV: Dealing with ability differences and Testing

- (i) Teaching children with mental retardation, learning disability, social class differences and educational difficulties, and attention deficit hyperactive disorder.
- (ii) Types of standardized tests- Achievement test, and aptitude tests, Advantages and limitations of standardized test.

PRACTICALCredit : **02****25 Marks**

- (i) **Academic Behavior:** To assess the academic attitude and behavior of college students by using Sia's Academic Behavior Scale
- (ii) **Academic Stress:** To assess the academic stress of two higher Secondary students using Rao's Academic Stress Scale.

Text Books:

- Gage, N. L., & Berliner, D. C. (2009) *Educational psychology* (5th ed.). Boston, MA: Houghton Mifflin.
- Woolfolk, A.E. (2004). *Educational Psychology* (9th Ed.), Allyn& Bacon, London / Boston
- Mohanty, N., Varadwaj, K. & Mishra, H.C. (2014). *Explorations of Human Nature and Strength: Practicals in Psychology*, DivyaPrakashani, Samantarapur, Bhubaneswar.

Reference Books:

- Chauhan, S. S. (2010). *Advanced Educational Psychology*, Vikash Publishing.

+3 SECOND YEAR FOURTH SEMESTER**Core Paper - 10
PSYCHOLOGICAL ASSESSMENT**Time : **3 Hrs.**End Semester Theory : **60 Marks**Credit: **04**Mid-Semester Theory : **15 Marks****Introduction:**

The course is designed to expose students to a basic understanding about approaches to psychological assessment and develop skill in the administration and interpretation of psychological tests.

Learning Objectives:

- To train students in various psychological assessment techniques
-

- To impart skills necessary for selecting and applying different tests for different purposes such as evaluation, training, rehabilitation etc.

Expected outcomes: Students will be able to

- Understand the basic facts about psychological assessment.
- Understand the processes of test construction and standardization.
- Understand about the assessment of different types of skills and abilities.

UNIT-I: Introduction

- (i) Nature and Scope of human assessment; Parameters of assessment
- (ii) Psychological scaling, Methods of scaling

UNIT- II: Psychological Tests

- (i) Principles of test construction and standardization- Item analysis, reliability, validity and development of norms
- (ii) Types of psychological tests- Individual, group, performance, verbal, nonverbal

UNIT –III: Assessment of Ability

- (i) Assessment of general abilities- Intelligence, interest, interpersonal interaction
- (ii) Assessment of personality- Use of self-report inventories, interview, projective and non-projective tests

UNIT- IV: Classroom Assessment

- (i) Classroom as assessment context, Traditional tests, Alternative assessment
- (ii) Grading and reporting of performance, Computer and assessment

PRACTICALCredit : **02****25 Marks**

- (i) **Empathy:** To assess the empathy behavior of Five college students using Spreng's Empathy questionnaire.
- (i) **Sense of Humor:** To assess the Sense of Humor of 4 College Students Using McGhee's Scale of Sense of Humor (MSSH)

Text Books:

- Anastasi, A. (1988). Psychological Testing. New York: MacMillan
- Mishra, G.C. & Others (2018). Psychological Assessment. Kalyani Publisher, New Delhi

Reference Books:

- Kerlinger, F.N. (1983). Foundations of Behavioral Research. New York: Surjeet Publications
 - Minium, E.W., King, B.M. & Bear, G. (1993). Statistical Reasoning in Psychology and Education. New York: John Willey.
-

+3 THIRD YEAR FIFTH SEMESTER

Core Paper - 11 ORGANIZATIONAL BEHAVIOR

Time : 3 Hrs.
Credit: 04

End Semester Theory : 60 Marks
Mid-Semester Theory : 15 Marks

Introduction:

The course provides an overview of the main fields of organizational and personnel psychology. It focuses on topics such as organizational system; work behavior, attitudes and motivation as related to organizational set up; management of power and politics in the organizations; and finally development and evaluation of human resources for sustainable growth of an organizations.

Learning Objectives:

- To help students understand the structure, functions, and designs of different organizations.
- To make students understand the processes of group decision making and leadership functions in different organizations.
- To make students understand the theories of work motivation and related issues of power and politics in the organizational set up.
- To help students demonstrate professional skills in the evaluation, management, and development of human resources in the organizations.

Expected outcomes: Students will be able to

- Understand different concepts and dynamics related to organizational system, behavior, and management.
- Identify steps managers can take to motivate employees in the perspectives of the theories of work motivation.
- Understand the tricks of power and politics management in the organizations.
- Understand significance of human resource development, evaluation and management for the interest and benefit of the organization.

UNIT I: Historical context of organizational behavior

- (i) Contributions of Taylor, Weber and Fayoll; Challenges, Scope and opportunities for OB
- (ii) OB perspectives-Open system approach, Human relations perspective, Socio-technical approach, OB model responsive to Indian realities

UNIT-II: Organization System

- (i) Structure and functions of organization, Common organizational designs, Management roles, functions and skills
 - (ii) Group decision making processes in organizations, Organizational leadership and types of leadership in organizations
-

UNIT- III: Work, Power and Politics

- (i) Contemporary theories of work motivation- ERG theory, McClelland's theory of needs, Cognitive evaluation theory, Goal-setting theory, Reinforcement theory
- (ii) Defining power in organization, Bases of power, Power tactics, Nature of organizational politics, Impression management, and defensive behavior

UNIT –IV: Human resource development and Evaluation

- (i) Human Skills and Abilities, Selection Practices for Optimal use of Human Resources; Training Programs for the Development of Human Resources
- (ii) Performance Evaluation- Purpose, Methods, Potential Problems and methods to overcome them

PRACTICALCredit : **02****25 Marks**

- (i) **Leadership Style:** To measure his basic leadership style of 4 college students by using Greenberg Basic Leadership Style scale
- (ii) **Conflict-Handling:** To measure the conflict-handling style of 4 college students by using Rahim's scale to identify their conflict handling style.

Text Books:

- Robbins, S.P.; Timothy, A.J. & Vohra, N. (2012). Organizational Behavior, 15th Edn. Pearson Education: New Delhi
- Luthans, F. (2009). Organizational behavior. New Delhi: McGraw Hill.
- Mohanty, N., Varadwaj, K. & Mishra, H.C. (2014). Explorations of Human Nature and Strength: Practicals in Psychology, DivyaPrakashani, Samantarapur, Bhubaneswar.

Reference Books:

- Greenberg, J. & Baron, R.A. (2007). Behaviour in Organizations (9th Ed.). India: Dorling Kindersley.

+3 THIRD YEAR FIFTH SEMESTER**Core Paper - 12
HEALTH PSYCHOLOGY**Time : **3 Hrs.**End Semester Theory : **60 Marks**Credit: **04**Mid-Semester Theory : **15 Marks****Introduction:**

Health psychology is a specialty area that focuses on how biology, psychology, behavior and social factors influence health and illness. This course is designed to provide an introduction to the area of health psychology to help students understand how Health Psychology as a specialty within psychology addresses the role of behavioral factors in health and illness. Basic theories, models and applications are also included.

Learning Objectives:

- To help the students understand the issues of health psychology and how to address them by the bio-psychosocial model of health and illness.
- To help the students to describe behavioral factors that influence health and illness.
- To guide the students understand about health enhancing behaviors including coping with illness.

Expected outcomes: Students will be able to

- Know the basics of health and illness from the bio-psychosocial perspectives.
- Understand the significance of behavioral and psychological correlates of health and illness.
- Understand the significant aspects of coping and importance of health enhancing behavior.

UNIT-I: Introduction

- (i) Goals of Health Psychology, Biopsychosocial model of health and illness
- (ii) Basic nature of stress, cognitive appraisal of stressors, some major causes of stress, Management of stress

UNIT- II: Health and Illness

- (i) Behavioral and psychological correlates of illness, approaches to promoting wellness, some common health beliefs and their implications
- (ii) Models of health- The cognition models- The health belief model, The protection motivation model, Leventhal's self-regulatory model.

UNIT –III: Health and Coping

- (i) Individual differences in symptom perception, coping with the crises of illness; compliance behavior and improving compliance.
- (ii) Health enhancing behavior- Diet management, yoga and exercise

UNIT- IV: Health Issues

- (i) Children health issues- Malnutrition, Immunization, Autism, ADHD
- (ii) Health issues of women and elderly: Diabetes, Osteoporosis, Alzheimer's Disease, Depression

PRACTICALCredit : **02****25 Marks**

- (i) **Sleep Quality:** To assess the Sleep quality of 4 college students by The Pittsburgh Sleep Quality Index (PSQI)
- (ii) **Coping Strategies:** To assess of the Coping Strategies of 4 college students by Tobin's Coping Strategy Inventory (TCSI)

Text Books:

- Taylor, S.E. (2006). Health Psychology (6th Ed.). New York: Tata McGraw Hill
- Brannon and Feist. Health Psychology.
- Mohanty, N., Varadwaj, K. & Mishra, H.C. (2014). Explorations of Human Nature and Strength: Practicals in Psychology, DivyaPrakashani, Samantarapur, Bhubaneswar.

Reference Books:

- Ogden, J. (2007). Essentials of Health Psychology. McGraw Hill.
-

+3 THIRD YEAR SIXTH SEMESTER

Core Paper - 13 COUNSELING PSYCHOLOGY

Time : 3 Hrs.
Credit: 04

End Semester Theory : 60 Marks
Mid-Semester Theory : 15 Marks

Introduction:

The course is designed to develop entry level counseling psychologists who will be capable of understanding and demonstrating behavior and attitudes in the basic areas of professional counseling.

Learning Objectives:

- To help students understand and integrate current scientific knowledge and theory into counseling practice.
- To make students learn the history and professional issues related to counseling psychology.
- To help students integrate and convey information in the core areas of counseling practice.
- To help students demonstrate professional behavior in their various roles as counseling psychologists.

Expected outcomes: Students will be able to

- Understand the purpose of counseling and practice of counseling ethically following different approaches.
- Understand the basics of counseling process and use them for counseling students, families, couples, distressed, and handicaps.

UNIT-I: Basics of Counseling

- (i) Meaning, scope and purpose of counseling with special reference to India; The counseling process, counseling relationship, counseling interview
- (ii) Characteristics of a good counselor, Ethics and values in counseling; Education and training of the counselor

UNIT –II: Theories and Techniques of Counseling

- (i) Psychodynamic approach-Freud and Neo Freudians; Humanistic approach-Existential and Client centered
- (ii) Cognitive approach- Rational-emotive and transaction analysis; Behavioral approach- Behavior modification; Indian contribution- yoga and meditation

UNIT- III: Counseling Programs

- (i) Working in a counseling relationship, transference and counter transference, termination of counseling relationship, Factors influencing counseling
 - (ii) Student counseling, Emphases, roles and activities of the school, and college counselor.
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UNIT –IV: Counseling application

- (i) Family and Marriage Counseling, Family life and family cycle, Models and methods of family counseling
- (ii) Alcohol and drug abuse counseling; Counseling the persons with Suicidal tendencies, and Victims of Harassment and Violence

PRACTICALCredit : **02****25 Marks**

- (i) **Marital Relationship-** To assess the marital relationship of 2 couples using Lerner's Couple adjustment scale
- (ii) **Case Reporting:** To complete four case studies of high school students with problem behavior in the appropriate case record proforma

Text Books:

- Gladding, S.T. (2009). Counseling: A comprehensive profession (6th Ed.). New Delhi: Pearson India
- Mishra, H.C. &Varadwaj, K. (2009). Counseling Psychology: Theories, Issues and Applications, DivyaPrakashini, Samantarapur, Bhubaneswar, Odisha
- Burnard Philip. (1995). Counseling Skills Training – A sourcebook of Activities. New Delhi: Viva Books Private Limited.
- Gibson, R.L & Mitchell M.H. (2003). Introduction to counseling and Guidance. 6th edn. Delhi: Pearson Education
- Mohanty, N., Varadwaj, K. & Mishra, H.C. (2014). Explorations of Human Nature and Strength: Practicals in Psychology, DivyaPrakashani, Samantarapur, Bhubaneswar.

Reference Books:

- Feltham, C and Horton, I. (2000). Handbook of Counseling and Psychotherapy. London: Sage.
 - Misra, G. (Ed) (2010). Psychology in India, Volume 3: Clinical and Health Psychology. New Delhi: Pearson India.
 - Nelson-Jones. (1995). The theory and practice of counseling. 2ndEdn. London: Holt, Rinehart and Winston Ltd
 - Mohanty, G. B. (2018). Counseling Psychology, Kalyani Publisher, New Delhi.
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+3 THIRD YEAR SIXTH SEMESTER

Core Paper - 14 POSITIVE PSYCHOLOGY

Time : 3 Hrs.

Credit: 04

End Semester Theory : 60 Marks

Mid-Semester Theory : 15 Marks

Introduction:

Positive psychology is the scientific study of optimal human functioning to help people flourish. This is a foundation course in positive psychology to help students not only to understand the core themes of positive psychology, but also to equip them with the helpful positive interventions in various areas of professional psychology, such as clinical, health, education, organization and community.

Learning Objectives:

- To help students to understand the rationale behind positive psychology.
- To guide students to identify and analyze the key conceptual and theoretical frameworks underpinning positive psychology.
- To encourage students to appreciate the contributions of scholars from a range of disciplines and their influence on developing a positive approach to mental health.
- To make students understand and apply a strengths-based approach to mental health issues.

Expected outcomes: Students will be able to understand

- The goal of positive psychology and the basic behavior patterns that result in positive human growth from the point of view of leading positive psychologists.
- The concepts of flow and happiness and the related theories and models explaining happiness behavior and its consequences.
- All the precursors to positive psychology from character strength and altruism to resilience.

UNIT-I: Foundations

- (i) Historical roots and goals of positive psychology, Positive emotions, Positive Individual traits, and positive subjective experience
- (ii) Contribution of Martin Seligman, Albert Bandura, Carol Dweck and Abraham Maslow to positive psychology

UNIT- II: Flow and Happiness

- (i) Components of flow, Conditions and mechanisms of flow, Positive and negative consequences of flow experience
- (ii) Meaning and nature of happiness, Sources of happiness, Theories of happiness- Set-point theory, Life satisfaction and Affective state theories.

UNIT –III: Precursors to Positive Psychology

- (i) Character strength, Altruism, Hope and Optimism, Positive thinking, Resilience
 - (ii) Psychology of well-being: Meaning of well-being, the well-being models, Factors affecting well-being, Promoting well-being among people
-

UNIT- IV: Ways to Positive Psychology

- (i) Discovering strength, Increasing optimism, Self-direction, Purpose, gratitude, Mindfulness, and Activities and experience
- (ii) Effects of exercise, Yoga, meditation and spiritual intelligence on development of positive psychology; Positive psychology in building relationship

PRACTICALCredit : **02****25 Marks**

- (i) **Happiness:** To measure the happiness of 4 adults using Oxford Happiness Questionnaire
- (ii) **Spiritual Intelligence:** To measure the spiritual intelligence of 4 adults using King's Spiritual Intelligence Test.

Text Books:

- Seligman, M.E. (2002). Authentic Happiness: Using the New Positive Psychology to Realize Your Potential for Lasting Fulfillment: Oxford University Press
- Carr, A. (2004). Positive Psychology: The science of happiness and human strength. UK: Routledge.
- Mohanty, G.B. (2018). Positive Psychology. Kalyani Publisher, New Delhi
- Mohanty, N., Varadwaj, K. & Mishra, H.C. (2014). Explorations of Human Nature and Strength: Practicals in Psychology, DivyaPrakashani, Samantarapur, Bhubaneswar.

Reference Books:

- Peterson, C. (2006). A Primer in Positive Psychology; Oxford University Press
- Seligman, M.E. (2012). Flourish: A Visionary New Understanding of Happiness and Well-being. Oxford University Press
- Snyder, C.R. & Shane, J.L. (2005). Handbook of Positive Psychology. .Oxford University Press
- Snyder, C.R., & Lopez, S.J. (2007). Positive psychology : The scientific and practical explorations of human strengths. Thousand Oaks, CA : Sage.

+3 THIRD YEAR FIFTH SEMESTER**DSE - 1****PSYCHOLOGICAL RESEARCH AND MEASUREMENT**Time : **3 Hrs.**Credit: **04**End Semester Theory : **60 Marks**Mid-Semester Theory : **15 Marks****Introduction:**

The research methods course is among the most frequently required in the psychology and with good reason. It helps the students know about the difference between an experiment and a correlational study, the function of independent and dependent variables, the importance of reliability and validity in psychological measurement, and the need for replication in psychological

research. In other words, psychologists' research methods are at the very core of their discipline. The course is designed to train the students in psychological research and measurement.

Learning Objectives:

- To provide an overview of scientific approaches to psychological research in term of sampling techniques, scientific method, and experimental designs.
- To acquaint the students with respect to psychometric, projective techniques and non-testing approaches like interview

Expected outcomes: Students will be able to

- Understand the nature of psychological research and characteristics of scientific methods of research.
- Know the methods of test construction and standardization
- Know the different approaches to assessment of personality.

UNIT-I: Psychological Research

- Assumptions of science, Characteristics of scientific methods, Psychological research: Correlational and experimental
- Sampling frame: probability and non-probability samples, sample size, sampling error

UNIT- II : Psychological Scaling and Construction of test

- Purpose of scaling and types of psychological data, Psychological scaling methods: Familiarity with Thurstone, Likert and Guttman scale
- Construction of test: Theory of measurement error; Operationalizing a concept, Generating items, Item analysis, Item response theory

UNIT - III:

- Experimental Designs:** Pretest- post-test design, Factorial designs, Randomized Block design
- Standardization of tests:** Reliability and validity of tests, Development of norms and interpreting test scores

UNIT- IV:

- Assessment of Personality:** Psychometric and projective techniques, Familiarity with MMPI, Rorachs, WAT, and TAT
- Interviewing:** Principles and procedures of interviewing, gaining cooperation, motivating respondents, training of interviewers, ethics of interviewing

PRACTICAL

Credit : 02

25 Marks

- TAT:** To administer the TAT on a subject and give summary report
- Word Association Test:** To administer the Jung / Kent-Rosanoff list of WAT on a subject and report on his areas of emotional difficulties

Text Books:

- Anastasi, A. (1988). Psychological Testing. New York: MacMillan

- Minium, E.W., King, B.M. & Bear, G. (1993). Statistical Reasoning in Psychology and Education. New York: John Willey

Reference Books:

- Kerlinger, F.N. (1983). Foundations of Behavioral Research. New York: Surjeet Publications
- Best, W.J. & Kahn, J.V. (2006)- Research in Education. Pearson

+3 THIRD YEAR FIFTH SEMESTER

DSE - 2

PSYCHOLOGY AND SOCIAL ISSUES

Time : 3 Hrs.

End Semester Theory : **60** Marks

Credit: **04**

Mid-Semester Theory : **15** Marks

Introduction:

Psychologists can play a larger role in the solution of important social problems. Psychology brings two important qualities to the study of social problems: attention to psychological process and rigorous methodology. The key task in the designed course is to define social problems in part as psychological problems. Learning Objectives: The course will provide social psychological analysis of some major social issues in India.

Expected outcomes: Students will be able to

- Understand the nature and characteristics of different social systems and social integration in India.
- Understand the aspects of health and wellbeing of Indian people.
- Understand about the political behavior of Indian people

UNIT-I

- Understanding Social Systems:** Indian Family System; Social stratification; caste, class, power, religious ethics
- Poverty and Deprivation:** Theories of poverty, concomitants of poverty, sources of deprivation, inequality and social justice.

UNIT- II

- Health and wellbeing:** Role of behavior in health problems, Behavioral sciences in disease prevention and control, India's health scenario
- Political Behavior:** Development of ideology, Use of small groups in politics, Issues of human and social development, Quality of life and development

UNIT –III: Antisocial Behavior

- Corruption and bribery, Juvenile delinquency, Terrorism
- Crime and criminal behavior, Alcoholism and drug abuse, Psychopath

UNIT- IV

- Social integration:** The concept of social integration; Causal factors of social conflicts and prejudices; Psychological strategies for handling the conflicts and prejudices; Measures to achieve social integration.
-

- (ii) **Violence:** Nature and categories of violence, violence in family and marriage, rape, Collective violence for social change

PRACTICAL

Credit : 02

25 Marks

- (i) **Quality of Life:** To assess the quality of life family of 4 families using Beach Center Family Quality of Life Scale
- (ii) **Community Integration:** To assess the community integration of a village by using Community integration questionnaire (CIQ) of Barry Willer

Text Books:

- Srinivas, M.N. (1966). Social change in modern India, .Bombay: Allied
- Mohanty, A .K. and Mishra, G. (Eds.) (2000). Psychology of Poverty and Disadvantage. New Delhi: Concept
- Mishra, H.C. and Misra, S. (2009). Psychology of Deviants, DivyaPrakashani, Bhubaneswar

Reference Books:

- Banerjee, D. (1998). Poverty, class and health culture in India, Vol. I, Delhi PrachiPrakashan
- Dube, S.C. (1987) Modernization and Development. ND: Sage
- Mishra, G. (1999). Psychological perspectives on stress and Health. New Delhi: Concept
- Sen, A. &Sen A.K. (Eds.). (1998). Challenges of contemporary Realities: A psychological Perspective. New Delhi: New Age International.

+3 THIRD YEAR SIXTH SEMESTER

DSE - 3

PSYCHOLOGY OF DISABILITY

Time : 3 Hrs.

End Semester Theory : 60 Marks

Credit: 04

Mid-Semester Theory : 15 Marks

Introduction:

According to WHO, disability is any restriction or lack resulting from an impairment of ability to perform an activity in the manner or within the range considered normal for a human being. While individuals may have physical or psychological impairments, it is often the society and environment that contribute to the experience of disability by failing to accommodate people with impairments. Inclusion and access is a fundamental human right and inclusive and accessible communities are vital for individual and community wellbeing. Study of psychology of disability would help the students understand this social responsibility.

Learning Objectives:

- The objective of the course is to provide students with an overview of the disability from the psychological perspective.
- Drawing from the four units, students will be exposed to varying disability definitions, cultural meanings and representations.

- What does it mean to be “disabled”? How has this meaning changed over time in India? What factors affect a person’s experience of disability? Why should people in psychology learn about these matters?

Expected outcomes: Students will be able to

- Know about different types of disability and their prevalence in India.
- Understand various socio-cultural models of disability
- Gain knowledge about disability policies in India
- Understand about intervention and rehabilitation of disables in India

UNIT I

- (i) Conceptualizing Disability: Meaning and Definition, Types of disability, Assessment and Diagnosis
- (ii) Understanding Disability Policy in India: Equal opportunities Bill, Rehabilitation Council of India, National Trust

UNIT-II

- (i) Theorizing Disability: Charity Model: Welfare Model; Medical Model
- (ii) Social Model: culture as disability; Empowerment Model

UNIT- III

- (i) Disability support: Beliefs and attitudes towards disability; Family, care, and support structure
- (ii) Issues of Access: Built and Psychological; Education and Employment, learning disability

UNIT -IV

- (i) Designing Interventions: Psychotherapeutic approaches; Rehabilitation
- (ii) Contemporary Debates: euthanasia, prenatal selection

PRACTICAL

Credit : **02**

25 Marks

- (i) To assess the attitude of 8 college students by using ‘Attitude towards Disabled Persons Scale’ (Yuker et al., 1998).
- (ii) To assess the knowledge of 4 college students about Disability Policy in India using a Questionnaire.

Text Books:

- Chib, M. (2011). One Little Finger. New Delhi: Sage Publications Pvt. Ltd.
 - Dalal, A. K. (2011). Folk wisdom and traditional healing practices: Some lessons for modern psychology. In MatthijsCornelissen, Girishwar Misra, & Suneet Varma (eds) Foundations of Indian Psychology: Practical applications (Vol. 2) Longman, Pearson Education, New Delhi
 - Mohanty, N., Varadwaj.K, & Mishra, H.C. (2014). Explorations of Human Nature and Strength: Practicals in Psychology, Divya Prakashani, Samantarapur, Bhubaneswar
-

Reference Books:

- Ghai, A. (2015). Rethinking Disability in India. India: Routledge.
- Ghai, A. (2010). Psychology of Disabled in G.Misra (Ed.) Psychology in India: Advances in research. New Delhi: Pearson education.
- Ghai, A. (2006 [2003]) (Dis)Embodied Form: Issues of Disabled Women. New Delhi: Shakti Books.
- Goodley. D & Lawthom. R. (2006). Disability and Psychology: Critical Introductions and Reflections. Palgrave Macmillan.

+3 THIRD YEAR SIXTH SEMESTER

DSE - 4

DISSERTATION / RESEARCH PROJECT

Credit : **06**

End Semester : **100** Marks

Introduction:

The research experience of students is greatly enriched by early exposure to conducting research. There are numerous benefits of undergraduate students who get involved in research. They are better off in understanding published works, determine an area of interest, can discover their passion for research and may start their career as a researcher. Further students will be able develop ability for scientific inquiry and critical thinking, ability in the knowledge base and communication of psychology. This course is included to promote above mentioned abilities among the students.

Learning Objectives:

- To help students to learn how to develop scientific research designs in the study of psychology.
- To guide students to understand the previous research in their field of interest and review them to arrive at a research problem
- To encourage the students to learn ways to describe and measure human behavior.
- To help students understand the logic of hypothesis testing and application of appropriate statistical analysis.
- To make students to learn the methods of writing a research report.

Expected outcomes: Students will be able to

- Independently prepare a research design to carry out a research project
- Review the related research papers to find out a research problem and relevant hypotheses

Unit I :

- Understand the administration, scoring and interpretation of the appropriate instrument for measurement of desired behavior
 - Learn the use of statistical techniques for interpretation of data.
-

- Learn the APA style of reporting a research project. A student is required to carry out a project on an issue of interest to him / her under the guidance and supervision of a teacher. In order to do so s/he must have the knowledge in research methodology and of steps in planning and conducting a research. The supervisors may help the students to go on field study / study tour relevant to their work. Thirty hours of class may be arranged in the routine to help students understand research methodology, and planning, conduction and reporting on the research. An external examiner with the supervisor as the internal examiner will evaluate the research project on the basis of scientific methodology in writing the report, and presentation skill and performance in the viva.
- **Format**
 - **Abstract** – 150 words including problem, method and results.
 - **Introduction** – Theoretical considerations leading to the logic and rationale for the present research
 - **Review**- Explaining current knowledge including substantive findings and theoretical and methodological contributions to the topic, objectives and hypotheses of the present research
 - **Method** – Design, Sample, Measures, Procedure
 - **Results**- Quantitative analysis of group data ϕ ' (Raw data should not be attached in Appendix) Graphical representation of data wherever required. ϕ ' Qualitative analysis wherever done should indicate the method of qualitative analysis.
- **Discussion**
 - **References (APA Style) & Appendices**
 - Project should be in Soft binding. It should be typed in Times New Roman 14 letter size with 1.5 spacing on one sides of the paper. Total text should not exceed 50 pages (References & Appendices extra).
 - Two copies of the project should be submitted to the College.
 - ***Project - American Psychological Association (APA) – Publication Manual 2006 to be followed for project writing***

MARK DISTRIBUTION FOR DISSERTATION / RESEARCH PROJECT

Identification of problem	Review of	Methodology Literature	Analysis	Findings	V iva-voce	Total
10	10	10	25	20	25	100

+3 FIRST YEAR FIRST SEMESTER

GE - 1

INTRODUCTORY PSYCHOLOGY

Time : 3 Hrs.

Credit: 04

End Semester Theory : 60 Marks

Mid-Semester Theory : 15 Marks

Introduction:

The course is designed to provide the students a basic understanding of the psychology of human behavior. The students will be given exposure to concepts, terminology, principles, and theories that comprise an introductory course in psychology.

Learning Objectives:

- To help the students know the sources and processes of development of modern scientific psychology.
- To help the students develop a scientific temperament in studying and understanding human behavior.

Expected outcomes: Students will be able to

- Define the term psychology and demonstrate command of the basic terminology, concepts, and principles of the discipline.
- Gain knowledge of scientific methodology—the variety of ways in which psychological data are gathered and evaluated / interpreted.
- Identify and compare the major perspectives in psychology: Recognize how each approach views human thought and behavior.
- Understand the physiological and biochemical links of human behavior.

UNIT-I: Introducing Psychology

- (i) Concept and definition of psychology, Roots of psychology, Psychology as a scientific discipline.
- (ii) Key Perspectives in Psychology- Behavioral, Cognitive, Humanistic, Psychodynamic, and Sociocultural

UNIT- II: Methods in Psychology

- (i) Natural Observation, Survey and Case Study- Nature, advantages and limitations.
- (ii) Experimental and Correlational methods-Nature, advantages and limitations.

UNIT –III: Biological Bases of Behavior

- (i) Structure and functions of the neurons, Communication within and between neurons, Chemical regulation of the endocrine glands.
- (ii) Structure and functions of the Central nervous system and Autonomic nervous system

UNIT-IV: States of Mind

- (i) Nature of consciousness; changes in consciousness- sleep-wake schedules
 - (ii) Extended states of Consciousness- Hypnosis, Meditation and Hallucinations
-

PRACTICALCredit : **02****25 Marks**

- (i) Collecting and analysing a case history.
- (ii) Sleep quality

Text Books:

- Baron, R. A. (2002). Psychology (5th Edition), New Delhi: Pearson Education.
- Hilgard & Atkinson- Introduction to Psychology (2003) 14th Edition, Thomson Learning Inc.
- Mohanty, N., Varadwaj, K. & Mishra, H.C. (2014). Explorations of Human Nature and Strength: Practicals in Psychology, DivyaPrakashani, Samantarapur, Bhubaneswar.

Reference Books:

- Morgan, C.T., King, R.A., Weisz, J.R., & Schopler, J. (2008). Introduction to psychology (7th edition) Bombay: Tata-McGraw Hill.
- Feldman, R.S. (2004). Understanding Psychology (6th Edition), New Delhi, Tata-McGraw Hill.

+3 FIRST YEAR SECOND SEMESTER**GE - 2****BASIC DEVELOPMENTAL PROCESSES**Time : **3 Hrs.**End Semester Theory : **60 Marks**Credit: **04**Mid-Semester Theory : **15 Marks****Introduction:**

The course is designed to expose students to a basic understanding about the fundamental concerns of developmental psychology and provide examples of the following three dimensions of development: growth, differentiation, and orderly progression.

Learning Objectives:

- To help students gain some key ideas about human development and the perspectives to understand and explain such developments.
- To help the students understand the significance of prenatal period for human development.
- To help the students understand the developmental preparations of the childhood and the implications of developmental milestones for the normal human development.

Expected outcomes: Students will be able to

- Understand the nature, types, and principle of development.
 - Understand the processes of formation of life and development during pre- and post-natal periods.
 - Understand about the different aspects of preparation for future life.
-

UNIT-I: Basics of development

- (i) Meaning, nature, and types of development; Principles of development; Factors influencing development
- (ii) Perspectives of development- Psychoanalytic; Mechanistic; Organismic; Humanistic

UNIT- II: Life in formation

- (i) Fertilization, determination of sex, multiple birth; Prenatal development- germinal stage, embryonic stage, fetal stage; Factors influencing prenatal development
- (ii) Physical and motor developments, Social and emotional developments during childhood.

UNIT –III: Life in preparation

- (i) Physical and motor developments, Social and emotional developments during adolescence.
- (ii) Piaget's stage of cognitive development; Kohlberg's stages of moral development

Unit- IV: Self and identity

- (i) Emergence of self; Structure of the self; Development of personal identity
- (ii) Development of self-control; Development of gender differences and gender roles

PRACTICALCredit : **02****25 Marks**

- (i) **Locus of Control:** To assess the Locus of Control of four college students by using Rotter's Locus of Control Scale.
- (ii) **Emotional Intelligence:** To measure the emotional intelligence of four college students by using the Schutte's Emotional Intelligence Scale.

Text Books:

- Sigelman, G.K. & Schaffer, D.R. (1995). Life-span Human Development, Brooks / Cole Publishing Co. Pacific Grove, California.
- Berk, L. E. (2010). Child Development (8th Ed.). New Delhi: Prentice Hall.
- Mohanty, N., Varadwaj, K. & Mishra, H.C. (2014). Explorations of Human Nature and Strength: Practicals in Psychology, DivyaPrakashani, Samantarapur, Bhubaneswar.

Reference Books:

- Papalia, Diane E., Sally Wendos Olds (2006). Human Development. 9th Edition. New Delhi: Tata McGraw Hill
 - Baron, R. A. (2002). Psychology (5th Edition), New Delhi, Pearson Education.
-

SANSKRIT

PROGRAMME OUTCOMES (POS)

1. **CHARACTER DEVELOPMENT:** Developing personal and behavioral competence through moral and ethical teachings of stories and some popular texts.
2. **COMMUNICATION SKILL:** Understanding Basic communication skills in Sanskrit with LSRW (Listening, Speaking, Reading and Writing) through knowledge of Paninian Grammar.
3. **SOCIAL VALUES:** Enhancing social competence and transformation through learning values and social concerns reflected in ancient Sanskrit treatises and Ornate Prose and Poetry in Classical Sanskrit Literature.
4. **CRITICAL THINKING:** Developing knowledge of fundamental principles of literary criticisms of both ancient and modern Sanskrit poetics.
5. **VEDIC WISDOM:** Contextualizing the ancient Indian wisdom reflected in Vedic Literature which is timeless and still applicable to the society.
6. **ANCIENT SOCIO-POLITICAL THOUGHTS:** Analyzing social problems and understanding social dynamics through socio-political thoughts of ancient India and ethical literature in Sanskrit.
7. **PERSONAL PROBLEMS AND SOLUTION:** Facilitating life skills like self-respect, safe-development, and competency in communicating, interacting, listening, speaking and observing.
8. **MEDICINE AND ENGINEERING KNOWLEDGE:** Enhancing technical abilities in Medicine, Astrology, Architecture and making Sanskrit learners self sufficient.
9. **INTELLECTUAL DEVELOPMENT:** Developing the basic approach to study Indian Philosophy and research work for intellectual, analytical and critical thinking capacities.
10. **SKILL OF TRANSLATION:** Providing learners' competence level through Translation, Transliteration, Proof Correction, usage of various e-resources, social media, computer literacy etc.

PROGRAMME SPECIFIC OUTCOMES (PSOS):

After becoming graduate students can:

1. Make them eligible for higher education.
 2. Pursue project works independently.
 3. Understand and develop holistic approach of the Core Areas of the subject.
 4. Develop a concept of ancient Indian history, philosophy and literature.
 5. Enhance communication skill of Listening, Speaking, Reading and Writing in Sanskrit.
 6. Make the Sanskrit Literature (Prose and Poetry) melodious and lucid with the knowledge of Prosody & Figures of Speech.
 7. Understand and work for multidisciplinary activities with other disciplines.
 8. Enhance their skills in fields of Plant life, Medicine, Astrology, Architecture etc.
-

+3 FIRST YEAR FIRST SEMESTER

Core Paper - 1

MORAL TEACHINGS AND BASICS OF SANSKRIT

Time : 3 Hrs.
Credit : 06

End Semester Theory : 80 Marks
Mid Semester Theory : 20 Marks

1. *Hitopodesa Mitralabha (Prastavana, Kathâ mukha, Brddhavyaghrapathiakakatha, Mrgajambukakatha & Grdhravidalakatha)*
2. *Yaksaprasna of Mahabharata (Aranyakaparva, ch.313 from Verses no, 41 to 133)*
3. *Sabdarupa & Dhaturupa*
('a' karanta, 'i' karanta, 'î'karanta, 'u'karanta, 'û' karanta, 'in' bhaganta, Mâtru, Pitru, Asmad, Yusmad, Tad (sabdarupas).Lat, Lan, Vidhilin, Lrut, Lot and Litlakeras of path,Ni, Kru, Sev, Han, Pâ, Dâ, Sru, Sî and Krîn in the form of Atmanepada, Parasmaipada or Ubhayapada whichever is applicable. (Dhaturupas)

Group -A- 10 bit questions covering all four units 2x10=20

Group -B- Each unit carries 15 marks 15x4=60

Unit - I & II: *Hitopodesa Mitralabha and Sabdarupa*

Unit - I - One long question

Unit-II - Explanations two

Unit - III & IV: *Yaksaprasna of Mahabharata and Dhaturupas*

Unit - III - long question one

Unit - IV - Two Explanations and Three sabdarupas and three Dhaturupas

Course Outcomes:

- (i) Ability to develop a strong sense of ethical and moral values in personal and professional life.
- (ii) A solid foundation of students' positive mind-set through lofty teaching of Hitopadesa.
- (iii) a solid foundation of student's positive mind-set through lofty teachings of Yaksaprasna.
- (iv) Awareness of communication skills in understanding Sanskrit Grammar with knowledge of basic words and roots.

Core Readings:

1. *Hitopadesah (Mitralabhah)* (Ed.) Kapildev Giri, Chaukhamba Publications, Varanasi.
2. *Mahabharata*, Gitapress, Gorakhpur (Prescribed Text)
3. *Vyakaranadarpana*, The Odisha State Bureau of Text Book Preparation and Production, Bhubaneswar, 2013

Suggested Readings:

1. *Hitopadesah (Mitralabhah)* (Ed.) N.P. Dash and N.S. Mishra, Kalyani Publishers, New Delhi
2. *Hitopadesah (Mitralabhah)* (Ed.) B.S. Mishra, Vidyapuri, Cuttack
3. *Yaksaprasna*, T. K. Ramaayiyar, R. S. Vadhyar & Sons. Palkad, Kerala
4. *Yaksaprasna*, Ed. Dr. Nirmal Sundar Mishra, A.K. Mishra Agency, Cuttack, 2016

+3 FIRST YEAR FIRST SEMESTER
Core Paper - 2
DRAMA-I & HISTORY OF SANSKRIT LITERATURE

Time : 3 Hrs.
 Credit : 06

End Semester Theory : 80 Marks
 Mid Semester Theory : 20 Marks

Group -A- 10 bit questions covering all four units 2x10=20
Group -B- Each unit carries 15 marks 15x4=60

1. Abhijnanasakuntalam (Act I-IV)

Unit-I- long questions (Two)

Unit-II- Explanation of one verse

Textual Grammar

- i) *Sandhi*
- ii) *Karaka & Vibhakti*
- iii) *Samasa*

2. History of Sanskrit Literature-I

Unit- III: *Ramayana & Mahabharata, General out lines of Puranas (Definition & Number)*

Unit- III: One long question

Unit- IV: (General Outlines of *Mahakavyas with special refence to Ashvaghosa, Kalidasa, Bharavi, Magha and Sriharsa and Sanskrit Dramas with special refence to Bhasa, Kalidasa, Sudraka, Visakhadatta, Ashvaghosa, Bhattanarayana*)

Unit- IV: One long question or three short notes

Course Outcomes:

- (i) Through understanding of love and romance by youths through the popular drama of Kalidasa i.e. Abhijnanasakuntalam.
- (ii) Negotiation of texts independently and appreciation for Sanskrit Learning.
- (iii) General outlines of Classical Sanskrit Literature (Ramayana, Mahabharata, Puranas)
- (iv) General outlines of Classical Sanskrit Literature (Poetry and Dramas)

Core Readings:

1. *Abhijnanasakuntalam* (Ed.) M.R. Kale, Motilal Banarsidass Publishers Pvt. Ltd., New Delhi- 110007, 8th Reprint, 2010.
2. *History of Sanskrit Literature*, Baladev Upadhyay, Chaukhamba Publications, Varanasi.

Suggested Readings:

1. *Abhijnanasakuntalam* (Ed.) R.M. Bose, Modern Book Agency Pvt. Ltd., Bankim Chatterjee Street, Calcutta
2. *Abhijnanasakuntalam* (Ed.) R.M. Mohapatra, Books & Books, Cuttack
3. *Abhijnanasakuntalam* (Ed.) H.K. Satapathy, Kitab Mahal, Cuttack
4. *Sanskrit Drama*, A.B. Keith, Oxford University Press, London
5. *Samskrta Sahiyata Itihasa*, (Odia) H.K. Satapathy, Kitab Mahal, Cuttack- 753003.

+3 FIRST YEAR SECOND SEMESTER

Core Paper - 3 DRAMA-II and DRAMATURGY

Time : 3 Hrs.
Credit : 06

End Semester Theory : 80 Marks
Mid Semester Theory : 20 Marks

Group -A- 10 bit questions covering all four units 2x10=20
Group -B- Each unit carries 15 maros 15x4=60

1. *Abhijnanasakuntalam* (Acts V-VII)

2. *Dramaturgy*

(*Nandi, Prastavana, Purvaranga, Panca-arthaprak[ti, Pancasandhi, Panca-arthopaksepaka, Nataka, Prakarana from Sahityadarpana*)

1. *Abhijnanasakuntalam* (Acts V-VII)

Unit-I- Two long questions

Unit-II-Explanation of textual verse- 1

Translation from Sanskrit to Odia/ English-1 verse

Translation from Prakrit to Sanskrit-1

2. *Dramaturgy* (*Sahityadarpana, Chapter- VI*)

Unit-III- *Nandi, Prastavana, Purvaranga, Nataka, Prakarana*

Unit-III- Three short notes

Unit-IV- *Pancasandhi, Panca - arthaprakruti and Panca- arthopaksepaka*

Unit-IV- Three short notes

Course Outcomes:

- (i) Through understanding of love and romance by youths through the popular drama of Kalidasa i.e. *Abhijnanasakuntalam*.
- (ii) Negotiation of texts independently and appreciation for Sanskrit Learning.
- (iii) Acquaintance with the keynote essentials of the rhetorical work of *Sahityadarpana* of Viswanath Kaviraja.
- (iv) Knowledge of Aesthetic values by reading Sanskrit Literature.

Core Readings:

1. *Abhijnanasakuntalam* (Ed.) M.R. Kale, Motilal Banarsidass Publishers Pvt. Ltd., NewDelhi-110007, 8th Reprint, 2010.
2. *Sahitya Darpana* with Laksmi Tika (Sanskrit) and Vimala Tika, (Hindi) (Ed.) K.M.Sastri, Chaukhamba Publications, Varanasi.

Suggested Readings:

1. *Abhijnanasakuntalam* (Ed.) H.K. Satapathy, Kitab Mahal, Cuttack
2. *Sahitya Darpana* (Ed.) P.V.Kane, Motilal Banarsidass Publishers Pvt. Ltd., New Delhi
3. *Odia Translation of Sahityadarpana* by Narayana Mohapatra, Odisha Sahitya Academy, Bhubaneswar.
4. *Sahityadarpana* evam Chanda (Ed.) Dr. Braja Sundar Mishra, Satyanarayan Book Store, Cuttack
5. *Sahityadarpana O Chanda* (Ed.) Niranjan Pati, Vidyapuri, Cuttack

+3 FIRST YEAR SECOND SEMESTER

Core Paper - 4

AN INTRODUCTION TO THE TECHNIQUE OF PANINIAN GRAMMAR & PROSODY

Time : 3 Hrs.

Credit : 06

End Semester Theory : 80 Marks

Mid Semester Theory : 20 Marks

Group-A-10 bit questions covering all four units 2x10=20

Group-B- Each unit carries 15 marks 15x4=60

1. *Vocabulary relevant to Sanskrit Grammar and Arrangement of Paninian Grammar*
2. *Samjna-prakaranam from Vaiyakarana Siddhanta Kaumudi*
3. *Chanda from Srutabodha*

1. **Vocabulary relevant to Sanskrit Grammar and Arrangement of Paninian Grammar**

Unit- I

(*Sutra, Varttika, Bhasya, Astadhyayi, Siddhantakaumudi, Dhatupatha, sthani, Agama, Adesa, Nadi, Nistha, Krdanta, Taddhita, Tinanta, Nijanta, Sananta, Yananta, Namadhatu, Vikarana, Luk, Lopa, Sarvadhataka, Ardhadhataka, ti & Upadha = 26*)

Unit-I- Short notes any six

2. **Samjnaprakaranam**

Unit- II :

From beginning upto najjhalau: four sutras to be explained

Unit- III :

Rest of the Sutras: Four Sutras to be explained

3. **Chanda (Prosody)- Srutabodhah**

(*Chandas such as -: Arya, Anustubh, Indravajra, Upendravajra, Upajati, Vamsastha, Vasantatilaka, Mandakranta, Malini, Shikharini, Shardula- vikridita, Sragdhara.*)

Unit- IV:

Definition and Examples of 4 Chandas - out of 7 asked (The students are advised to compose slokas in seminar period)

Course Outcomes:

- (i) Idea of Linguistics through Paninian grammer of Phonology, Morphology, Syntqax and Semantics.
- (ii) Idea of vocabulary relevant to Sanskrit Grammer and Arrangement of Panian Gramma.
- (iii) Awareness of Sanskrit Language through technical ideas of Paninian rules.
- (iv) Realisation of the styles of various mters to get pleasure from Sanskrit Slokas.

Core Readings:

1. *Siddhanta-kaumudi with Balamanorama and Tattvabodhini, Vol.I (Ed.) Giridhara Sharma Chaturveda, Motilal Banarsidass*

2. Vyakaranadarpana, The Odisha State Bureau of Text Book Preparation and Production, Bhubaneswar- 2013
3. Shrutabodha, Hari Prasad Sharma, Nirnaya Sagar Press. Bombay

Suggested Readings:

1. *Siddhanta-kaumudi* (Ed.) Prof. G.K. Dash & Dr(Mrs) K.Dash with Navanita tika, A.K.Mishra Publishers Pvt. Ltd, Cuttack.
2. *Siddhanta-kaumudi* (Ed.) Minati Mishra, Vidyapuri, Cuttack
3. *Siddhanta-kaumudi* (Ed.) Dr. Niranjana Pati, Kalyani Publishers, New Delhi
4. *Siddhanta-kaumudi* (Ed.) P.R.Ray, Sailabala Womens College,(Skt.Deptt.) Cuttack.
5. *Sahityadarpana Evam Chanda* (Ed.) Dr. Brajasundar Mishra, Satyanarayana Book Store, Cuttack.

+3 SECOND YEAR THIRD SEMESTER

Core Paper - 5

POETRY & HISTORY OF SANSKRIT LITERATURE- II

Time : 3 Hrs.

Credit : 06

End Semester Theory : 80 Marks

Mid Semester Theory : 20 Marks

Group-A-10 bit questions covering all four units 2x10=20

Group-B- Each unit carries 15 marks 15x4=60

1. *Meghadutam- (Purvamegha)*
2. *History of Sanskrit Literature-II*
(*Gitikavyas / Khandakavyas, Campu, Gadyakavyas and Kathasahitya*)

1. *Meghadutam- (Purvamegha)*

Unit-I one long question

- i) *Explanation of One Verse*
- ii) *Translation of One Verse into Odia/ Sanskrit*

2. *History of Sanskrit Literature-II*

Unit-III: *Gitikavyas / Khandakavya(Kalidas, Bhartrhari & Jayadeva)*

Unit-III: one long question two short notes

Unit-IV: *Campu (Ramayana campu, Bharata campu, Nala campu & Nilakantha campu), Gadyakavyas (Subandhu, Banabhatta & Dandi), Kathasahitya (Gunadhya, Somadeva, Visnusarma & Pandita Narayana)*

Unit-IV: Three short notes

Course Outcomes:

- (i) Inquisitiveness for knowing geographical ideas about boundary and various places of India, cultural values, relationship etc.
- (ii) Skill of Explanation and Translation from Sanskrit to Odia.

- (iii) Awareness of Indian age-old heritage exercising : inexpressible impact on the life and culture of the India.
- (iv) General outlines of Classical Sanskrit Literature (Champu & Gadya kavya)

Core Readings:

1. *Meghadutam* (Ed.) M.R. Kale, Motilal Banarsidass, Delhi
2. *Sanskṛta Sahitya ka Itihasa*, Baladeva Upadhyaya, Choukhamba, Varanasi.

Suggested Readings:

1. *Meghadutam* (Ed.) Dr. Braja Sundar Mishra, Vidyapuri, Cuttack, 1st Edn-1999
2. *Meghadutam* (Ed.) Radhamohan Mahapatra, Books and Books, Vinodvihari, Cuttack, 1984
3. *Sanskṛta Sahitya ka Ruparekha*, Vacaspati Goreilla, Choukhamba Vidyabhavan, Varanasi.
4. *Sanskṛta Sahitya Itihasa*, H.K. Satapathy, Kitab Mahal, Cuttack
5. *Sanskṛta Sahitya Itihasa*, Text Book Bureau, Govt. of Odisha, Bhubaneswar

+3 SECOND YEAR THIRD SEMESTER**Core Paper - 6****META RULES OF PANINIAN GRAMMAR, POETICS
& FIGURES OF SPEECH**

Time : 3 Hrs.

Credit : 06

End Semester Theory : 80 Marks

Mid Semester Theory : 20 Marks

Group-A-10 bit questions covering all four units 2x10=20

Group-B- Each unit carries 15 marks 15x4=60

1. *Paribhasaprakaranam of Vaiyakarana Siddhantakaumudi*
2. *Sahityadarpanah (Ch.I & II)*
3. *Sahityadarpanah (Selected Alamkaras from Ch.X)*

1. Paribhasaprakaranam**Unit- I:**Four *Sutras* to be explained.**2. Poetics****Unit- II:***Sahityadarpana Ch. I (Kavya laksana, Kavya prayojana, Kavya hetu, Kavya bheda)***Unit- III:***Sahityadarpana Ch. II (Vakya, Pada, Abhidha, Laksana, Vyanjana)*

Unit-II: Three short notes out of five

Unit-III: Three short notes out of five

3. **Figures of speech** (without Sub-division)

Sahityadarpana (Ch.X)

(*Alamkaras such as Anuprasa, Yamaka, Slesa, Upama, Rupaka, Utpreksa, Bhrantiman, Nidarsana, Arthantaranyasa, Aprastuta-prasamsa, Apahnuti, Vyatireka, Vibhavana, Visesokti, Samasokti, Svabhavokti*)

Unit- IV:

Definition and Examples of **Four Alamkaras** (figures of speech) out of **seven** asked.

Course Outcomes:

- (i) Enhancement of knowledge of meta-rules of Panini which is supposed to enrich the grammatical base of students.
- (ii) Basic knowledge of kavyas in Sanskrit Literature.
- (iii) Basic knowledge of making sentence and three powers.
- (iv) Affirmation of reciting Sanskrit slokas with figure speech and Poetics that develop clarity and lucidity in Sanskrit learning.

Core Readings:

1. *Vaiyakarana Siddhanta-kaumudi* with Balamanorama and Tattvabodhini, Vol.I (Ed.) Giridhara Sharma Chaturveda, Motilal Banarsidass, Delhi
2. *Sahitya Darpana* with Laksmi Tika (Sanskrit) and Vimala Tika, (Hindi) (Ed.) K.M.Sastri, Chaukhamba Publications, Varanasi.

Suggested Readings:

1. *Siddhanta-kaumudi* (Ed.) Prof. G.K. Dash & Dr(Mrs) K.Dash with Navanita tika, A.K. Mishra Publishers Pvt. Ltd, Cuttack.
2. *Sahitya Darpana* (Ed.) P.V.Kane, Motilal Banarsidass Publishers Pvt. Ltd., New Delhi
3. *Odia Translation of Sahityadarpana* by Narayana Mohapatra, Odisha Sahitya Academy, Bhubaneswar.
4. *Sahitya Darpana* with Laksmi Tika (Sanskrit) and Vimala Tika, (Hindi) (Ed.) K.M.Sastri, Chaukhamba Publications, Varanasi.
5. *Sahityadarpana* evam Chanda (Ed.) Dr. Braja Sundar Mishra, Satyanarayan Book Store, Cuttack.
6. *Sahityadarpan*, Dr. Niranjana Pati, Kalyani Publishers, Ludhiana.

+3 SECOND YEAR THIRD SEMESTER

Core Paper - 7

CASES AND CASE ENDINGS IN PANINIAN GRAMMAR & TRANSLATION - I

Time : 3 Hrs.

End Semester Theory : 80 Marks

Credit : 06

Mid Semester Theory : 20 Marks

1. *Vaiyakarana Siddhantakaumudi (Karaka-Vibhakti I-IV)*
2. *Translation from Sanskrit unseen passage to Odia/ English*
 Group-A-10 bit questions covering all four units 2x10=20
 Group-B- Each unit carries 15 marks 15x4=60

1. *Siddhantakaumudi (Karaka-Vibhakti I-IV)*

Unit- I:

(Prathama & Dvitiya) Two Sutras/ Vrtti/ Varttika to be explained.

Unit- II:

(Tritiya) Two Sutras/ Vrtti/ Varttika to be explained

Unit- III:

(Caturthi) Two Sutras/ Vrtti/ Varttika to be explained.

2. *Translation from Sanskrit unseen passage into Odia/ English*

Unit-IV:

One unseen Sanskrit Passage is to be given for Translation into Odia/ English (At least 08 sentences)

Course Outcomes:

- (i) Basic ideas about cases and case-ending in Paninian grammar to develop tips to write, speak translate in Sanskrit.
- (ii) Enhancement of skill to translate Sanskrit text to other languages like English, Odia, Hindi etc.
- (iii) Basic ideas about cases and case-endings in Paninian grammar to develop tips to write, speak translate in Sanskrit.
- (iv) Basic ideas about cases and case-endings in Paninian grammar to develop tips to write, speak translate in Sanskrit.

Core Readings:

1. *Vaiyakarana Siddhanta-kaumudi* with Balamanorama and Tattvabodhini, Vol.I (Ed.) Giridhara Sharma Chaturveda, Motilal Banarsidass
2. *Vyakaranadarpana*, The Odisha State Bureau of Text Book Preparation and Production, Bhubaneswar- 2013

Suggested Readings:

1. *Siddhanta-kaumudi* (Ed.) Prof. G.K. Dash & Dr(Mrs) K.Dash with Navanita tika, A.K. Mishra Publishers Pvt. Ltd, Cuttack.
2. *Siddhanta-kaumudi* (Ed.) Minati Mishra, Vidyapuri, Cuttack
3. *Siddhanta-kaumudi* (Ed.) Dr. Niranjana Pati, Kalyani Publishers, New Delhi
4. *A Guide to Sanskrit Composition and Translation*, M.R.Kale, Motilal Banarsidass, New Delhi
5. *Bhat Anuvada Candrika*, Chakradhara Hamsa Nautial Shastri, Motilal Banarsidass, New Delhi.

+3 SECOND YEAR FOURTH SEMESTER

Core Paper - 8 UPANISAD, RAMAYANA & BHAGAVADGITA

Time : 3 Hrs.
Credit : 06

End Semester Theory : 80 Marks
Mid Semester Theory : 20 Marks

1. *Kathopanisad* (Vallis-I, II&III)
2. *Ramayana* (Ch.IX of *Aranyakanda*, *Ahimsa prasamsa*)
3. *Bhagavadgita* (Chap.XV)

Group-A-10 bit questions covering all four units 2 x 10 = 20
Group-B- Each unit carries 15 marks 15 x 4 = 60

1. ***Kathopanisad* (Adhyaya I, Vallis-I, II & III)**

Unit- I & II

- i) Explanation - 1 Mantra)
- ii) Translation- 1

2. ***Ramayana***

Unit-III

Ch. IX of *Aranyakanda*, *Ahimsa prasamsa*
One long question
One explanation

3. ***Bhagavadgita***

Unit-IV

(Chap. XV)

Course Outcome:

- (i) Development of a strong concept of character - building through Upanisadic story of Nachiketa.
- (ii) Skill of explanation & Translation of mantras.
- (iii) Inclucation of human values like non-violence, kindness etc. as instructed by Devi Sita to Lord Ram in the epic *Ramayana*. This also develops gender sensitization like how to show respect to ladies in society.
- (iv) Knowledge of Self-management like self-control, control over emotions, consistency and persistency, Perserverance etc. to excel in every walk of life.

Core Readings:

1. *Kathopanisad* with *Sankarabhasya* (Ed.) V.K. Sharma, Sahitya Bhandar, Subhas Bazar, Meerut
2. *Shrimad-bhagavad-gita*, Gita Press, Gorakhpur
3. *Srimad Valmikiya Ramayanam*, Gita Press, Gorakhpur (Prescribed Text)

Suggested Readings:

1. *Kathopanisad with Sankarabhasya*, Ed. Dr. Haramohan Mishra, Vidyapuri, Cuttack.

2. *The Message of the Upanisad*, Swami Ranganathananda, Bharatiya VidyaBhavan, K.M. Munsii Marg Mumbai.
3. *Valmiki Ramayana*, (Critical Edition), Oriental Institute, Baroda
4. *Shrimad-bhagavad-gita* (Ed.) S. Radhakrishnan, Bharatiya Vidya Bhavan
5. *Shrimad-bhagavad-gita* (Ed.) Gambhirananda, Ramakrishna Mission
6. *Shrimad-bhagavad-gita*(Ed.) Swami Ranganathananda, Advaita Ashrama, Kolkata- (8th reprint) 2014

+3 SECOND YEAR FOURTH SEMESTER

Core Paper - 9

CASE AND CASE ENDING OF PANINIAN GRAMMAR, TRANSLATION- II & LEXICON

Time : 3 Hrs.

Credit : 06

End Semester Theory : 80 Marks

Mid Semester Theory : 20 Marks

1. *Vaiyakarana Siddhantakaumudi (Karaka – vibhakti V-VI)* End sem theory - 80 marks
2. *Translation of an unseen Odia / English passage into Sanskrit* midsem - 20 marks
3. *Amarakosa*

Group-A-10 bit questions covering all four units 2x10=20

Group-B- Each unit carries 15 marks 15x4=60

1. *Siddhantakaumudi (Karaka – Vibhakti V – VI)*

Unit-I:

(CASE –V) Explanation of any two sutras / Vrttis / Varttikas

Unit-II:

(CASE VI & VII) Explanation of any two sutras / Vrttis / Varttikas (One from VIth one sutras from VII case)

2. *Translation – II*

Unit-III :

Unseen Passage of Odia is to be translated into Sanskrit. (At least Eight sentences)

3. *Amarakosa (Devata, Svarga, Visnu, Laksmi, Durga, Surya, Brahma, Siva, Kartikeya, Ganesa, Sarasvati from Svargavarga)*

Unit- IV:

Short notes on any two out of four asked

Course Outcome:

- (i) Basic ideas about cases and case-endings in Paninian grammar to develop tips to write, speak translate in Sanskrit.
- (ii) Enhancement of skill to translate Sanskrit text to other languages like English, Odia, Hindi etc.

- (iii) Basic ideas about cases and case-endings in Paninian grammar to develop tips to write, speak translate in Sanskrit.
- (iv) Basic ideas about Lexicon of Amarakosha.

Core Readings:

1. *Vaiyakarana Siddhanta-kaumudi* with Balamanorama and Tattvabodhini, Vol.I (Ed.) Giridhara Sharma Chaturveda, Motilal Banarsidass
2. *Vyakaranadarpana*, The Odisha State Bureau of Text Book Preparation and Production, Bhubaneswar- 2013
3. *Amarakosa* with Ramasrami tika, Choukhamba Sanskrit Series office, Varanasi

Suggested Readings:

1. *Siddhanta-kaumudi* (Ed.) Prof. G.K. Dash & Dr(Mrs) K.Dash with Navanita tika, A.K. Mishra Publishers Pvt. Ltd, Cuttack.
2. *Siddhanta-kaumudi* (Ed.) Minati Mishra, Vidyapuri, Cuttack
3. *Siddhanta-kaumudi* (Ed.) Dr. Niranjana Pati, Kalyani Publishers, New Delhi
4. *A Guide to Sanskrit Composition and Translation*, M.R.Kale, Motilal Banarsidass, New Delhi
5. *Brhat Anuvada Candrika*, Chakradhara Hamsa Nautial Shastri, Motilal Banarsidass, New Delhi
6. *Namalinganuasanam (Amarakosa)*, D.G. Padhye, Choukhamba Sanskrit Series, New Delhi.

+3 SECOND YEAR FOURTH SEMESTER

Core Paper - 10

ORNATE PROSE IN CLASSICAL SASNKRIT

Time : 3 Hrs.

Credit : 06

End Semester Theory : 80 Marks

Mid Semester Theory : 20 Marks

1. *Inscriptions*
2. *Dasakumaracaritam (Purvapithika, Dvitiya Ucchvasa)*
3. *Sukanasopadesa of Kadambari*

End sem theory - 80 mark

mid sem - 20 mark

Group-A-10 bit questions covering all four units

2x10=20

Group-B- Each unit carries 15 marks

15x4=60

1. *Inscriptions*

Unit-I:

Girnar inscription of Rudradaman, Prayaga (Allahabad) stone pillar inscription of Samudragupta & Mandasore inscription of Yasovarman)

2. *Dasakumaracaritam*

Unit-II:

Purvapithika, Dvitiya Ucchvasa

3. *Sukanasopadesa of Kadambari*

Unit-III & IV:

Textual Sentence Translation into Odia/ English

Course Outcome:

- (i) The students will have also character development through the popular books of Dasakumarcharitam.
- (ii) Knowledge of various inscriptions found in India, which help students to know about the Ancient Indian history, literature, art, religion etc.
- (iii) Knowledge about vastness and variety of the scope of Sanskrit literature specifically civilization and culture in prose like Sukanasopadesa.
- (iv) Development of skill in Explanation and Translation in Prose Texts.

Core Readings:

1. *Dasakumaracarita* (Ed.) M.R. Kale, Motilal Banarsidass, Delhi.
2. *Sukanasopadesa* (Ed.) Ramakanta Jha, Choukhamba Vidyabhavan, Varanasi.
3. Selected Sanskrit inscriptions (Ed.) by D.B. Pusalkar, Classical Publisher, New Delhi.

Suggested Readings:

1. *Dasakumaracarita*, Chaukhamba Publications, Varanasi.
2. *Sukanasopadesa* (Ed.) Nirmal Sundar Mishra, Kalyani Publishers, New Delhi.
3. *Abhilekhamala* (Ed.) Sujata Dash, Kalyani Publisher, New Delhi.
4. *Abhilekhaçayana* (Ed.) Jayanta Tripathy, Vidyapuri, Cuttack
5. *Kadambari (Purvardham)* with the com. of Bhanuchandra Siddhanjani, MLBD, New Delhi

+3 THIRD YEAR FIFTH SEMESTER

Core Paper - 11 ORNATE POETRY IN SANSKRIT

Time : 3 Hrs.

Credit : 06

End Semester Theory : 80 Marks

Mid Semester Theory : 20 Marks

1. *Sisupalabadham* (Canto-I Verses 01-48)

2. *Kiratarjuniyam* (Canto-I)

End sem theory - 80 marks

midsem - 20 marks

Group-A-10 bit questions covering all four units

2x10=20

Group-B- Each unit carries 15 marks

15x4=60

1. *Sisupalabadham*

Unit-I & II-

(Canto-I Verses 01-48)

Unit-I

One long question

Unit-II

Explanation of two verse

2. Kiratarjuniyam (Canto-I) Unit-III & Unit- IV**Unit-III**

One long question

Unit-IV

Explanation of two verse Bigrahavakya

Course Outcomes:

- (i) The students will have also character development through the popular books of Sisupalabadham.
- (ii) Development of skill in Translation and Explanation of the texts.
- (iii) The knowledge of role of a lady in society from the text of karatarjuniyam.
- (iv) The students will have development of Translation and Explanation of the texts through the popular books of Kiratarjurniyam.

Core Readings:

1. *Sisupalabadham* (Ed.) S.R. Ray, Vallabhatika, Bharatiya Vidya Prakashan, New Delhi.
2. *Kiratarjuniyam* (Cantos I-III) (Ed.) M.R. Kale, Motilal Banarsidass Publishers Pvt. Ltd., Delhi, 4th Edn-1966, Rpt-1993

Suggested Readings:

1. *Sisupalabadham - Canto-I* (Ed.), Devanarayan Mishra, (With *Sarvankasa-tika* of Mallinatha), Sahitya Bhandar, Meerut
2. *Kiratarjuniyam* (Canto- I) (Ed.) Niranjan Pati, Vidyapuri, Cuttack.
3. *Sisupalabadham* – H.K. Satpathy, Kitab Mahal, Cuttack

+3 THIRD YEAR FIFTH SEMESTER**Core Paper - 12****VEDA, VEDIC GRAMMAR & HISTORY OF VEDIC LITERATURE**

Time : 3 Hrs.

Credit : 06

End Semester Theory : 80 Marks

Mid Semester Theory : 20 Marks

1. *Vaidika Suktas*

End sem theory - 80 marks

2. *Vedic Grammar*

mid sem - 20 marks

3. *History of Vedic Literature*

Group-A-10 bit questions covering all four units

2x10=20

Group-B- Each unit carries 15 marks

15x4=60

1. Veda**Unit-I & II:**

Vedic Suktas from different *Samhitas*: Agni (RV- I.1), Indra (RV- II.12) , Savitr (RV- I.35), Usas (RV- I.48), Purusa-sukta (YV XXXI.1.16), Siva-samkalpa (YV-XXX.1.6), Samjnana(RV X.191), Vak(RV X.125)

Unit-I-One long question

Unit-II-Explanation of two mantras

2. Vedic Grammar**Unit- III:**

The following Sutras are to be taught: *Chandasi pare'pi, Vyavahitasca, Caturthyarthe bahulam chandasi, Chandasi lun-lan-litah, Linarthe let, Leto'datau, Sibbahulam leti, Itasca lopah parasmaipadesu, Sa uttamasya, Ata ai, Vaito'nyatra, Hr-grahor bhaschandasi, Chandasi ubhayatha, Tumarthe se-sen-ase-asen- kase-kasen-adhyai-adhyain- kadhyai-kadhyain-shadhyai-shadhyain-tavai-taven-tavenah, Va chandasi, Ses chandasi bahulam, Prakrya'ntapadam avyapare, Nipatasya ca, Supam suluk purva-savarnac che-ya-da-dya- ya-jalah, Idanto masi, Ajjaserasuk, Dirghadati samanapade*

Unit-III- Two *sutras* to be explained

Two *sadhanas* to be worked out

3. History of Vedic Literature**Unit-IV (Samhita, Brahmana, Aranyaka, Upanisad)**

Unit-IV- One long questions

Course Outcome:

- (i) Knowledge of Vedas, Upanishads etc. the actual Intellectual Property of Ancient India in this paper explicitly inspires and uplifts human lives socially, morally and spiritually.
- (ii) Acquaintance with knowledge of explanation and translation of Vedic mantras.
- (iii) Knowledge of Vedic Grammar to understand Vedic texts.
- (iv) Knowledge of History of Vedic Literature.

Core Readings:

1. *New Vedic Selection (Part-I)* (Ed.) Telang and Chaubey, Bharatiya Vidya Prakashan, New Delhi.
2. *Vaidika Sahitya aur Samskriti*, Baladeva Upadhyaya, Chaukhamba, Varanasi

Suggested Readings:

1. *Vaidika sahitya o Samskriti* , A.C. Das, Grantha Mandira, Cuttack
2. *Veda O Vaidika Prakarana*,(Ed) Niranjan Pati, Vidyapuri, Cuttack.
3. *History of Indian Literature Vol. I*, M.Winternitz, MLBD, New Delhi
4. *Vaidik sahitya ki Ruparekha*,Umashankar Sharma Rsi,Chawkhamba Vidyapublishan, Varanasi
5. *Vaidika Sahitya O Samskriti*, Bholanath Rout, Chitrotpala Publication, Salipur

+3 THIRD YEAR SIXTH SEMESTER

Core Paper - 13 AYURVEDA & VRKSAYURVEDA

Time : 3 Hrs.
Credit : 06

End Semester Theory : 80 Marks
Mid Semester Theory : 20 Marks

Group-A-10 bit questions covering all four units 2x10=20 *End sem theory - 80 marks*
Group-B- Each unit carries 15 marks 15x4=60 *mid sem - 20 marks*

1. **Ayurveda** (Carakasamhita- Sutrasthana, dhirgham jivitiyadhyaya) (Verses from 51 upto the end)
2. **Vrksayurveda** (Vrksayurvedadhyaya of Brhatsamhita)

1. Ayurveda

Unit I, II & III - (Carakasamhita, Sutrasthana, dhirgham jivitiyadhyaya)

Unit I & II- Two long questions

Unit III- Three short questions

2. Vrksayurveda

Unit-IV:

Vrksayurvedadhyaya of Brhatsamhita(one long question & Three short questions)

Course Outcomes:

- (i) Enhancement of knowledge of plants life and their contribution to human health and wellbeing.
- (ii) Knowledge of Ayurveda in Charaka Samhita, alternative medicine system of ancient Indian Risis.
- (iii) Impact of herbal life in Wellness Industry.
- (iv) Knowledge of Vrksayurveda regarding medicinal plants, process of plantation, their remedial measures for diseases etc.

Core Readings:

1. *Carakasamhita, Brahamananda Tripathy, Chowkhamba Surabharati Prakasan, Varanasi.*
2. *Brhatsamhita of Barahamihira, Ed. Sudhakar Dwivedi, Sampurnanda Samskrita Viswavidyalaya, Varanasi*

Suggested Readings:

1. *Samskrita Vanmaya ka brhat itihās (Vol.17) Ayurved ka itihās, Uttarpradesh Samskrit Sansthan, Lukhnow, 2006*
2. *Ayurved ka Brhat Itihās, Atridev Vidyānkar, Chowkhamba, Delhi*
3. *Carakachintanam, Priyabrata Sharma, Chowkhamba, Delhi*
4. *Vrksayurveda, Ed. Dr. Narayana Prasad Dash, Vidyapuri, Cuttack.*

+3 THIRD YEAR SIXTH SEMESTER

Core Paper - 14

TECHNICAL LITERATURE IN SANSKRIT (JYOTISA & VASTU)

Time : 3 Hrs.

Credit : 06

End Semester Theory : 80 Marks

Mid Semester Theory : 20 Marks

- | | |
|--|---|
| <p>1. <i>Jyotisa (Jyotih-sara-ratnavali, Chap I)</i>
(<i>Graha-naksatra-paricaya-prakaranam</i>)</p> <p>2. <i>Vastu (Vasturatnakara, Chap-I)</i> (<i>Bhuparigraha-prakaranam</i>)
Group-A-10 bit questions covering all four units 2x10=20
Group-B- Each unit carries 15 marks 15x4=60</p> | <p><i>End sem theory - 80 marks</i>
<i>mid sem - 20 marks</i></p> |
|--|---|

1. **Jyotisa**

Unit-I & II-(*Graha-naksatra-paricaya-prakaranam*)

Unit-I- One long question

Unit-II- Three short questions

2. **Vastu**

Unit-III, IV & V (*Bhuparigraha-prakaranam*)

Unit-III- One long question

Unit-IV- Three short questions

Course Outcomes:

- (i) The knowledge of Planetary world in Indian Astrology.
- (ii) Enhancement skill in the field of Hindu Astrology. The book *Jyotih-sara-ratnavali* describes the planetary bodies in the solar system and forecasts future events.
- (iii) Knowledge of *Vastu Shastra* which impacts the universal need for peace and harmony.
- (iv) The text book of *Vasturatnakar* impacts knowledge of perfectly balanced home, which invites positive energy and keeps out negative energy.

Core Readings:

1. *Jyotih-sara-ratnavali*(Part-I) (Ed.) Pandit Baikoli Mahapatra, Radhakrishna Pustakalaya, Satyanarayan Temple Road, Berhampur, Ganjam, Odisha
2. *Vasturatnakara* (Ed.) Vindhreshwari Prasad Dwivedi, Chowkhamba Krishnadas Academy, Varanasi

Suggested Readings:

1. *Jyotishavisvakosa*, Haridutta Sharma, Subodh Publication, New Delhi
2. *Vaidika jyotisa*, Dr. G. S. Shastri, Chowkhamba Samskriti Bhabana, Varanasi
3. *Bharatiya jyotisa*, Dr. Nemichandra Shastri, Bharatiya Jnanapitha, New Delhi-110003
4. *Jyotisa-tattvanka*, Gitapress, Gorakhpur (2014)
5. *Rajaballavam Vastusatram*, Ed. Dr. Srhrikishna Jugnu, Parimal Publication, Delhi, 2005

6. *Vastu, Astrology & Architecture*, (Compilation of Research Paper of A National Conference on Vastu & Jyotisa), Ed.by Gayatri Dev Vasudev, MLBD, New Delhi, (4th reprint-2015)
7. *Grahanaksatra paricaya prakaranam*, Dr. N.S. Mishra, Kalyani Publishers, Ludhiana.
8. Bhuparagraha – prakaranam, Dr. N.S. Mishra, Kalyani Publishers, Ludhiana.

+3 THIRD YEAR FIFTH SEMESTER

DSE - 1

SOCIO-POLITICAL THOUGHT IN ANCIENT INDIA

Time : 3 Hrs.

Credit : 04

End Semester Theory : 50 Marks

Mid Semester Theory : 20 Marks

1. Arthasastra (Adhikarana I.1- 4)

End sem theory - 80 marks

2. Dharmasastra

mid sem - 20 marks

Yajnavalkyasmruti (Vyavahârâdhyâya verses 1-65)

Group-A-10 bit questions covering all four units 2x10=20

Group-B- Each unit carries 15 marks 15x4=60

1. Arthasastra

Unit- I & II: *Adhikarana* I.1-4 from the beginning up to Vinayadikarana - 16 Marks

Unit- I- one long questions

Unit-II- Three short questions

2. Dharmasastra

Units- III, IV & V: *Yajnavalkyasmruti (Vyavahârâdhyâya verses 1-65)*

Unit-III- Short question three

Unit-IV- Translation of two verse

Course Outcomes:

- (i) Knowledge of various ancient Indian knowledge system, duties of kings for good governance, punishment policy, tax policy, war policy, etc. from the famous book of Kutilya i.e. Arthasastra.
- (ii) Expansion of Ancient Indian Polity from Arthasastra.
- (iii) Knowledge of Dharmasastra Literature in Which ancient Indian social institutions and Indian Polity are highlighted. The treatise of Yajnavalkyasmruti highlights law and conduct of Ancient India.
- (iv) Expansion of Ancient Indian Laws from Dharmasastra.

Core Readings:

1. *Kautilya Arthashastra*, (Ed. & Trans.) R.P. Kangle, 3 Vols., Motilal Banarsidass, New Delhi
2. *Yajnavalkyasmruti (Vyavahârâdhyâya)*, (Ed.) Kishore Chandra Mahapatra, Jageswarilane, Balighat, Puri

Suggested Readings:

1. The *Arthashastra*. (Ed.& Trans), L.N. Rangarajan, Penguin Classics, India, 1992
2. The *Arthashastra*. (Ed.) N.P. Unni, Bharatiya Vidya Prakashan, New Delhi
3. *Arthashastra* (Odia Trans.) Anantarma Kar, Odisha Sahitya Academy, Bhubaneswar
4. *Kautilya Arthashastra*, (Ed.) Karunakar Das, Kitab Mahal, Cuttack.
5. *Yājñavalkyasmṛiti*, (Ed.) M.N. Dutta, Parimal Publications, New Delhi

+3 THIRD YEAR FIFTH SEMESTER**DSE - 2****ETHICAL LITERATURE IN SANSKRIT**

Time : 3 Hrs.

Credit : 04

End Semester Theory : 50 Marks

Mid Semester Theory : 20 Marks

1. *Chanakyaniti* (Chaps- I, II, III and IV from *Cānakyanītidarpaṇa*) End sem theory - 80marks
 2. *Nīṭisataka* of Bhartrhari (Verses 1-50) Midsem - 20 marks
- Group-A-10 bit questions covering all four units 2x10=20
Group-B- Each unit carries 15 marks 15x4=60

1. Chanakyaniti**Unit-I & II:** Chaps- I, II, III and IV from *Chanakyanīti darpaGa*

Unit-I- Two verse to be explained

Unit-II- Three short questions

2. Nīṭisataka**Unit-III, IV & V** (Verses 1-50)

Unit-III- Two short questions

Unit-IV- Two Explanations

Course Outcomes:

- (i) Acquaintance of a collection of moral teachings in Sanskrit literature.
- (ii) Knowledge of Verses which are full of wit and wisdom related to family, social, economic, political and mental life of human beings.
- (iii) Knowledge of advice to conquer wicked and falls friend, son, servant, ruler or administration from *Nīṭisataka*.
- (iv) Students can follow the path of righteousness for a happy and contented life.

Core Readings:

1. *CānakyanītidarpaGa* (Ed.) Gunjeswar Choudhury, Choukhamba SurabharatiPrakashan, Varanasi
2. *Nīṭisataka* (Ed.) M.R. Kale, MLBD, New Delhi (Text)

Suggested Readings:

1. *Sampurna Canakyaniti (Ed.)*, Dr. N.S. Mishra, A.K. Mishra Agencies, Cuttack
2. *Nītisataka (Ed.)* Naresh Jha, Choukhamba Prakashan, New Delhi
3. *Bhartrhari Sataktrayam*, B. S. Mishra, Vidyapuri, Cuttack.

+3 THIRD YEAR SIXTH SEMESTER**DSE - 3****TRANSLATION, EDITING AND WRITING SKILL**

Time : 3 Hrs.

End Semester Theory : 50 Marks

Credit : 04

Mid Semester Theory : 20 Marks

Unit-I: Anuvada Kala-*End sem theory - 80 marks***Unit-I:** Translation of one Odia/ English Paragraph in to Sanskrit*mid sem - 20 marks***Unit-II:****Precises Writing-**

Unit-II-One Sanskrit Paragraph is to be precisised in 1/3rd words and a suitable title is to be suggested.

Unit-III:**Proof Correction and Transliteration**

- i. Proof Correction of **two** *wrongly printed* Sanskrit Verses from the Prescribed text are to set for necessary Proof Correction-
- ii. Transliteration of **two** Sanskrit Verses from Prescribed text are to be written in Roman/ Italic script with diacritical marks

Unit-IV:**Essay-**One Essay in Sanskrit**Course Outcomes:**

- (i) Enhancement of skill in translation of any valuable Odia/English text to Sanskrit language which is very necessary for spreading new information and knowledge to all.
- (ii) Knowledge of precise writing in Sanskrit.
- (iii) Knowledge of editing and proof reading which can enhance their mastery over Sanskrit language and style of righting.
- (iv) Knowledge of Transliteration to study Sanskrit texts easily.

Core Readings:

1. Samskrta Vyakaranadarpana, Odisha Text Book Bureau, Bhubaneswar
2. Samskrta Nibandha Satakam, Kapildev Dwivedi, Chawkhamba Publication, Banaras

Suggested Readings:

1. Brht Anuvada Shiksa, Chakradhara Hansa Nautiyal, MLBD, New Delhi
2. Samskrta- nibandhadarsah, Rammurti Sharma, Sahitya Niketan, Kanpur

Discipline Specific Elective Paper-IV INDIAN PHILOSOPHY: GENERAL IDEAS

1. **Astika**
2. **Nastika**
1. **Astika**

Unit– I:

Samkhya and Yoga Twenty – Five elements of Samkhya, satkaryavada and Astangayoga of Yogadarsana.

Unit– II:

Nyayavaishesika Asatkaryavada, Saptapadarthas, Armbhavada, Paramanuvada

Unit– III:

Vedanta Mimamsa O Saktidvaya of Maya in Vedanta, Vivartavada, Netivada and karma in Mimamsa, Svatapramanyavada.

Unit– IV:

Nastikas, Carvaka, Jaina & Bauddha Yadrchavada and Nairatmyavada of Carvaka, Saptabhanga-naya, Syadvada of Jaina, Aryasatyas, Ksanikavada & Moksa

Core Readings:

1. Bharatiya Darsana (Odia), Gouranga Charana Nayak, The Odisha State Bureau of Text Book Preparation and Production, Bhubaneswar.

Suggested Readings:

1. History of Indian Philosophy, S.N. Dasgupta, MLBD, New Delhi.
2. Indian Philosophy, S. Radhakrishnan, George Allen and Unuin Ltd., New York.
3. A Critical Survey of Indian Philosophy, C. D. Sharma, MLBD, New Delhi.
4. Outlines of Indian Philosophy, M. Hiriyana, MLBD, New Delhi.

+3 THIRD YEAR SIXTH SEMESTER

DSE - 4

PREPARATION AND PRESENTATION OF PROJECT

Time : 3 Hrs.

Credit : 04

End Semester Theory : 50 Marks

Mid Semester Theory : 20 Marks

Project and Presentation

(The Project work should be done preferably on Creative writings and Translation works of Sanskrit Language.)

Course Outcomes:

- (i) Knowledge of Indian philosophy of Samkhya and Yoga which help one to achieve intellectual and behavioural competence.

- (ii) Knowledge of Vaisesika philosophy which is the right instrument and formulation of all actions and duties.
- (iii) Knowledge of Vedanta philosophy which develops of an inquisitive mind and sense of self confidence to produce research work independently.
- (iv) Knowledge of Nastika, Carvaka and Boudha philosophy.

+3 FIRST YEAR FIRST SEMESTER

GE - 1

MORAL TEACHINGS AND BASICS OF SANSKRIT

Time : 3 Hrs.
Credit : 04

End Semester Theory : 50 Marks
Mid Semester Theory : 20 Marks

1. *Hitopodesa Mitralabha* (Prastavana, Kathâ mukha, Brddhavyaghrapathikakatha, Mrgajambukakatha & Grudhravidalakatha)
2. *Yaksaprasna of Mahabharata* (Aranyakaparva, ch.313 from Verses no. 41 to 133)
3. *Sabdarupa & Dhaturupa*

('a' karanta, 'i' karanta, 'î' karanta, 'u' karanta, 'û' karanta, 'in' bhaganta, Mâtru, Pitru, Asmad, Yusmad, Tad (sabdarupas). Lat, Lan, Vidhilin, Lrut, Lot and Litlakaras path, Ni, Kru, Sev, Han, Pâ, Dâ, Sru, Sî and Krîn in the form of Atmanepada, Parasmaipada or Ubhayapada whichever is applicable. (Dhaturupas)

Group-A-10 bit questions covering all four units 2x10=20
Group-B- Each unit carries 15 marks 15x4=60

Unit-I & II:

Hitopodesa Mitralabha and Sabdarupa

Unit-I- one long question

Unit-II- Translation of a textual verse

Sabdarupa - 4

Unit-III & IV:

Yaksaprasna of Mahabharata and Dhaturupa

Unit-III- one long question

Unit-IV- Explanation - 1 (About 150 words each) Translation of a textual verse

Dhaturupa – 4

Course Outcome:

- (i) Ability to develop a strong sense of ethical and moral values in personal and professional life.
- (ii) A solid foundation of students' positive mind-set through lofty teachings of Hitopadsa.

- (iii) A solid foundation of students' positive mind-set through lofty teachings of Yakasaprasna.
- (iv) Awareness of communication skills in understanding Sanskrit Grammar with knowledge of basic Words and roots.

Core Readings:

1. *Hitopadesah (Mitrabhabh)* (Ed.) Kapildev Giri, Chaukhamba Publications, Varanasi.
2. *Mahabharata*, Gitapress, Gorakhpur (Prescribed Text)
3. *Vyakaranadarpana*, The Odisha State Bureau of Text Book Preparation and Production, Bhubaneswar, 2013.

Suggested Readings:

1. *Hitopadesah (Mitrabhabh)* (Ed.) N.P. Dash and N.S. Mishra, Kalyani Publishers, New Delhi
2. *Hitopadesah (Mitrabhabh)* (Ed.) B.S. Mishra, Vidyapuri, Cuttack
3. *Yaksaprasna*, T. K. Ramaayiyar, R. S. Vadhyar & Sons. Palkad, Kerala
4. *Yaksaprasna*, Ed. Dr. Nirmal Sundar Mishra, A.K. Mishra Agency, Cuttack, 2016

+3 FIRST YEAR SECOND SEMESTER

GE - 2

KHANDAKAVYA & DARSANAKAVYA

Time : 3 Hrs.
Credit : 04

End Semester Theory : 50 Marks
Mid Semester Theory : 20 Marks

Group-A-10 bit questions covering all four units 2x10=20
Group-B- Each unit carries 15 marks 15x4=60

1. *Meghadutam (Purvamegha)*
2. *Bhagavad Gita*

1. *Meghadutam*

Unit-I, II & III:

Purvamegha

Unit-I- one long question (1-33 stories)

Unit-II- one long question (34-66 stories)

Unit-III- two explanation

2. *Bhagavadgita*

Unit-IV: (Chap.XV)

Unit-IV one long question, one explanation

Course Outcomes:

- (i) Inquisitiveness for knowing geographical ideas about boundary and various places of India, cultural values, relationship etc.
- (ii) Awareness of Indian age-old heritage exercising: inexpressible impact on the life and culture of the India.
- (iii) Development of a strong concept of character - building through Purusottama Yoga (Chap-XV) of Bhagavadgita.
- (iv) Knowledge of Self-management like self-control, control over emotions, consistency and persistency, perseverance etc. to excel in very walk of life.

Suggested Readings:

1. *Meghadutam* (Ed.) B.S. Mishra, Vidyapuri, Cuttack, 1st Edn-1999
 2. *Meghadutam* (Ed.) Radhamohan Mahapatra, Books and Books, Vinodvihari, Cuttack, 1984
 3. *Shrimad-bhagavad-gita* (Ed.) S. Radhakrishnan, Bharatiya Vidya Bhavan
 4. *Shrimad-bhagavad-gita* (Ed.) Gambhirananda, Ramakrishna Mission
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SOCIOLOGY

+3 FIRST YEAR FIRST SEMESTER

Core Paper - 1

INTRODUCTION TO SOCIOLOGY-I

Time : 3 Hrs.

Credit : 06

End Semester Theory : 80 Marks

Mid Semester Theory : 20 Marks

This introductory paper intends to acquaint the students with Sociology as a social science and the basic concepts used in the discipline. It also focuses on the social processes and the social institutions that man encounters as a member of the society.

Objectives:

After studying this paper the student can

- Can get to know the convergence and divergence of Sociology with other social science disciplines in terms of the subject matter, nature and scope of the discipline and its approach.
- Develop knowledge about its historicity.
- Can get acquainted with the basic concepts used in the subject.
- Can generate ideas about the social processes and social institutions man encounters as a member of the society.

Course Outcomes:

This paper is expected to clarify and broaden the student's notion about the subject, the basic concepts used and some universal societal processes. This will provide a wholesome picture about what the subject is all about.

Unit-1: Discipline and Perspective

- 1.1 Meaning, Definition and Subject Matter
- 1.2 Emergence of Sociology
- 1.3 Nature and Scope of Sociology
- 1.4 Importance of Sociology

Unit-2: Sociology and other Social Sciences

- 2.1 Sociology, Anthropology and History
- 2.2 Sociology and Psychology
- 2.3 Sociology and Political Science
- 2.4 Sociology and Economics

Unit-3: Basic Concepts

- 3.1 Society and Community, Associations and Institutions
 - 3.2 Social Groups and Culture
-

- 3.3 Role and Status.
- 3.4 Power and Social Norms

Unit-4: Social Stratification

- 4.1 Meaning, Definition, Characteristics
- 4.2 Forms of Stratification-Caste, class & gender
- 4.3 Theories of stratification: Functional theories (Parson, Davis & Moore), Marxian & Weberian theories of stratification
- 4.4 Elite Theory: Pareto, C Wright Mills.

Suggested Text Book:

1. Haralambos, M. & Holborn, Sociology: Themes and Perspectives, Harper Collins; Eighth edition, 2014

Reference Readings:

1. C.N.Shankar Rao, Principles of Sociology: With an Introduction to Social Thought, S.Chand & Co. Pvt. Ltd.(Revised ed.), 2006
2. Inkle, A.,What is Sociology? An Introduction to the Discipline and Profession, Englewood Cliffs, New Jersey: Prentice Hall, 1964.
3. Mills, C.W., The Power Elite, Oxford:Oxford University Press, 1954.
4. Bottomore, T. B. Sociology: A Guide to Problems and Literature, New Delhi: S. Chand, 2008
5. Paul B. Horton, Chester L. Hunt.. Sociology, McGraw-Hill., 1984
6. Giddens, Anthony., Introduction to Sociology, Polity Press 1991

+3 FIRST YEAR FIRST SEMESTER

Core Paper - 2

INTRODUCTION TO SOCIOLOGY- II

Time : 3 Hrs.

Credit : 06

End Semester Theory : 80 Marks

Mid Semester Theory : 20 Marks

This part two introductory paper intends to provide some additional knowledge on the interrelationship between individual and society, the types of societies and the various social processes that contribute to sustain the society over a period of time.

Objectives: After studying these two papers, the student can

- Develop knowledge about the subject matter, nature and scope of the key topics and its approach.
- Develop knowledge about individual and society.
- Can get acquainted with the basic concepts used in the subject.
- Can generate ideas about the social processes and social institutions.

Course Outcomes:

This paper is expected to clarify and broaden the student's notion about the subject, the basic concepts used and some universal societal processes. This will provide a wholesome picture about what the subject is all about.

Unit-1: Individual, Society and Culture

- 1.1 Social Structure
- 1.2 Types of Society – Primitive, Agrarian and Industrial
- 1.3 Relationship between individual and society
- 1.4 Culture and Personality, Theories of Self: Cooley and Mead

Unit-2: Socialization

- 2.1 Meaning, Definitions & types
- 2.2 Stages of Socialization Process
- 2.3 Agencies of Socialization
- 2.4 Theories of Socialization - G H Mead, C.H Cooley

Unit-3: Social Control

- 3.1 Meaning, Definitions & Nature
- 3.2 Importance of social Control
- 3.3 Types and Agencies of Social Control: Formal and Informal
- 3.4 Social Mobility: Meaning and Types

Unit-4: Social Processes

- 4.1 Meaning and Definition
- 4.2 Associative Social Processes- Cooperation, Accommodation, Assimilation
- 4.3 Dissociative Social Processes- Competition and Conflict
- 4.4 Cooperation, Conflict and Competition: Interrelations and relevance

Suggested Text Books:

1. Rao ,C.N.Shankar, Principles of Sociology: With an Introduction to Social Thought, S.Chand& Co. Pvt. Ltd.(Revised ed.), 2006
2. Haralambos & Holborn , Sociology: Themes and Perspectives Harper Collins; Eighth edition, 2014

Reference Readings:

1. Mills, C.W., *The Sociological Imagination*, Oxford: Oxford University Press, 1959.
 2. Giddens ,Anthony, Introduction to Sociology, 1991
 3. Rawat, H.K. Contemporary Sociology, Rawat Publication, Jaipur, 2013
 4. Johnson, Harry M. Sociology: A Systematic Introduction, New Delhi, Allied Publishers, 1995
 5. Smelser Neil J. *Hand Book of Sociology*, Sage Publications, Inc. 1998
 6. Dasgupta,Samir and Saha,Paulomi An Introduction to Sociology,Pearson,2014
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+3 FIRST YEAR SECOND SEMESTER

Core Paper - 3 INDIAN SOCIETY

Time : 3 Hrs.
Credit : 06

End Semester Theory : 80 Marks
Mid Semester Theory : 20 Marks

Every society has its own peculiar structure and there are some institutions universal to every society, but with their unique manifestations in each society. There are some change agents and initiatives that enable the society to change with the passage of time. This paper focuses on the structure of the Indian society and the changing aspects with the processes operating change agents and initiatives.

Objectives:

After studying these two papers on Indian society, the student can

- Get an impression about the basic composition of Indian society, its historical moorings, basic philosophical foundations of the society and the institutions.
- Learn about the changing institutions, the processes, the agents and the interventions that bring about change in the Indian society.

Course Outcomes:

This paper is expected to bring familiarity in a student about Indian society. It will present a comprehensive, integrated and empirically –based profile of Indian society. It is hoped that the structure and processes operative in the society, the change agents operating in Indian society presented in this course will also enable students to gain a better understanding of their own situation and region.

Unit-1: Composition of Indian Society and Approaches to the study of Indian Society:

- 1.1 Religious composition, Linguistic composition & Racial composition
- 1.2 National Integration—Meaning and, Threats (Communalism, Linguism, Regionalism)
- 1.3 Indian nationalism – Emergence and social background
- 1.4 Approaches to the study of Indian society: Structural-Functional, Marxian and Subaltern

Unit-2: Historical Moorings and Bases of Hindu Social Organization

- 2.1 Varna Vyavastha and relevance
- 2.2 Ashrama and relevance
- 2.3 Purusartha and relationship with Ashramas
- 2.4 Doctrine of Karma

Unit-3: Marriage, Family and Tribes in India

- 3.1 Hindu Marriage as Sacrament, Aims of Hindu marriage, Forms of Hindu Marriage.
 - 3.2 Hindu Joint Family: Meaning & disintegration
 - 3.3 Tribes in India: Meaning, Features and Geographical Distribution
 - 3.4 Marriage among the Muslims & Tribes
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Unit-4: The Caste System in India

- 4.1 Meaning, Definitions & features of Caste
- 4.2 Functions & Dysfunctions of Caste
- 4.3 Factors affecting caste system
- 4.4 Recent Changes in Caste System

Suggested Text Book:

1. Rao ,C.N.Shankar, *Sociology of Indian Society*, S.Chand& Co. Pvt. Ltd.(Revised ed.), 2004

Reference Readings:

1. Shah, A.M., *The Household Dimension of the Family in India: A Field Study in a Gujarat Village and a Review of Other Studies*, Delhi: Orient Longman, 1973.
2. Uberoi, P. (ed.), *Family, Kinship and Marriage in India*, New Delhi: Oxford University Press, 1993.
3. Y. Singh , *Modernisation of Indian Tradition*, Jaipur: Rawat Publications, 1986
4. Ram Ahuja, *Indian Social System*, Rawat Publications, 1993
5. Sharma, KL. *Indian Social Structure and Change*, Rawat Publication, 2008
6. Srinivas, M.N. *India: Social Structure*. New Delhi: Hindustan Publishing Corporation, 1980

+3 FIRST YEAR SECOND SEMESTER

Core Paper - 4 SOCIOLOGY OF ENVIRONMENT

Time : 3 Hrs.
Credit : 06

End Semester Theory : 80 Marks
Mid Semester Theory : 20 Marks

Environment and society are in constant interaction with each other. It is the environment which sustains life in society and it is the society that is responsible for the preservation and the degradation of the environment. In the recent years environmental challenges have posed a threat to the lives on the planet. Keeping this in view, the present paper tries to create awareness among the students about the major environmental issues and the efforts geared to tackle them.

Objectives:

After going through this paper, the student can

- Derive knowledge about the close interaction between society and environment.
- Gain substantial idea about the environmental issues and their repercussions on humanity.
- Accumulate ideas about the ideological currents, issues that drive environment movements.
- Get aware about the global and national efforts to conserve environment.

Course Outcomes:

The very aim of this paper is to disseminate knowledge about the significance of environment for society, to change the practices that can protect and preserve the environment and to make the students participate in the mission to preserve, protect and promote the cause of environment.

Unit-1: Basics of Sociology of Environment

- 1.1 Sociology of Environment: Meaning, emergence and scope
- 1.2 Environment and Society – their inter-relations, Ecology and Environment.
- 1.3 Eco-system.
- 1.4 Sustainable Development

Unit-2: Environmental Movements

- 2.1 Narmada Bachao Andolan
- 2.2 Ganga Bachao Abhiyan
- 2.3 Silent valley movements
- 2.4 Eco-feminist movement

Unit-3: Major Environmental Issues

- 3.1 Global Warming & Climate Change.
- 3.2 Loss of Biodiversity (Water & Air)
- 3.3 Deforestation.
- 3.4 Urban Wastes, Industrial wastes

Unit-4: Environmental Protection

- 4.1 Environment protection efforts at the global level
- 4.2 Efforts at national level
- 4.3 Role of Civil Society Organizations
- 4.4 Role of Corporate Social Responsibility in environmental protection

Suggested Text Books:

1. Biswas, Anupama Environment & Society, Wisdom Press (ISBN) (CBCS).
2. Giddens, Anthony "Global Problems and Ecological Crisis": 2 edition New York. W.W.Norton and Co.,1996 nd

Reference Readings:

1. Baviskar, A., In the Belly of the River: Tribal Conflicts Over Development in the NarmadaVally, New Delhi: Oxford University Press, 2005.
 2. DharamGhai, (ed) Development and Environment: Sustaining People and Nature UNRISDBlackwell Publication,1994.
 3. Schumacher, E. F., Small is Beautiful: A Study of Economics as if People Mattered,London: Blond and Briggs, 1973.
 4. Prasad, A., Against the Ecological Romanticism: Verrier Elwin and the Making of an Antimodern Tribal Identity, Delhi: Three Essays Collective, 2011.
 5. Maria Mies&Vandana Shiva, Ecofeminism, Fernwood Pub. Halifax, Nova Scotia, Canada,1993
 6. Gadgil Madhav& Ram Ch. Guha, Ecology & Equity: The use and abuse of Nature incontemporary India, New Delhi, OUP, 1996.
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+3 FIRST YEAR THIRD SEMESTER

Core Paper - 5

CLASSICAL SOCIOLOGICAL THINKERS

Time : 3 Hrs.

Credit : 06

End Semester Theory : 80 Marks

Mid Semester Theory : 20 Marks

Sociology originated as an intellectual response to the crisis confronting the mid nineteenth century European society. Its development over two centuries has been influenced by a variety of socioeconomic and political conditions. It is now established as a multi-paradigmatic academic discipline, with its body of theoretical knowledge enriched and its methodological techniques and procedures systemized. This paper is intended to familiarize the students with the social, political, economic and intellectual contexts in which sociology emerged as a distinctive discipline. It deals with the contributions of the forerunners of the discipline and with the contributions of the founders who gave a systematic shape to the subject.

Objectives:

- After going through these two papers, the student can
- Gain an understanding of some of the classical contributions in Sociology, and their contemporary relevance.
- Learn about the methodological shift in the discipline over the years.

Course Outcomes:

This paper is expected to clarify and broaden the student's knowledge about the theoretical and methodological contributions of the classical contributors to the subject and the contemporary relevance of these theories.

Unit-1: Auguste Comte and Herbert Spencer

- 1.1 Law of the Three Stages
- 1.2 Hierarchy of Sciences & Positivism
- 1.3 Organismic Analogy
- 1.4 Theory of Social Evolution

Unit-2: Karl Marx

- 2.1 Historical and Dialectical Materialism
- 2.2 Class struggle
- 2.3 Alienation
- 2.4 Theory of Capitalism

Unit-3: Emile Durkheim

- 3.1 Division of Labour in Society
 - 3.2 Rules of Sociological Method
 - 3.3 Theory of Suicide
 - 3.4 Theory of Religion
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Unit-4: Max Weber and V. Pareto

- 4.1 Social Action, Authority
- 4.2 Protestant ethic and the Spirit of Capitalism, Ideal Type
- 4.3 Logical and Non-Logical Action
- 4.4 Circulation of elite

Suggested Text Books:

1. Morrison, Ken, Marx, Durkheim, Weber: Formation of Modern Social Thought, London, Sage, 1995
2. Lewis A. Coser, Masters of Sociological Thought, New York, Harcourt Brance Jovanovich (Text Book), 1977

Reference Readings :

1. F. Abraham & J.H.Morgan, Sociological Thought, Wyndham Hall Press, 1989.
2. Kenneth, A., *The Social Lens: An Invitation to Social and Sociological Theory*, London: Sage. 2011.
3. Ramond Aron, Main Currents in Sociological thoughts Vol. I & Vol. II Harmondsworth, Middlesex: Penguin Books, 1967 (1982 reprint).
4. Ritzer, George, Sociological Theory, New Delhi, Tata-McGraw Hill, 1996
5. Waters, M., *Modern Sociological Theory*, London: Sage, 2000
6. Fletcher, R. *The Making of Sociology: A Study of Sociological Theory*, Volume 1 and 2, Thomas Nelson & Sons Ltd , 1972

+3 FIRST YEAR THIRD SEMESTER**Core Paper - 6****SOCIAL CHANGE AND DEVELOPMENT**

Time : 3 Hrs.
Credit : 06

End Semester Theory : 80 Marks
Mid Semester Theory : 20 Marks

Change is the law of nature and every society is subject to change. Social change has always been a central concern of Sociological study. Change takes different forms. Change has its pattern which is spelt out by various theories. Change is often propelled by various factors. This paper is designed to provide some ideas to the student about such process, theories and factors.

Objectives: After going through this paper, the student can

- Derive knowledge about the meaning, nature, forms and patterns of change.
- Get an idea about the theories that explain change and their adequacy in explaining so.
- Get an impression about the factors that propel change in the society.

Course Outcomes:

This paper is expected to provide a wholesome idea to the students about the process of social change. They can relate their experience with the theoretical explanations.

Unit-1: Social Change:

- 1.1 Meaning and Nature of Social Change.
- 1.2 Social Evolution & Social Progress: Meaning and features
- 1.3 Social Development: Meaning and Features
- 1.4 Factors of Change: Cultural, Technological, Demographic

Unit-2: Theories of Social Change:

- 2.1 Evolutionary theory
- 2.2 Functionalist theory
- 2.3 Conflict Theory
- 2.4 Cyclical Theory

Unit-3: Models of development:

- 3.1 Indicators of Social Development
- 3.2 Capitalist
- 3.3 Socialist
- 3.4 Gandhian

Unit-4: Processes of Social Change in Indian Context:

- 4.1 Sanskritisation
- 4.2 Westernisation
- 4.3 Modernisation
- 4.4 Secularisation

Suggested Text Books

1. Steven, Vago, Social Change, Pearson Prentice Hall, 2003 5th Rev. Edt

Reference Readings:

1. Jairam Kansal, Social Change & Development, Wisdom Press (ISBN) (CBCS), 2004
 2. Singh, Y., Modernization of Indian Tradition: A Systematic Study of Social Change, Faridabad: Thompson Press Limited, 1973.
 3. Rudolf, L and Rudolf, S. H., Modernity of Tradition: Political Development in India, Chicago: University of Chicago Press, 1984.
 4. Moore, W.E Social Change, Prentice Hall of India, New Delhi, 1965.
 5. Mishra, B Capitalism, Socialism and Planning, South Asia Books, 1998
 6. Escobar, A., Encountering Development, London: Zed Books, 2012
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+3 FIRST YEAR THIRD SEMESTER

Core Paper - 7 SOCIOLOGY OF GENDER

Time : 3 Hrs.
Credit : 06

End Semester Theory : 80 Marks
Mid Semester Theory : 20 Marks

The biological basis to the differences between the sexes does not explain the inequalities faced by the sex groups in the society. In the society variations are marked in the roles, responsibilities, rights of and relations between sex groups depending on the social prescriptions relating to sex affiliations. The differences, inequalities and the division of labour between men and women are often simply treated as consequences of 'natural' differences between male and female humans. But, in reality the social norms, institutions, societal expectations play a significant role in deciding and dictating the behaviour of each sex group. This is the fundamental of the study of Gender and Society.

Objectives: After studying this paper, the student can

- Conceptualize what is "Gender" and what is "Sex" and draw a line of distinction between the two.
- Note the difference in gender roles, responsibilities, rights and relations.
- Trace out the evolution and institutionalization of the institution of "Patriarchy".
- Get to know the theories of Feminism that brought women issues and demands to the forefront.
- Assess the initiatives undertaken for gender development with the paradigm shift from time to time.

Course Outcomes:

This paper is expected to generate ideas and sensitivity about gender in a student which he/she can put into practice in daily life. This will lead to change the prevalent biases and gender practices and create a gender neutral social world where both men and women can enjoy their basic rights and cherish to achieve their dreams.

Unit-1: Social Construction of Gender

- 1.1 Gender as a Social Construct
- 1.2 Gender Vs. Sex
- 1.3 Gender Stereotyping and Socialization
- 1.4 Gender Role

Unit-2: Feminism

- 2.1 Meaning and Definitions
 - 2.2 Origin , Growth of Feminism, Waves of Feminism
 - 2.3 Patriarchy
 - 2.4 Theories of Feminism-Liberal, Radical, Socialist, Marxist, Post Modernism
-

Unit-3: Gender and Development

- 3.1 Approaches -WAD, WID and GAD
- 3.2 Gender Mainstreaming: Meaning, Policies and Programmes
- 3.3 Gender Development Index
- 3.4 Women Empowerment: Meaning and Dimensions: Political, Economic and Social.

Unit-4: Women in India through ages

- 4.1 Status of Women in Ancient Period
- 4.2 Medieval Period
- 4.3 Women in Pre- independence India
- 4.4 Women in Contemporary Indian Society

Suggested Text Book:

1. Bhasin, Kamla, Understanding Gender, Kali for Women,2003

Reference Readings:

1. Prabhakar,Vani Gender and Society, Wisdom Press (ISBN) (CBCS), 2012
2. Choudhury , Maitry *Feminism in India: Issues in Contemporary Indian Feminism*, Kali for Women, New Delhi,2004.
3. Walby, S.,*Theorizing Patriarchy*, John Wiley and Sons,1990.
4. John, M. E. (ed.),*Women's Studies: A Reader*, New Delhi: Penguin India, 2008.
5. Pilcher, J and Whelehan, I. , *Fifty Key Concepts in Gender Studies*.London: Sage, 2004.
6. Forbes, G. *Women in Modern India*, Cambridge: Cambridge University Press, 1996.

+3 FIRST YEAR FOURTH SEMESTER

Core Paper - 8 RURAL SOCIOLOGY

Time : 3 Hrs.

Credit : 06

End Semester Theory : 80 Marks

Mid Semester Theory : 20 Marks

Rural Sociology is a specialized branch of Sociology describing the society of villages and rural areas. As the rural areas or the villages mark the beginning of human civilization, this paper is designed to bring out the distinct features of the rural society with their typologies and typicalities. In the present paper an attempt is made to introduce the student with the development of this branch overtime with its focus on the typicality of Indian villages, their structures, changing features and social problems faced by the rural people.

Objectives: After studying this paper, the student can

- Get an impression about the emergence of the sub discipline Rural Sociology and the forces contributing for its origin.
 - Learn about the nature of this branch of knowledge, its subject matter and significance.
-

- Collect information and knowledge about the mooring of the sub discipline in the Indian context.
- Generate an idea about the typicality of the rural society and the institutions operating therein and their dynamics.
- Derive ideas about rural social problems of the country.

Course Outcomes:

India thrives in her villages. By going through this paper, the student can have a grip on the grass roots of Indian society. This will enable the student to understand the society in a better manner, to note the heterogeneities in culture, institutions and their functions, changes, the contrasts found between the rural urban societies and the problems faced by the people.

Unit- 1: Introduction to Rural Sociology

- 1.1 Meaning, Definition & Nature
- 1.2 Origin & Subject Matter of Rural Sociology
- 1.3 Importance of Rural Sociology
- 1.4 Evolution and Growth of Village Community

Unit- 2: Rural Social Structure

- 2.1 Village Community-Meaning & Types
- 2.2 Rural-Urban Contrast & Continuum
- 2.3 Agrarian Economy: Meaning and Features
- 2.4 Dominant Caste, Emerging class structure in rural India

Unit- 3: Rural Social Problems

- 3.1 Poverty
- 3.2 Unemployment
- 3.3 Problem of Women farmers
- 3.4 Rural factionalism

Unit- 4: Rural Development Programmes

- 4.1 Community development Programmes, Cooperative Movements and Panchayati Raj System
- 4.2 Swarnajayanti Gram Swarozgar Yojana (SGSY), Mahatma Gandhi National Rural Employment Guarantee Scheme (MGNREGS)
- 4.3 National Rural Livelihood Mission (NRLM)
- 4.4 National Rural Health Mission (NRHM)

Suggested Text Books:

1. Sharma, R.N. Rural Sociology, Media Promoters and Publishers. Pvt. Ltd. 1983
 2. Singh, Kartar Rural Development: Principle Policies and Management, Sage, New Delhi, 1995
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Reference Readings:

1. Choudhury, Anjana Rural Sciology, Wisdom Press ,2004
2. S.L. Doshi, S.L &P.C.Jain , Rural Sociology, Jajpur, Rawat,2002.
3. Maheswari, S.R Rural Development in India, Sage Publication, New Delhi,1985.
4. Ahuja, Ram Rural Sociology,Popular Prakashan Ltd; New edition 2011
5. Desai, A.R .Rural Sociology in India, Popular Prakashn, Bombay, 1997
6. Ray E. Pahl "The Rural-Urban Continuum." *Sociologia Ruralis* 6(3-4):299-327. Reprinted in R.
- E. Pahl, ed. *Readings in Urban Sociology*. Oxford: Pergamon, 1970

+3 FIRST YEAR FOURTH SEMESTER

Core Paper - 9 GLOBALISATION & SOCIETY

Time : 3 Hrs.

Credit : 06

End Semester Theory : 80 Marks

Mid Semester Theory : 20 Marks

Globalization is the dominant process of social change in the contemporary world. It has resulted in the sinking of time and space and collapse of borders. It is a new coinage for an old process. It has its own dimensions, distinct features and impacts on society. It has given birth to new role players. All these are the focal points of discussion of this paper.

Objectives: By going through this paper, the student can

- Collect information about the meaning and nature of this process, its historical mooring.
- Amass knowledge about its dimensions and impacts, both positive and negative. Get introduced to the agencies that manage the process.

Course Outcomes:

This paper is expected to acquaint the student with an ongoing social process; which can bring tremendous changes in the nations.

Unit-1: Globalisation

- 1.1 Meaning, characteristics of Globalisation
- 1.2 Emergence of Globalisation
- 1.3 Liberalisation- Meaning & characteristics
- 1.4 Privatisation- Meaning & characteristics

Unit-2: Dimensions of Globalisation

- 2.1 Economic
 - 2.2 Technological
 - 2.3 Political
 - 2.4 Cultural
-

Unit-3: Consequences of Globalisation

- 3.1 Rising Inequality
- 3.2 Environmental Degradation
- 3.3 Consumerism
- 3.4 Health and Security

Unit-4: Impact of Globalisation in Indian Context:

- 4.1 Cultural Impacts
- 4.2 Impact on Education
- 4.3 Impact on Religion
- 4.4 Impact on Women

Suggested Text Books:

1. Biswas, Anupama Globalization and Society, Wisdom Press (ISBN) (CBCS)
2. Bhagawati, Jagdis, In Defence of Globalization, Oxford Univ. Press, Delhi 2004.

Reference Readings:

1. Pathak, A., Modernity, Globalization and Identity: A Reflexive Quest, Delhi: Aakar Books, 2006
2. Singh, Y. Culture Change in India: Identity and Globalization. Jaipur: Rawat, 2006.
3. Sengupta, A., Reforms, Equity and the IMF: An Economist's World, Delhi: Har-Anand Publications PVT limited, 2001
4. Jha, Avinash, Background to Globalisation, Centre for education and documentation. Mumbai, 2000
5. Arjun Appadurai, Modernity at large: Cultural Dimensions of Globalization, Delhi, OUP, 1997.
6. Joseph E. Stiglitz, Globalization & its Discontents, W.W. Norton & Company, 2002

+3 FIRST YEAR FOURTH SEMESTER

Core Paper - 10 MARRIAGE, FAMILY & KINSHIP

Time : 3 Hrs.
Credit : 06

End Semester Theory : 80 Marks
Mid Semester Theory : 20 Marks

This course provides a brief account of the classical approaches to the study of family and kinship. It exposes the students to the distinct aspects of these three interrelated institutions in the Indian context. Finally, it discusses some contemporary issues that pose a challenge to the normative model of these institutions.

Objectives: By going through this paper, the student can

- Understand the three institutions that are the foundations of the society.
 - Comprehend the theoretical perspectives on these institutions.
-

- Get to know the rules governing these institutions.
- Estimate the changes coming over these institutions with the process of social change.

Learning Outcomes:

This paper is expected to instill knowledge about the foundational institutions, their governing principles and the continuity and change features of these institutions.

Unit-1: Marriage

- 1.1 Marriage as a social institution
- 1.2 Functions of marriage
- 1.3 Rules of marriage, Types of marriage
- 1.4 Changes in the institution of marriage

Unit-2: Family

- 2.1 Family as a social institution
- 2.2 Rules of Marriage and Types of family
- 2.3 Functions of family
- 2.4 Contemporary Changes in family

Unit-3: Kinship System

- 3.1 Meaning, Definition & Types
- 3.2 Kinship Terminologies & usages
- 3.3 Kinship system in North India & South India
- 3.4 Clan, Lineage

Unit-4: Contemporary Issues

- 4.1 Migration and its impact on family
- 4.2 Domestic Violence
- 4.3 Dowry
- 4.4 Divorce

Suggested Text Books:

1. Kapadia , K.M. Marriage and family in India : London, Oxford Univ. Press, 1966

Reference Readings:

1. Maya Majumdar, Maya Marriage, Family & Kinship, Wisdom Press (ISBN), (CBCS), 2005
 2. Shankar Rao, C.N. Principles of Sociology: With an Introduction to Social Thought, S.Chand& Co. Pvt. Ltd.(Revised edt.), 2006
 3. Karve, Irawati Kinship Organisation in India, Poona, Deccan college, 1953
 5. Robin Fox , Kinship and Marriage: An Anthropological Perspective, Pelican,1967
 6. Patricia Uberoi, Family, Kinship & Marriage in India, Oxford University Press, Delhi, 1993
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+3 FIRST YEAR FIFTH SEMESTER

Core Paper - 11 RESEARCH METHODOLOGY

Time : 3 Hrs.
Credit : 06

End Semester Theory : 80 Marks
Mid Semester Theory : 20 Marks

Since the days of August Comte, a debate and a deliberate attempt has been initiated to provide a scientific character to social sciences. In this attempt empirical research has been introduced as an integral part of observing social reality and generalizing it objectively without any subjective predisposition. Gradually, research methods have been developed and introduced in social sciences to bring it in par with scientific observations. The essence of this paper lies in introducing the students with these methods of research to ensure objectivity as far as practicable in social research.

Objectives: By going through this paper, the student can

- Get an understanding of the nature of scientific methods, nature of social Phenomena and the way of attaining value neutrality.
- Have a grip over the basic steps involved in social research and the types of social research with their applicability
- Develop an insight into the need and types of research design and the use of sampling method for attending objectivity and scientific study.

Learning Outcomes:

This paper is designed and incorporated to acquaint the students with the scientific ways of studying social phenomena. This provides them with a research insight that will enable them to capture the most relevant data in an objective manner. The market demand of this paper will be very high as the students well versed with this paper will be highly demanded in academics, fundamental research, and policy research undertaken both by Government and NonGovernment agencies.

Unit-1: Meaning & Significance of Social Research

- 1.1 Meaning , Definitions & Utility of Social Research
- 1.2 Major Steps in Social Research
- 1.3 Scientific Method-Characteristics
- 1.4 Applicability of Scientific Method

Unit-: 2 Hypothesis & Sampling

- 2.1 Meaning, definitions and Characteristics of Hypothesis
- 2.2 Types of and sources of Hypothesis
- 2.3 Sampling-Meaning & Characteristics
- 2.4 Types of sampling-probability & non-probability

Unit -3: Tools and Techniques of Data Collection

- 3.1 Qualitative methods and Quantitative methods
 - 3.2 Observation, Case study
-

3.3 Interview Schedule, Questionnaire

3.4 Survey and census

Unit-:4 Data Analysis & Report Writing

4.1 Significance of Measures of Central Tendency

4.2 Mean, Median, Mode

4.3 Tabulation and Data Analysis

4.4 Report Writing

Suggested Text Books:

1. Goode William J and Paul K. Hatt. *Methods in Social Research*. New York: McGraw-Hill Book Co, 1952
2. Wilkinson T.S& P.L. Bhandarkar, *Methodology & Techniques of Social Research*, Himalaya Publishing House, 2010

Reference Readings:

1. Bajpayee, . S.R. *Methods of Social Survey and Research*, KitabGhar, 1960.
2. Seale, C. (ed), *Researching Society and Culture*, London: Sage, 2014.
3. Young , P.V. *Scientific Social Survey and Research*, Prentice Hall, New Delhi, (Ref.Book) 1939 4.
4. Kothari, C.R *Research Methodology: Methods and Techniques*, Bangalore ,Wiley Eastern, 1985 5.
5. Bryman, Alan *Quality and Quantity in Social Research*, Unwin Hyman, London, 1988.
6. Jayram , N. *Sociology: Methods and Theory*, Madras, Macmillan Madras, 1989.

+3 FIRST YEAR FIFTH SEMESTER

Core Paper - 12

SOCIAL MOVEMENTS IN INDIA

Time : 3 Hrs.

Credit : 06

End Semester Theory : 80 Marks

Mid Semester Theory : 20 Marks

Movements reflect the voices raised against the prevailing practices of a society. Every society witnesses social movement in some form or the other. Movements bring social change and transformation. It is a collective effort that is driven by particular issues and brings forth changes. The present paper tries to provide a rudimentary impression to the students about the concept, nature and types of movements with a thrust on the movements witnessed by Indian society.

Objectives:

- To introduce to the students with the concept of social movements and their dynamics.
 - To introduce the students to the role of social movements in social transformation.
 - To help them understand the various approaches to the study of social movements.
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Learning Outcomes:

The very aim of this paper is to disseminate knowledge about the concept of social movements and its process and change making role in the society.

Unit-1: Social Movement

- 1.1 Meaning and Definitions of Social Movement.
- 1.2 Nature and Characteristics of Social Movement
- 1.3 Causes of Social Movement
- 1.4 Types of Social Movement- Revolutionary, Reforms, Revival

Unit-2: Peasant Movements in India

- 2.1 Champaran Satyagraha
- 2.2 The Bardoli Movement in Gujarat
- 2.3 The Peasant Revolt in Telengana
- 2.4 The Tebhaga Movement in Bengal

Unit-3: Backward Castes & Tribal Movement in India

- 3.1 Mahar Movement in Maharashtra
- 3.2 Dalit & Non-Brahmin Movement in Tamilnadu, SNDP movement in Kerala
- 3.3 Santhal Insurrection
- 3.4 Jharkhand Movement

Unit-4: Women's Movement in India

- 4.1 The Social Reform Movement and Women
- 4.2 Women in the Indian National Movement
- 4.3 Women in Chipko Movement
- 4.4 Contemporary Women's Movement

Suggested Text Books:

1. Shah, Ghanashyam Social Movements in India, Sage Publication, New Delhi, 1990
2. Rao, M.S.A.edt. ,Social Movements in India 1920-1950, OUP Delhi, 1983

Reference Readings:

1. Kumar, R.,History of Doing: An illustrated Account of Movements for Women's Rights and Feminism in India , New Delhi: Zubban, 1997.
 2. Agnihotri, I. and Mazumdar, V., Changing Terms of Political Discourse: Women's Movement in India, in T. K. Oomen (ed.), Social Movements II: Concerns of Equity and Security, New Delhi: OUP,2010.
 3. Geetha, V and Rajadurai, S. V., Towards a Non-Brahmin Millennium: From Iyothee Thass to Periyar. Delhi: Popular Prakashan, 1998.
 4. Dhanagare D. N. Peasants Movements in India, Oxford University Press, 1983
 5. Omvelt, Gail Social Movements in India, Rowman& Littlefield, INC, Oxford, 1993
 6. Singh, K.S. Tribal Movements in India, Foundation Pub. New Delhi, 1982
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+3 FIRST YEAR SIXTH SEMESTER

Core Paper - 13 POPULATION & SOCIETY

Time : 3 Hrs.
Credit : 06

End Semester Theory : 80 Marks
Mid Semester Theory : 20 Marks

Demography is both an index and instrument of development and change. India as a country is plagued by population explosion which retards, the economy and blocks social progress. Irrespective of several positive attempts undertaken by the government, India has failed to control its population problem. This paper is designed to provide an idea to the students about population dynamics and its impact on society.

Objectives: After going through this paper, the student can

- Understand the various facets of population studies and the theories that depict population change.
- Develop specific idea on Indian population structure, policies adopted and programmes launched in the country to check population.
- Assess the role of various agencies in population control.

Course Outcomes:

The very aim of this paper is to acquaint the students with a perennial problem of the Indian society that is population growth and the measures introduced to control it.

Unit: 1 Population Studies

- 1.1 Meaning & Scope of Population Studies
- 1.2 Population & Society Relationship
- 1.3 Importance of Population Studies
- 1.4 Causes and effects of Population Growth

Unit: 2 Population Theories

- 2.1 Malthusian Theory
- 2.2 Optimum Theory of Population
- 2.4 The Theory of Demographic Transition
- 2.4 Applicability of Population Theories in Contemporary Scenario

Unit: 3 Determinants of Population Growth

- 3.1 Fertility
- 3.2 Migration
- 3.3 Mortality
- 3.4 Measures to control population growth

Unit: 4 Population Compositions in India

- 4.1 Sex Composition
 - 4.2 Age Compositions
-

- 4.3 Literacy Composition
- 4.4 Rural & Urban Composition

Suggested Text Book:

1. Hans, Raj Population Studies with special reference to India, Sujeet Publication, New Delhi, 1978

Reference Readings:

1. S.N. Agarwal, Population studies with Special Reference to India, New Delhi: Lok Surjeet Publication, 1989
2. Bose, Ashish Demographic Diversity in India, Delhi: B.R. Publishing Corporation, 1991
3. Dubey, Surendra Nath Population of India, Delhi: Authors Press, 2001
4. Chandrasekhar S. (ed) Infant Mortality, Population growth and Family Planning in India, London, George Allen and Unwin Ltd., 1974
5. Srivastava, O.S. Demography and Population Studies, Vikas Pub. House, New Delhi, 1998
6. Jain, R.K A Textbook of Population Studies, Neha Publishers & Distributors, 2013

+3 FIRST YEAR SIXTH SEMESTER

Core Paper - 14

SOCIAL DISORGANIZATION & DEVIANCE

Time : 3 Hrs.

Credit : 06

End Semester Theory : 80 Marks

Mid Semester Theory : 20 Marks

No society is fully organized in character. Disorganization is apt to occur from time to time. Disorganization is a manifestation of the deviant behavior found among some individuals. This deviance occurs when the individuals feel that the normative order of the society and its institutions are not need fulfilling in character. This present paper makes an attempt to provide an impression about the scenario of disorganization, its forms, causes and consequences with the theories explaining the situation.

Objectives: After going through this paper, the student can

- Understand the meaning, causes, consequences and forms of social disorganization.
- Learn about the theories explaining the disorganization situations.
- Comprehend the concept of crime and the existing theories of punishment.

Course Outcomes:

This paper is designed with an expectation to impress upon a student on the concept of deviant behavior leading to social disorganization, forms, theoretical foundations and criminal activities which he encounters in real life situations.

Unit-1 : Social Disorganization

- 1.1 Meaning and Nature of Social Disorganization
 - 1.2 Causes and Consequences of Social Disorganization
-

- 1.3 Family Disorganization - Causes and Consequences
- 1.4 Personality Disorganization- Causes and Consequences

Unit- 2: Theories of Deviant Behaviour

- 2.1 Durkheim's Theory
- 2.2 Merton's Theory
- 2.3 Differential Association theory
- 2.4 Delinquent Sub-Culture theory

Unit- 3 : Crime and Punishment :

- 3.1 Crime-Definitions and types
- 3.2 Causes & Consequences of Crime
- 3.3 Juvenile Delinquency-Causes and consequences
- 3.4 Theories of Punishment: Retributive, Deterrant, Reformative

Unit-4: Social Problems:

- 4.1 Alcoholism
- 4.2 Terrorism
- 4.3 Human Trafficking
- 4.4 Drug Addiction

Suggested Text Book

1. Memoria, C.B.Social Problems and Social Disorganization in India, Kitab Mahal, Allahabad, 1980.

Reference Readings:

1. Prabhakar , Vani Social Disorganization & Deviance, Wisdom Press (ISBN) (CBCS), 2012
 2. Ahuja, Ram Social Problems in India, Rawat, 2014
 3. Sharma, R.N.Criminology & Penology, Surjit Publication, New Delhi,2008
 4. Ahuja, Ram Criminology, Rawat, 2001
 5. Shankar Rao , C.N.Indian Social Problems, S.Chand& Co. Pvt. Ltd.(Revised edt.), 2015
 6. Sharma, P.D.Criminal Justice Administration, Rawat, 1998
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+3 FIRST YEAR FIFTH SEMESTER

DSE - 1 SOCIOLOGY OF HEALTH

Time : 3 Hrs.

Credit : 06

End Semester Theory : 80 Marks

Mid Semester Theory : 20 Marks

Objectives: After studying this paper, the student can

- Gain knowledge on the sociology of health and medicine.
- Can get an insight on socio-cultural dimensions in the construction of illness and medical knowledge.
- Can gain understanding on health sector reforms of Government of India. Gain knowledge on medical pluralism for treatment of disease.

Learning Outcome:

Students are expected to know the concept of health from different perspectives. They can also learn about the contemporary trend of Sociology of Health in India. By knowing various health policies and programs in India student can expand the information base and disseminate the same to others.

Unit – 1: Sociology of Health

- 1.1 Meaning & Definition
- 1.2 Emergence of Health Sociology
- 1.3 Scope and significance of Sociology of Health
- 1.4 Social Determinants of Health

Unit – 2: Sociological Perspectives of Health

- 2.1 Functionalist
- 2.2 Marxist
- 2.3 Post-structuralist
- 2.4 Feminist

Unit-3: Health Programs in India

- 3.1 Pradhan Mantri Swasthya Suraksha Yojana (PMSSY)
- 3.2 Janani Suraksha Yojana (JSY)
- 3.3 National Urban Health Mission
- 3.4 National AIDS Control Programme

Unit-4: Health Sector Reforms of the Government of India:

- 4.1 Health Policies of the Government of India
 - 4.2 Role of ICDS
 - 4.3 Protective & Preventive measures
 - 4.4 Promotive measures (modern & indigenous)
-

Suggested Text Book:

1. Cockerham, William C. Medical Sociology Englewood, Cliffs, Prentice Hall 1978.

Reference Readings:

1. Dak, T.M. Sociology of Health in India, Kaveri Printers, New Delhi, 1991.
2. Blaxter, M., Health, Cambridge: Polity Press, 2004.
3. White, K., An Introduction to Sociology of Health and Illness, London: Sage, 2016, third edition
4. Prasad, Purendra and Amar Jesani ed. Equity and Access Health Care Studies, Oxford University Press, 2018

+3 FIRST YEAR FIFTH SEMESTER

DSE - 2

SOCIOLOGY OF EDUCATION

Time : 3 Hrs.

Credit : 06

End Semester Theory : 80 Marks

Mid Semester Theory : 20 Marks

Objectives: After going through this paper, the student can

- Get to know the meaning and theoretical perspectives on sociology of education
- Get familiar with the relationship between education and society.
- Get insights on role of education in Nation building.
- Get an understanding on inequality in education that persists at various levels.
- Gain knowledge on constitutional provisions and various education policies

Course Outcomes:

The students are expected to learn various perspectives on education through the contributions of both Indian and western thinkers. Knowledge on education policies and constitution provisions can prepare the students for the development of their own higher education. Students can develop academic interest by knowing the contribution of education in nation building as well as the educational inequalities which persist in the society.

Unit-1: Sociology of Education

- 1.1 Meaning of Sociology of Education
- 1.2 Interrelationship between Education and Society
- 1.3 Literacy & Education
- 1.4 Education as Social Construct

Unit-2: Perspectives on Sociology of Education

- 2.1 Dominant Perspectives on Sociology of Education
 - 2.2 Functionalist Perspective
 - 2.3 Conflict Perspective
 - 2.4 Critical Perspectives
-

Unit-3: Education, Social Process

- 3.1 Education and Socialization
- 3.2 Education and Social Change
- 3.3 Education and Social Mobility
- 3.4 Education and Development

Unit-4: Educational Programs, Policies & Issues in India

- 4.1 Educational Policies in India
- 4.2 Universalisation of Primary Education
- 4.3 Privatisation of Education
- 4.4 Right to Education in Contemporary India

Suggested Text Book:

1. Jayram, N., *Sociology of Education in India*. Rawat. Jaipur., 2015

Reference Readings:

1. Morish, I. *The Sociology of Education. An Introduction*. London. Unwin Publication, 1972.
2. Freire, P., *Pedagogy of the Oppressed*, New York: Seabury Press, 1970.
3. Hooks, B. *Teaching to Transgress*, New York: Routledge, 1994
4. Aggarwal, J.C *Yearbook of Indian Education*. New Delhi, 1992
5. Dwibedi, Ramnath. *Education and Society*, Kalyani Publisher, New Delhi 2016.
6. Kilpatrick, M.O. *Philosophy of Education*. McMillan Company 1963

+3 FIRST YEAR SIXTH SEMESTER**DSE - 3****URBAN SOCIOLOGY**

Time : 3 Hrs.

Credit : 06

End Semester Theory : 80 Marks

Mid Semester Theory : 20 Marks

Urbanisation is an important social process that changed the face of human civilization. It was initiated with the process of modernization, transport revolution, coming up of river valley civilizations, establishment of trade links and industrial revolution. Urbanisation has brought both prosperity and problems. It is one of the earnest tasks of Sociology to trace out the evolution of the process, social; problems associated with it and policy planning and measures undertaken to overcome these challenges. This paper Urban Sociology concentrates upon these tasks.

Objectives:

After going through this paper, the student can

- Understand the specific traits of urban areas, its historical patterns of growth.
- Develop knowledge about urban social institutions and problems
- Gain insight into urban development plans, programmes and efforts.

Learning Outcomes:

By going through this paper, the students can get an insight into the basic features of an urban area, the way cities grow, the major problem that encounter urban population and the various urban development programmes designed by the Government of India, their implementations, achievements and limitations.

Unit-1: Introduction to Urban Sociology

- 1.1 Meaning, and Subject matter of Urban Sociology
- 1.2 Importance of Urban Sociology
- 1.3 Specific traits of Urban Community
- 1.4 Urbanism as a way of life

Unit-2: Theories of patterns of city growth:

- 1.1 Concentric zone theory
- 1.2 Sector model
- 1.3 Multiple nuclei theory
- 1.4 Exploitative Model & symbolic approach theory

Unit-3: Urban Social Problems

- 3.1 Urban Crime
- 3.2 Problem of Slums
- 3.3 Problem in Urban Basic Services
- 3.4 Urban Pollution

Unit –4: Urban Development Programmes in India

- 4.1 Smart City Mission (SCM)
- 4.2 Jawaharlal Nehru National Urban Renewal Mission (JNNURM)
- 4.3 Atal Mission for Rejuvenation and Urban Transformation (AMRUT)
- 4.4 National Urban Livelihoods Mission (NULM)

Suggested Text Book:

1. Sharma, R.N. Urban Sociology, Atlantic Publishers & Distributors Pvt Ltd, 2014

Reference Readings:

1. Rao M. S. A. Urban Sociology in India: Reader and Sourcebook, Sangam Books Limited; New edition, 1992 Satish Sharma, Urban Sociology, Wisdom Press (ISBN) (CBCS)
 2. Jayapalan, N. Urban Sociology, Atlantic Publishers, 2002,
 3. Dhandeva, M.S. Sociology & Slum, Archives Books, New Delhi, 1989.
 4. Sandhu, R.S Urbanization in India: Sociological Contributions, Sage Publication, New Delhi, 2003.
 5. William G. Flanagan, William G. Urban Sociology: Images and structure, Allyn & Bacon, Boston. 1999.
 6. Ramachandran, R Urbanization and Urban system in India, Oxford Univ. Press, New Delhi, 1989
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+3 FIRST YEAR SIXTH SEMESTER

DSE - 4

FIELD WORK AND DISSERTATION

Time : 3 Hrs.

Credit : 06

End Semester Theory : 80 Marks

Mid Semester Theory : 20 Marks

(College can give this choice only for students with above 60% aggregate marks)

Objectives:

This paper is designed

- To provide a basic exposure to the student to the fields and to acquaint him/her with the research process.
- To equip them with the capacity to browse secondary literature from right sources and with a process of reviewing relevant literature.
- To promote in them an ability to capture the right type of data and put them into documentation format.

(Dissertation: 75 marks and Viva-voce: 25 marks)

- Dissertation may be written on any social institution, problem or may be an evaluative study.
- It should be based on empirical study.
- Size of the dissertation should be around 5000 words.
- Dissertation paper will be examined jointly by one Internal and one External Examiner to be appointed by the University. Marks will be awarded jointly by the Internal and External Examiners on the basis of the written Dissertation and Vivavoce.

OR

TRIBES OF INDIA

Objectives: The present paper aims

- To provide a fair stock of knowledge to the students on the tribes and tribal life.
- To enable the students to understand the problems faced by the tribes
- To give impression and knowledge on the tribal development plans, policies and programmes.

Learning outcomes:

After going through this paper it is expected that the students will gain fair idea about the Indian tribes, their demography and distribution. They will be sensitized about tribal situations and the challenges faced by them today. Finally, they can get an account of the safeguards created for them through the Constitution, legislations and programmes and the changes noted in the tribal society of the country today.

Unit-1: Tribes: Their Distribution and Demography

- 1.1 Tribe: definitions, characteristics and demography
 - 1.2 Geogrpahic distribution of the tribes
-

1.3 N.K.Guha's Classification on Tribes

1.4 Caste and Tribe

Unit-2: Social Organisation of the Tribes

2.1 Tribal economic system

2.2 Tribal political system

2.3 Tribal religion

2.4 Women in Tribal Society

Unit-3: Challenges Faced by the Tribes

3.1 Land alienation, Migration

3.2 Alcoholism and Indebtedness

3.3 Tribal Displacement

3.4 Tribal health and Sanitation

Unit-4: Changes and Upliftment of the Tribes

4.1 Constitutional safeguards for the tribes

4.2 Legal provisions for tribes

4.3 Flagship programmes of the Government for the tribes

4.4 Recent Changes in Tribal Life

Suggested Text Books:

1. Hasnain, Nadeem, Indian Anthropology, New Royal Book Co 2011
2. Majumdar, D.N. and T.N.Madan, An Introduction To Social Anthropology, Asia Pub. House, 2010

Reference Readings:

1. Hasnain Nadeem Tribal India, New Royal Book Company, 2017 edition
 2. Joshi Vidyut and Chandrakant Upadhyaya (eds), Tribal Situation in India: Issues and Development ,Rawat Publications,2017
 3. Rath Govind Chandra,edt. Tribal Development in India:The Contemporary Debate, Sage Publications,2006
 4. Paul Mitra, Kakali Development Programmes And Tribals Some Emerging Issues, Kalpaz Publications,2004
 5. Munshi, Indra The Adivasi Question, Orient Blackswan Private Limited,2018
 6. Mohanty,P.K. Development of Primitive Tribal Groups in India, Kalpaz Publications,2003
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+3 FIRST YEAR FIRST SEMESTER

GE - 1

INTRODUCTION TO SOCIOLOGY

Time : 3 Hrs.

Credit : 06

End Semester Theory : 80 Marks

Mid Semester Theory : 20 Marks

This introductory paper intends to acquaint the students with Sociology as a Social Science and the basic concepts used in the discipline. It also focuses on the social processes and the social institutions that man encounters as a member of the society.

Objectives:

After studying these two papers, the student can

- Get to know the convergence and divergence of Sociology with other social sciencedisciplines in terms of the subject matter, nature and scope of the discipline and its approach.
- Develop knowledge about its historicity.
- Can get acquainted with the basic concepts used in the subject.
- Can generate ideas about the social processes and social institutions man encounters as a member of the society.

Course Outcomes:

This paper is expected to clarify and broaden the student's notion about the subject, the basic concepts used and some universal societal processes. This will provide a wholesome picture about what the subject is all about.

Unit-1: Discipline and Perspective

- 1.1 Meaning and Emergence of Sociology
- 1.2 Definition, Subject Matter
- 1.3 Nature and Scope of Sociology
- 1.4 Relationship of Sociology with Anthropology, Political Science, History and Economics

Unit-2: Basic Concepts

- 2.1 Society and Community
- 2.2 Associations and Institutions
- 2.3 Social Groups and Culture
- 2.4 Role and Status

Unit-3: Social Stratification

- 3.1 Meaning, Definition, Characteristics
 - 3.2 Forms of Stratification-Caste, class & gender
 - 3.3 Functional Theorists of stratification (Parsons, Davis & Moore)
 - 3.4 Marxian & Weberian Theories of stratification
-

Unit-4: Socialization and Social Control

- 4.1 Meaning, Definitions, Stages of Socialization Process.
- 4.2. Agencies of Socialization
- 4.3 Social Control: Meaning, Definitions, importance of social control
- 4.4 Agencies of Social Control: Formal and Informal

Suggested Text Books:

1. Rao ,C.N.Shankar, Principles of Sociology: With an Introduction to Social Thought, S.Chand & Co. Pvt. Ltd.(Revised ed.), 2006
2. Haralambos & Holborn , Sociology: Themes and Perspectives Harper Collins; Eighth edition, 2014

Reference Readings:

1. Mills, C.W., *The Sociological Imagination*, Oxford: Oxford University Press, 1959.
2. Giddens ,Anthony, Introduction to Sociology, 1991
3. Rawat, H.K. Contemporary Sociology, Rawat Publication, Jaipur, 2013
- 4 Johnson, Harry M. Sociology: A Systematic Introduction, New Delhi, Allied Publishers, 1995
5. Smelser Neil J. *Hand Book of Sociology*, Sage Publications, Inc. 1998
6. Dasgupta, Samir and Saha, Paulomi An Introduction to Sociology, Pearson, 2014

+3 FIRST YEAR FIRST SEMESTER

GE - 2 INDIAN SOCIETY

Time : 3 Hrs.
Credit : 06

End Semester Theory : 80 Marks
Mid Semester Theory : 20 Marks

Every society has its own peculiar structure and there are some institutions universal to every society, but with their unique manifestations in each society. There are some change agents and initiatives that enable the society to change with the passage of time. This paper focuses on the structure of the Indian society and the changing aspects with the processes operating, change agents and initiatives.

Objectives:

After studying these two papers on Indian society, the student can

- Get an impression about the basic composition of Indian society, its historical moorings, basic philosophical foundations of the society and the institutions.
- Learn about the changing institutions, the processes, the agents and the interventions that bring about change in the Indian society.

Course Outcomes:

This paper is expected to bring familiarity in a student about Indian society. It will present a comprehensive, integrated and empirically –based profile of Indian society. It is hoped that the

structure and processes operative in the society, the change agents operating in Indian society presented in this course will also enable students to gain a better understanding of their own situation and region.

Unit-1: Composition of Indian Society and Approaches to the study of Indian society:

- 1.1 Composition of Indian Society: Religious, Linguistic and Racial
- 1.2 Unity in diversity
- 1.3 National Integration—Meaning & Threats (Communalism, linguism, regionalism)
- 1.4 Approaches to the study of Indian society: Structural-Functional, Marxian and Subaltern

Unit-2: Historical Moorings and Bases of Hindu Social Organization

- 2.1 Varna Vyavastha and relevance
- 2.2 Ashrama and relevance
- 2.3 Purusartha and relationship with Ashramas
- 2.4 Doctrine of Karma

Unit-3: Marriage and Family in India

- 3.1 Hindu Marriage as Sacrament, Aims of Hindu marriage, Forms of Hindu Marriage
- 3.2 Hindu Joint Family-Meaning & disintegration
- 3.3 Marriage among the Muslims & Tribes
- 3.4 Changes in Marriage and Family in India

Unit-4: The Caste System in India

- 4.1 Meaning, Definitions & features of Caste
- 4.2 Functions & Dysfunctions of Caste
- 4.3 Factors affecting caste system
- 4.4 Recent Changes in Caste System

Suggested Text Book:

1. Rao ,C.N.Shankar, Sociology of Indian Society, S.Chand & Co. Pvt. Ltd.(Revised edt.), 2004

Reference Readings:

1. Shah, A.M., The Household Dimension of the Family in India: A Field Study in a Gujarat Village and a Review of Other Studies, Delhi: Orient Longman, 1973.
 2. Uberoi, P. (ed.), Family, Kinship and Marriage in India, New Delhi: Oxford University Press, 1993.
 3. Y. Singh , Modernisation of Indian Tradition, Jaipur: Rawat Publications, 1986
 4. Ram Ahuja, Indian Social System, Rawat Publications, 1993
 5. Sharma, KL. Indian Social Structure and Change, Rawat Publication, 2008
 6. Srinivas, M.N. India: Social Structure. New Delhi: Hindustan Publishing Corporation, 1980
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STATISTICS

+3 FIRST YEAR FIRST SEMESTER

Core Paper - 1

DESCRIPTIVE STATISTICS

Time : 3 Hrs.

Credit : 04

End Semester Theory : 60 Marks

Mid Semester Theory : 15 Marks

Course outcomes:-

- Define and compute the various measures of central tendency, dispersion, skewness, and kurtosis.
- Define and compute raw and central moments.
- Understand the use of moments in studying various characteristics of a distribution.
- Know various scales of measurement.
- Compute and interpret Karl Pearsons correlation coefficient.
- Understand the meaning and the significance of probable error of r
- Understand the concepts and meaning of regression coefficients and their relationships with correlation coefficient.
- Appreciate the use of regression analysis for estimation and prediction purposes.
- Know how to fit polynomials and curves.
- Compute indexes to measure price changes and quantity changes over time.
- Construction of index numbers.
- Computation of consumer price index.

UNIT-I

Statistical Methods: Definition and scope of Statistics, concepts of statistical population and sample. Data: quantitative and qualitative, attributes, variables, scales of measurement : nominal, ordinal, interval and ratio, Presentation: tabular and graphical, including histogram and Ogives, Consistency and independence of data with special reference to attributes.

UNIT-II

Measures of Central Tendency: mathematical and positional. Measures of Dispersion: Range, Quartile Deviation, Mean Deviation, Standard Deviation, Coefficient of Variation, Moments, Absolute Moments, Factorial Moments, Skewness And Kurtosis, Sheppard's Corrections.

UNIT-III

Bivariate data: Definition, Scatter Diagram, Simple, Partial And Multiple Correlation (3 variables only), Rank Correlation. Simple linear regression, Principle of least squares and fitting of polynomials and exponential curves.

UNIT-IV

Index Numbers: Definition, construction of index numbers and problems there of for weighted and unweighted index numbers including Laspeyre's, Paasche's, Edgeworth- Marshall and

Fisher's Ideal Index numbers. Errors in Index numbers. Chain index numbers, conversion of fixed based to chain based index numbers and vice-versa. Consumer price index numbers. Uses and limitations of index numbers.

TEXT BOOKS:

1. Goon A.M., Gupta M.K. and Dasgupta B. (2002): Fundamentals of Statistics, Vol. I & II, 8th Edn. The World Press, Kolkata.
2. Gupta, S. C. and Kapoor, V.K. (2008): Fundamentals Of Mathematical Statistics, 4th Edition (Reprint), Sultan Chand & Sons

SUGGESTED READINGS:

1. Miller, Irwin and Miller, Marylees(2006): John E.Freund's Mathematical Statistics with Applications, (7th Edn.), Pearson Education, Asia.
2. Mood, A.M. Graybill, F.A. and Boes, D.C. (2007): Introduction to the Theory of Page Statistics, 3rd Edn., (Reprint), Tata McGraw-Hill Pub. Co.Ltd.
3. Mukhopadhyay, P. (1999): Applied Statistics, New Central Book Agency,

PRACTICALCredit : **02****25** Marks**LIST OF PRACTICALS:**

1. Graphical representation of data.
2. Problems based on Measures of Central Tendency.
3. Problems based on Measures of Dispersion.
4. Problems based on Moments, Skewness And Kurtosis.
5. Karl Pearson and rank correlation coefficient.
6. Lines of regression, angle between lines and estimated values of variables.
7. Calculate price and quantity index numbers using simple and weighted average of price relatives.

+3 FIRST YEAR FIRST SEMESTER**Core Paper - 2****ALGEBRA**Time : **3** Hrs.Credit : **04**End Semester Theory : **60** MarksMid Semester Theory : **15** Marks**Course Outcomes :-**

- Understand the relation between roots and coefficients of any polynomial equations.
 - Know about linear dependence and independence of vectors.
 - Discuss various types of matrices and their properties.
 - Use of determinants in solution to the system of linear equations.
-

- Understand the properties of characteristic roots and various types of quadratic forms.

UNIT-I

Theory of equations, statement of the fundamental theorem of Algebra and its consequences. Relation between roots and coefficients of any polynomial equations. Vector spaces, Subspaces, sum of subspaces, Span of a set, Linear dependence and independence, dimension and basis.

UNIT-II

Algebra of matrices - A review, theorems related to triangular, symmetric and skew symmetric matrices, idempotent matrices, Hermitian and skew Hermitian matrices, orthogonal matrices, singular and non-singular matrices and their properties. Trace of a matrix, unitary, involutory and nilpotent matrices.

UNIT-III

Determinants of Matrices: Definition, properties and applications of determinants for 3rd and higher orders, evaluation of determinants of order 3 and more using transformations. Adjoint and inverse of a matrix and related properties. Use of determinants in solution to the system of linear equations, row reduction and echelon forms, the matrix equations $AX=B$, solution sets of linear equations. Applications of linear equations.

UNIT-IV

Rank of a matrix, row-rank, column-rank, standard theorems on ranks, rank of the sum and the product of two matrices. Characteristic roots and Characteristic vector, Properties of characteristic roots, Cayley Hamilton theorem and Quadratic forms.

TEXT BOOKS:

1. Gorakh Prasad: Differential Calculus, Pothishala Pvt. Ltd., Allahabad.
2. Gorakh Prasad: Integral Calculus, Pothishala Pvt. Ltd., Allahabad.

SUGGESTED READINGS:

1. Zafar Ahsan: Differential Equations and their Applications, Prentice-Hall of India Pvt. Ltd., New Delhi (2nd Edition-2004).
2. Piskunov, N: Differential and Integral Calculus, Peace Publishers, Moscow.
3. Differential calculus by Das & Mukherjee, U.N Dhar Publication, Kolkatta, 2010.
4. Integral Calculus by Das & Mukherjee, U.N Dhar Publication, Kolkatta, 2010.
5. Advanced Differential Equations by Md Raisinghanian, S Chand & Company Pvt Ltd

PRACTICALCredit : **02****25 Marks****LIST OF PRACTICALS:**

1. Finding roots of an algebraic equations
 2. Solution of linear equations by matrix method.
 3. Rank and Inverse of a matrix
 4. Characteristics roots and characteristic vectors of a matrix.
 5. Applications of matrices.
-

+3 FIRST YEAR SECOND SEMESTER

Core Paper - 3

PROBABILITY AND PROBABILITY DISTRIBUTIONS

Time : 3 Hrs.

Credit : 04

End Semester Theory : 60 Marks

Mid Semester Theory : 15 Marks

Course outcomes:-

- Linear about the different approaches to the theory of probability.
- Understand various theorems on probability and their use in solving problems in various diversified situations.
- Demonstrate the concepts of conditional probability, pairwise independence and mutual independence of events.
- Understand the concept of prior and posterior probability used in Bayes theorem and their use in decision making.
- Illustrate the concept of p.m.f, p.d.f and distribution function.
- Demonstrate the concept of joint, marginal, and conditional probability distribution involving two random variables.
- Understand use of m.g.f, c.g.f and characteristic functions.
- Demonstrate the concepts of conditional expectations and conditional variance.
- Derive moments, cumulants, m.g.f and various constants of discrete probability distributions.
- Apply probability distributions to variety of problems in various diversified fields.
- Enumerate various characteristics of several important continuous probability distributions.

UNIT-I

Probability: Introduction, random experiments, sample space, events and algebra of events. Definitions of Probability – classical, statistical, and axiomatic. Conditional Probability, laws of addition and multiplication, independent events, theorem of total probability, Bayes' theorem and its applications.

UNIT-II

Random variables: discrete and continuous random variables, p.m.f., p.d.f. and c.d.f., illustrations and properties of random variables, univariate transformations with illustrations. Two dimensional random variables: discrete and continuous type, joint, marginal and conditional p.m.f, p.d.f., and c.d.f., independence of variables.

UNIT-III

Mathematical Expectation and Generating Functions: Expectation of single and bivariate random variables and its properties. Moments and Cumulants, moment generating function, cumulant generating function and characteristic function. Uniqueness and inversion theorems (without proof) along with applications. Conditional expectations.

UNIT-IV

Standard discrete probability distributions: Uniform, binomial, poisson, geometric, along with their properties and limiting/approximation cases. Standard continuous probability distributions: uniform, normal, exponential, beta and gamma along with their properties and limiting/approximation cases.

TEXT BOOKS:

1. Hogg, R.V., Tanis, E.A. and Rao J.M. (2009): Probability and Statistical Inference, Seventh Ed, Pearson Education, New Delhi.
2. Gupta, S. C. and Kapoor, V.K. (2008): Fundamentals Of Mathematical Statistics, 4th Edition (Reprint), Sultan Chand & Sons

SUGGESTED READINGS:

1. Miller, Irwin and Miller, Marylees (2006): John E. Freund's Mathematical Statistics with Applications, (7th Edn.), Pearson Education, Asia.
2. Mood, A.M. Graybill, F.A. and Boes, D.C. (2007): Introduction to the Theory of Statistics, 3rd Edn., (Reprint), Tata McGraw-Hill Pub. Co. Ltd.
3. Goon A.M., Gupta M.K. and Dasgupta B. (2002): Fundamentals of Statistics, Vol. I, 8th Edn. The World Press, Kolkata.
4. Myer, P.L. (1970): Introductory Probability and Statistical Applications, Oxford & IBH Publishing, New Delhi

PRACTICALCredit : **02****25** Marks**LIST OF PRACTICALS:**

1. Fitting of Binomial distributions
2. Fitting of Poisson distributions
3. Fitting of Normal distributions
4. Application problems based on Binomial, Poisson and Normal distributions.

+3 FIRST YEAR SECOND SEMESTER**Core Paper - 4
CALCULUS**Time : **3** Hrs.Credit : **04**End Semester Theory : **60** MarksMid Semester Theory : **15** Marks**Course outcomes:-**

- Know about limits and properties of continuous functions.
- Find maxima and minima of functions of one and two variables.
- Learn about beta and gamma functions and the relationship between them.
- Understand several types of differential equations and their applications.
- Know about formation and solution of various types of partial differential equations.

UNIT-I

Differential Calculus: Limits of function, continuous functions, properties of continuous functions, partial differentiation and total differentiation (two variables). Indeterminate forms: L-Hospital's rule, Leibnitz rule for successive differentiation. Euler's theorem on homogeneous functions. Maxima and minima of functions of one and two variables. Transformations and Jacobians.

UNIT-II

Integral Calculus: Review of integration and definite integral. Differentiation under integral sign, double integral. Beta and Gamma functions: properties and relationship between them.

UNIT-III

Differential Equations: Exact differential equations, Integrating factors, change of variables, Total differential equations, Differential equations of first order and first degree, Differential equations of first order but not of first degree, Equations of the first degree in x and y , Clairaut's equations. Higher Order Differential Equations. Homogeneous differential equations of order n with constant coefficients.

UNIT-IV

Formation and solution of partial differential equations. Equations easily integrable. Linear partial differential equations of first order. Homogeneous linear partial differential equations with constant coefficients. Different cases for complementary functions and particular integrals.

TEXT BOOKS:

1. Krishnamurthy V., Mainra V.P. and Arora J.L.: An Introduction to Linear Algebra (II, III, IV, V).

SUGGESTED READINGS:

1. Biswas, S. (1997): A Textbook of Matrix Algebra, New Age International, 1997.
2. Gupta S.C.: An Introduction to Matrices (Reprint). Sultan Chand & Sons, 2008.
3. Datta K.B.: Matrix and Linear Algebra. Prentice Hall of India Pvt. Ltd., 2002.
4. Hadley G.: Linear Algebra. Narosa Publishing House (Reprint), 2002.
5. Searle S.R.: Matrix Algebra Useful for Statistics. John Wiley & Sons., 1982.
6. Schaum's Outlines : Linear Algebra, Tata McGraw-Hill Edition, 3rd Edition, 2006.

PRACTICALCredit : **02****25 Marks****LIST OF PRACTICALS**

1. Determination of Maxima & Minima.
 2. Using definite integral obtain the area under curve.
 3. Applications of differential equations.
 4. Applications Partial Differential Equations.
 5. Applications of Beta and Gamma function.
-

+3 SECOND YEAR THIRD SEMESTER

Core Paper - 5

SAMPLING DISTRIBUTIONS

Time : 3 Hrs.

Credit : 04

End Semester Theory : 60 Marks

Mid Semester Theory : 15 Marks

Course Outcomes:-

- Develop the proof of Chebyshev's inequality and understand its use in statistics.
- Discuss the concepts relating to various forms of WLLN and SLLN.
- Know about CLT and its applications.
- Explain the various steps involved in testing hypothesis problems.
- Understand the various concepts, theorems and properties of chi-square distribution, t and F distributions.
- Discuss various concepts, theorems and properties of chi square distribution, t and F distributions.
- Emphasize the need for various applications of t, F, and chi square distributions.

UNIT-I

Limit laws: convergence in probability, almost sure convergence, convergence in mean square and convergence in distribution and their interrelations, Chebyshev's inequality, W.L.L.N., S.L.L.N. and their applications, De-Moivre Laplace theorem, Central Limit Theorem (C.L.T.) for i.i.d. variates, applications of C.L.T.

UNIT-II

Definitions of random sample, parameter and statistics, sampling distribution of a statistic, sampling distribution of sample mean, standard errors of sample mean, sample variance and sample proportion. Null and alternative hypotheses, level of significance, Type I and Type II errors, their probabilities and critical region. Large sample tests for testing single proportion, difference of two proportions, single mean, difference of two means, standard deviation and difference of standard deviations by classical and p-value approaches.

UNIT-III

Exact sampling distribution: Definition and derivation of p.d.f. of χ^2 with n degrees of freedom (d.f.) using m.g.f., nature of p.d.f. curve for different degrees of freedom, mean, variance, m.g.f., cumulant generating function, mode, additive property and limiting form of χ^2 distribution. Tests of significance and confidence intervals based on χ^2 distribution.

UNIT-IV

Exact sampling distributions: Student's and Fisher's t-distribution, Derivation of its p.d.f., nature of probability curve with different degrees of freedom, mean, variance, moments and limiting form of distribution. Snedecore's F-distribution: derivation of p.d.f., nature of p.d.f. curve with different degrees of freedom, mean, variance and mode. Relationship between t, F and χ^2 distributions. Test of significance and confidence Intervals based on t and F distributions.

TEXT BOOKS:

1. Goon, A.M., Gupta, M.K. and Dasgupta, B. (2003): An Outline of Statistical Theory, Vol. I, 4th Edn. World Press, Kolkata.

SUGGESTED READINGS:

1. Rohatgi V. K. and Saleh, A.K. Md. E. (2009): An Introduction to Probability and Statistics. 2nd Edn. (Reprint) John Wiley and Sons.
2. Hogg, R.V. and Tanis, E.A. (2009): A Brief Course in Mathematical Statistics. Pearson Education.
3. Johnson, R.A. and Bhattacharya, G.K. (2001): Statistics-Principles and Methods, 4th Edn. John Wiley and Sons.
4. Mood, A.M., Graybill, F.A. and Boes, D.C. (2007): Introduction to the Theory of Statistics, 3rd Edn. (Reprint). Tata McGraw-Hill Pub. Co. Ltd.

PRACTICALCredit : **02****25 Marks****LIST OF PRACTICALS:**

1. Testing of significance and confidence intervals for single proportion and difference of two proportions
2. Testing of significance and confidence intervals for single mean and difference of two means and paired tests.
3. Testing of significance and confidence intervals for difference of two standard deviations.
4. Exact Sample Tests based on Chi-Square Distribution.
5. Testing if the population variance has a specific value and its confidence intervals.
6. Testing of goodness of fit.
7. Testing of independence of attributes.
8. Testing based on 2 X 2 contingency table without and with Yates' corrections.
9. Testing and confidence intervals of equality of two population variances.

+3 SECOND YEAR THIRD SEMESTER**Core Paper - 6****SURVEY SAMPLING & INDIAN OFFICIAL STATISTICS**Time : **3 Hrs.**Credit : **04**End Semester Theory : **60 Marks**Mid Semester Theory : **15 Marks****Course outcomes:-**

- Distinguish between population parameter sample statistics.
 - Know various procedure of sampling that provide estimates, variances allocations and comparisons.
 - Know about various methods of estimation.
 - Know about methods of collection of official statistics, role of MOSPI, CSO, NSSO etc.
-

UNIT-I

Concept of population and sample, complete enumeration versus sampling, sampling and non-sampling errors. Types of sampling: non-probability and probability sampling, basic principle of sample survey, simple random sampling with and without replacement, definition and procedure of selecting a sample, estimates of: population mean, total and proportion, variances of these estimates, estimates of their variances and sample size determination.

UNIT-II

Stratified random sampling: Technique, estimates of population mean and total, variances of these estimates, proportional and optimum allocations and their comparison with SRS. Practical difficulties in allocation, estimation of gain in precision. Systematic Sampling: Technique, estimates of population mean and total, variances of these estimates ($N=n \times k$). Comparison of systematic sampling with SRS and stratified sampling in the presence of linear trend and corrections.

UNIT-III

Introduction to Ratio and regression methods of estimation, first approximation to the population mean and total (for SRS of large size), variances of these estimates and estimates of these variances, comparison with SRSWOR. Cluster sampling (equal clusters only) estimation of population mean and its variance.

UNIT-IV

Present official statistical system in India, methods of collection of official statistics, their reliability and limitations. Role of Ministry of Statistics & Program Implementation (MoSPI), Central Statistical Office (CSO), National Sample Survey Office (NSSO), and National Statistical Commission. Government of India's Principal publications containing data on the topics such as population, industry and finance.

TEXT BOOKS:

1. Sukhatme,P.V., Sukhatme,B.V. Sukhatme,S. Asok,C.(1984). Sampling Theories of Survey With Application, IOWA State University Press and Indian Society of Agricultural Statistics
2. Guide to current Indian Official Statistics, Central Statistical Office, GOI, New Delhi.

SUGGESTED READINGS:

1. Cochran W.G. (1984):Sampling Techniques(3rd Ed.), Wiley Eastern.
2. Murthy M.N. (1977): Sampling Theory & Statistical Methods, Statistical Pub. Society, Calcutta.
3. Des Raj and Chandhok P. (1998): Sample Survey Theory, Narosa Publishing House.
4. Goon A.M., Gupta M.K. and Das gupta B. (2001): Fundamentals of Statistics (Vol.2), World Press.

PRACTICALCredit : **02****25 Marks****LIST OF PRACTICALS:**

1. To select a SRS with and without replacement.
 2. For a population of size 5, estimate population mean, population mean square and population variance. Enumerate all possible samples of size 2 by WR and WOR and establish all properties relative to SRS.
-

3. For SRSWOR, estimate mean, standard error, the sample size
4. Stratified Sampling: allocation of sample to strata by proportional and Neyman's methods. Compare the efficiencies of above two methods relative to SRS.
5. Estimation of gain in precision in stratified sampling.
6. Comparison of systematic sampling with stratified sampling and SRS in the presence of a linear trend.
7. Ratio and Regression estimation: Calculate the population mean or total of the population. Calculate mean squares. Compare the efficiencies of ratio and regression estimators relative to SRS.
8. Cluster sampling: estimation of mean or total, variance of the estimate, estimate of intra-class correlation coefficient, efficiency as compared to SRS.

+3 SECOND YEAR THIRD SEMESTER

Core Paper - 7

MATHEMATICAL ANALYSIS

Time : 3 Hrs.

Credit : 04

End Semester Theory : 60 Marks

Mid Semester Theory : 15 Marks

Course outcomes:-

- Learn about various terms associated with sets.
- Know about various tests of convergence and divergence.
- Understand limit, continuity, and differentiability.
- Discuss series expansions.
- Understand the meaning and the uses of interpolation and extrapolation.
- Define and understand the use of different operators like D,E
- Derive various formulas of interpolation for equal and unequal intervals of arguments.
- Derive various formulas for numerical, integration along with their applications.

UNIT-I

Real Analysis: Representation of real numbers as points on the line and the set of real numbers as complete ordered field. Bounded and unbounded sets, neighbourhoods and limit points, Supremum and infimum, open and closed sets, sequences and their convergence. Infinite series, positive term series and their convergence, Comparison test, D'Alembert's ratio test, Cauchy's nth root test, Raabe's test. Gauss test, Cauchy's condensation test and integral test (Statements and Examples only).

UNIT-II

Review of limit, continuity and differentiability, uniform Continuity and boundedness of a function. Rolle's and Lagrange's Mean Value theorems. Taylor's theorem with lagrange's and Cauchy's form of remainder (without proof). Taylor's and Maclaurin's series expansions.

UNIT-III

Numerical Analysis: Factorial, finite differences and interpolation. Operators, E and divided difference. Newton's forward, backward and divided differences interpolation formulae.

Lagrange's interpolation formulae. Central differences, Gauss and Stirling interpolation formulae.

UNIT-IV

Numerical integration. Trapezoidal rule, Simpson's one-third rule, three-eighth rule, Weddle's rule with error terms. Stirling's approximation to factorial n . Solution of difference equations of first order.

TEXT BOOKS:

1. Malik S.C. and Savita Arora: Mathematical Analysis, Second Edition, Wiley Eastern Limited, New Age International Limited, New Delhi, 1994.
2. Goel B. S. and Mittal S. K. : Numerical Analysis, Pragati Prakashan, ND, 2008

SUGGESTED READINGS:

1. Somasundram D. and Chaudhary B.: A First Course in Mathematical Analysis, Narosa Publishing House, New Delhi, 1987.
2. Shanti Narayan: A course of Mathematical Analysis, 12th revised Edition, S. Chand & Co. (Pvt.) Ltd., New Delhi, 1987.
3. Singal M.K. and Singal A.R.: A First Course in Real Analysis, 24th Edition, R. Chand & Co., New Delhi, 2003.
4. Bartle, R.G. and Sherbert, D.R. (2002): Introduction to Real Analysis (3rd Edition), John Wiley and Sons (Asia) Pte. Ltd., Singapore.
5. Jain, M. K., Iyengar, S. R. K. and Jain, R. K. (2003): Numerical methods for scientific and engineering computation, New age International Publisher, India.

PRACTICAL

Credit : 02

25 Marks

LIST OF PRACTICALS

1. Interpolation with equal and unequal intervals.
 2. Problems on Lagrange's interpolation
 3. Numerical Integration (Trapezoidal, Simpson's and Weddle's method)
 4. Stirling's approximation
-

+3 SECOND YEAR FOURTH SEMESTER

Core Paper - 8

STATISTICAL INFERENCE

Time : 3 Hrs.

Credit : 04

End Semester Theory : 60 Marks

Mid Semester Theory : 15 Marks

Course outcomes:-

- Understand and discuss various characteristics of estimators.
- Understand various methods of estimation.
- Know about the procedure to construct the most powerful test (Neyman Pearson Lemma).
- Know and understand about Cramer Rao inequality.
- Understand various concepts related to the testing of hypothesis.
- Elaborate the concept of Likelihood Ratio test, its properties.
- Explain and develop sequential probability ratio test (SPRT).

UNIT-I

Estimation: Concepts of point estimation, Criterion of a good estimator, unbiasedness, sufficiency, consistency and efficiency. Factorization theorem. Complete statistics. Minimum variance unbiased estimator (MVUE), Rao-Blackwell and Lehmann-Scheffe theorems and their applications. Cramer-Rao inequality and MVB estimators (statement and applications).

UNIT-II

Methods of Estimation: Method of moments, method of maximum likelihood estimation, method of minimum Chi-square, basic idea of Baye's estimators.

UNIT-III

Principles of test of significance: Null and alternative hypotheses (simple and composite), Type-I and Type-II errors, critical region, level of significance, size and power, best critical region, most powerful test, uniformly most powerful test, Neyman Pearson Lemma (statement and applications to construct most powerful test). Likelihood ratio test, properties of likelihood ratio tests (without proof).

UNIT-IV

Sequential Analysis: Sequential probability ratio test (SPRT) for simple vs simple hypotheses. Fundamental relations among α , β , A and B, determination of A and B in practice. Wald's fundamental identity and the derivation of operating characteristics (OC) and average sample number (ASN) functions, examples based on binomial and normal distributions.

TEXT BOOKS:

1. Goon A.M., Gupta M.K.: Das Gupta.B. (2005), Fundamentals of Statistics, Vol. I, World Press, Calcutta.
 2. Goon, A.M., Gupta, M.K. and Dasgupta, B.: An Outline of Statistical Theory, Vol.II, (4th ed.), World Press.
-

SUGGESTED READINGS:

1. Rohatgi V. K. and Saleh, A.K. Md. E. (2009): An Introduction to Probability and Statistics. 2ndEdn. (Reprint) John Wiley and Sons.
2. Miller, I. and Miller, M. (2002) : John E. Freund's Mathematical Statistics (6th addition, low price edition), Prentice Hall of India.
3. Dudewicz, E. J., and Mishra, S. N. (1988): Modern Mathematical Statistics. John Wiley & Sons.
4. Mood A.M, Graybill F.A. and Boes D.C. : Introduction to the Theory of Statistics, McGrawHill.
5. Bhat B.R, Srivenkatramana T and Rao Madhava K.S. (1997) Statistics: A Beginner's Text, Vol. I, New Age International (P)Ltd.

PRACTICALCredit : **02****25 Marks****LIST OF PRACTICALS:**

1. Unbiased estimators (including unbiased but absurd estimators)
2. Consistent estimators, efficient estimators and relative efficiency of estimators.
3. Maximum Likelihood Estimation
4. Most powerful critical region (MP Lemma)
5. Uniformly most powerful critical region
6. Unbiased critical region
7. Power curves
8. OC function and OC curve , ASN function and ASN curve

+3 SECOND YEAR FOURTH SEMESTER**Core Paper - 9****LINEAR MODEL**Time : **3 Hrs.**Credit : **04**End Semester Theory : **60 Marks**Mid Semester Theory : **15 Marks****Course outcomes:-**

- Know the procedure of estimability of linear parametric functions and estimation of error variance.
- Learn estimation and hypothesis testing in case of regression models.
- Understand ANOVA and ANCOVA for fixed effect models.
- Know about prediction from a fitted model, homoscedasticity, and collinearity.

UNIT-I

Gauss-Markov set-up: Theory of linear estimation, Estimability of linear parametric functions, Method of least squares, Gauss-Markov theorem, Estimation of error variance.

UNIT-II

Regression analysis: Simple regression analysis, Estimation and hypothesis testing in case of simple and multiple regression models, Concept of model matrix and its use in estimation.

UNIT-III

Analysis of variance: Definitions of fixed, random and mixed effect models, analysis of variance and covariance in one-way classified data for fixed effect models, Analysis of variance and covariance in two-way classified data with one observation per cell for fixed effect models.

UNIT-IV

Model checking: Prediction from a fitted model, Violation of usual assumptions concerning normality, Homoscedasticity and collinearity, Diagnostics using quantile- quantile plots.

TEXT BOOKS:

1. Draper, N.R. and Smith, H.: Applied Regression Analysis, John Wiley & Sons.
2. Sengupta, D, Linear model: an integrated approach, World Scientific Pub.

SUGGESTED READINGS:

1. Weisberg, S. (2005). Applied Linear Regression (Third edition).Wiley.
2. Wu, C. F. J. And Hamada, M. (2009). Experiments, Analysis, and Parameter Design Optimization (Second edition), John Wiley.
3. Renchner, A. C. And Schaalje, G. B. (2008). Linear Models in Statistics (Second edition), John Wiley and Sons

PRACTICALCredit : **02****25** Marks**LIST OF PRACTICALS:**

1. Estimability when X is a full rank matrix and not a full rank matrix
 2. Simple Linear Regression
 3. Multiple Regression
 4. Tests for Linear Hypothesis
 5. Orthogonal Polynomials
 6. Analysis of Variance of a one way classified data
 7. Analysis of Variance of a two way classified data with one observation per cell
 8. Analysis of Covariance of a one way classified data
-

+3 SECOND YEAR FOURTH SEMESTER

Core Paper - 10

STATISTICAL QUALITY CONTROL

Time : 3 Hrs.

Credit : 04

End Semester Theory : 60 Marks

Mid Semester Theory : 15 Marks

Course outcomes:-

- Understand the concepts of quality control and inspections.
- Exercise quality control at product as well as process level.
- Learn how control charts of different types are constructed and are used to monitor quality standards.
- Use of acceptance sampling for making measurements and taking corrective action as a product or service is being produced.
- Know about organizational structure and six sigma training plans, importance of voice of customers (VOC) and total quality management.

UNIT-I

Quality: Definition, dimensions of quality, historical perspective of quality control and improvements starting from World War II, historical perspective of Quality Gurus and Quality Hall of Fame. Quality system and standards: Introduction to ISO quality standards, Quality registration. Statistical Process Control - Seven tools of SPC, chance and assignable Causes of quality variation. Statistical Control Charts- Construction and Statistical basis of 3- σ Control charts, Rational Sub-grouping.

UNIT-II

Control charts for variables: \bar{X} & R-chart, \bar{X} & s-chart. Analysis of patterns on control chart, estimation of process capability. Control charts for attributes: np-chart, p-chart, c-chart and u-chart. Comparison between control charts for variables and control charts for attributes.

UNIT-III

Acceptance sampling plan: Principle of acceptance sampling plans. Single and Double sampling plan, Their OC, AQL, LTPD, AOQ, AOQL, ASN, ATI functions with graphical interpretation, use and interpretation of Dodge and Romig's sampling inspection plan tables.

UNIT-IV

Introduction to Six-Sigma: Overview of Six Sigma, Lean Manufacturing and Total Quality Management (TQM). Organizational Structure and Six Sigma training plans- Selection Criteria for Six-Sigma roles and training plans. Voice of customers (VOC): Importance and VOC data collection.

TEXT BOOKS:

1. Montgomery, D. C. (2009): Introduction to Statistical Quality Control, 6th Edition, Wiley India Pvt. Ltd.
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SUGGESTED READINGS:

1. Goon A.M., Gupta M.K. and Das gupta B. (2002): Fundamentals of Statistics, Vol. I & II, 8th Edn. The World Press, Kolkata.
2. Mukhopadhyay,P(2011):Applied Statistics,2nd edition revised reprint, Booksand Allied(P)Ltd.
3. Montgomery, D. C. and Runger, G.C. (2008): Applied Statistics and Probability for Engineers, 3rd Edition reprint, Wiley India Pvt.Ltd.
4. Ehrlich, B.Harris(2002):Transactional Six Sigma and Lean Servicing,2ndEdition, St. Lucie Press.
5. Hoyle, David (1995): ISO Quality Systems Handbook, 2nd Edition, Butterworth Heinemann Publication.

PRACTICALCredit : **02****25 Marks****LIST OF PRACTICALS:**

1. Construction and interpretation of statistical control charts
2. X-bar &R-chart
3. X-bar &s-chart
4. np-chart, p-chart, c-chart and u-chart
5. Single sample inspection plan: Construction and interpretation of OC, AQL, LTPD, ASN, ATI, AOQ, AOQL curves

+3 THIRD YEAR FIFTH SEMESTER**Core Paper - 11****STOCHASTIC PROCESS & QUEUING THEORY**Time : **3 Hrs.**End Semester Theory : **60 Marks**Credit : **04**Mid Semester Theory : **15 Marks****Course outcomes:-**

- Understand the concepts of Generating functions, stationary process, Stochastic process, Poisson process, Pure birth process, Pure death process and birth-death process, Yule fury process.
- Understand classification of states of Markov chain.
- Derive the differentials- difference equations for various processes.
- Know about the characteristics of queuing theory models and waiting time distributions.

UNIT-I

Probability Distributions: Generating functions, Bivariate probability generating function.
Stochastic Process: Introduction, Stationary Process.

UNIT-II

Markov Chains: Definition of Markov Chain, transition probability matrix, order of Markov chain, Markov chain as graphs, higher transition probabilities. Generalization of independent Bernoulli trials, classification of states and chains.

UNIT-III

Poisson Process: postulates of Poisson process, properties of Poisson process, inter-arrival time, pure birth process, Yule Furry process, birth and death process, pure death process.

UNIT-IV

Queuing System: General concept, Characteristics of queuing models, steady state distribution, queuing model, M/M/1 with finite and infinite system capacity, waiting time distribution (without proof).

TEXT BOOKS:

1. Medhi, J. (2009): Stochastic Processes, New Age International Publishers.
2. Kanti Swarup, Gupta, P.K. and Manmohan (2007): Operations Research, 13th Edition, Sultan Chand and Sons.

SUGGESTED READINGS:

1. Basu, A.K. (2005): Introduction to Stochastic Processes, Narosa Publishing.
2. Bhat, B.R. (2000): Stochastic Models: Analysis and Applications, New Age International Publishers.
3. Taha, H. (1995): Operations Research: An Introduction, Prentice- Hall India.
4. Karlin, S and Taylor H.M, A first course in Stochastic Process. Academic Press;

PRACTICALCredit : **02****25 Marks****LIST OF PRACTICALS**

1. Calculation of transition probability matrix
 2. Identification of characteristics of reducible and irreducible chains.
 3. Identification of types of classes
 4. Calculation of probabilities for given birth and death rates and vice-versa
 5. Calculation of Probability and parameters for (M/M/1) model and change in behaviour of queue as N tends to infinity.
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+3 THIRD YEAR FIFTH SEMESTER

Core Paper - 12

STATISTICAL COMPUTING USING C & R PROGRAMMING

Time : 3 Hrs.

Credit : 04

End Semester Theory : 60 Marks

Mid Semester Theory : 15 Marks

Course outcomes:-

- Understand data types, operators and expressions, library functions relating to C program.
- Learn about decision making and branching.
- Know about category of functions and user-defined functions in C program.
- Learn about running R program and constructing data objects.

UNIT-I

History and importance of C, Components, basic structure programming, Keywords and Identifiers and execution of a C program. Data types: Basic data types, Enumerated data types, derived data types. Constants and variables: declaration and assignment of variables, Symbolic Constants, overflow and underflow of data. Operators and Expressions: Arithmetic, relational, logical, assignment, increment/decrement, operators, precedence of operators in arithmetic, relational and logical expression. Implicit and explicit type conversions in expressions, library functions. Managing input and output operations: reading and printing formatted and unformatted data

UNIT-II

Decision making and branching - if...else, nesting of if...else, else if ladder, switch, conditional operator. Looping in C: for, nested for, while, do...while, jumps in and out of loops. Arrays: Declaration and initialization of one-dim and two-dim arrays. Character arrays and strings: Declaring and initializing string variables, reading and writing strings from Terminal (using scanf and printf only).

UNIT-III

User- defined functions: A multi-function program using user-defined functions, definition of functions, return values and their types, function prototypes and calls. Category of Functions no arguments and no return values, arguments but no return values, arguments with return values, no arguments but returns a value, functions that return multiple values.

UNIT-IV

Introducing R: Getting R, Running R program, Finding your way in R, Command packages, Starting Out: Reading and Getting Data into R, Viewing Named Objects, Types of Data Items, Structure of Data Items, Examining Data Structure, Saing Your Work in R, Working with objects: Manipulating objects, Viewing Objects, Constructing data objects, Different forms of Data Objects. Descriptive Statistics and Tabulation.

TEXT BOOKS:

1. Kanetkar Y. P. Let us C ; BPB Publications; 15th edition.
 2. Gardener, M. Beginning R: The Statistical Programming Language, WileyIndia
-

SUGGESTED READINGS:

1. Balagurusamy, E. (2011): Programming in ANSI C, 6th Edition, Tata McGraw Hill.
2. Kernighan, B.W. and Ritchie, D. (1988): C Programming Language, 2nd Edition, Prentice Hall.
3. Gottfried, B.S. (1998): Schaum's Outlines: Programming with C, 2nd Edition, Tata McGraw Hill

PRACTICALCredit : **02****25 Marks****LIST OF PRACTICALS**

1. Plot of a graph $y = f(x)$
2. Roots of a quadratic equation (with imaginary roots also)
3. Sorting of an array and hence finding median
4. Mean, Median and Mode of a Grouped Frequency Data
5. Variance and coefficient of variation of a Grouped Frequency Data
6. Value of $n!$ using recursion
7. Matrix addition, subtraction, multiplication Transpose and Trace
8. t-test for difference of means
9. Paired t-test
10. F-ratio test

+3 THIRD YEAR SIXTH SEMESTER**Core Paper - 13****DESIGN OF EXPERIMENTS**Time : **3 Hrs.**End Semester Theory : **60 Marks**Credit : **04**Mid Semester Theory : **15 Marks****Course outcomes:-**

- Understand how the total variation in a data set can be partitioned into different components.
- Learn how to summarize F ratio in the form of ANOVA table.
- Be able to compare the means of more than two samples simultaneously.
- Understand commonly used experimental designs.
- Know about factorial experiment, total and partial confounding in Design of experiments.

UNIT-I

Analysis of variance (ANOVA) for one way and two way classified data (one observation per cell) Experimental designs: Role, historical perspective, terminology, experimental error, basic principles, uniformity trials, fertility contour maps, choice of size and shape of plots and blocks.

UNIT-II

Basic designs: Completely Randomized Design (CRD), Randomized Block Design (RBD), Latin Square Design (LSD) – layout, model and statistical analysis, relative efficiency, analysis with missing observations.

UNIT-III

Factorial experiments: advantages and disadvantages, notations and concepts, 2^2 , 2^3 , ... 2^n and 3^2 factorial experiments, design and its analysis and applications.

UNIT-IV

Total and Partial confounding for 2^n ($n=5$), 3^2 and 3^3 , factorial experiments in a single replicate. Advantages and disadvantages. Balanced Incomplete Block Design (BIBD) – parameters, relationships among its parameters.

TEXT BOOKS:

1. Gupta, S. C. and Kapoor, V.K. (2008): Fundamentals of Applied Statistics, 4 (Reprint), Sultan Chand & Sons
2. Goon, A.M., Gupta, M.K. and Das Gupta, B. (2005): Fundamentals of Statistics. Vol. II, 8th Edn. World Press, Kolkata.

SUGGESTED READINGS:

1. Cochran, W.G. and Cox, G.M. (1959): Experimental Design. Asia Publishing House.
2. Das, M.N. and Giri, N.C. (1986): Design and Analysis of Experiments. Wiley Eastern Ltd.
3. Kempthorne, O. (1965): The Design and Analysis of Experiments. John Wiley.
4. Montgomery, D. C. (2008): Design and Analysis of Experiments, John Wiley.

PRACTICALCredit : **02****25 Marks****LIST OF PRACTICALS**

1. Analysis of a CRD
 2. Analysis of an RBD
 3. Analysis of an LSD
 4. Analysis of an RBD with one missing observation
 5. Analysis of an LSD with one missing observation
 6. Analysis of 2^2 and 2^3 factorial in CRD and RBD
 7. Analysis of a completely confounded two level factorial design in 2 blocks
 8. Analysis of a completely confounded two level factorial design in 4 blocks
 9. Analysis of a partially confounded two level factorial design
-

+3 THIRD YEAR SIXTH SEMESTER

Core Paper - 14

MULTIVARIATE ANALYSIS AND NON PARAMETRIC METHODS

Time : 3 Hrs.

End Semester Theory : 60 Marks

Credit : 04

Mid Semester Theory : 15 Marks

Course outcomes:-

- Learn how a non-parametric statistical test is conducted when variables are measured on a nominal scale and measurements are of independent nature.
- Know about multivariate data and various terms with it.
- Derive marginal and conditional distribution of MVND.
- Understand random vector, mean vector, dispersion matrix and variance-covariance matrix relating to MVND.
- Know about the properties of partial and multiple correlation coefficients.

UNIT-I

Bivariate Normal Distribution (BVN): p.d.f. of BVN, properties of BVN, marginal and conditional p.d.f. of BVN. Multivariate Data: Random Vector: Probability mass/density functions, Distribution function, Mean vector & Dispersion matrix, Marginal & Conditional distributions.

UNIT-II

Multivariate Normal distribution and its properties. Sampling distribution for mean vector and variance- covariance matrix. Multiple and partial correlation coefficient and their properties.

UNIT-III

Nonparametric Tests: Introduction and Concept, Parametric versus non-parametric tests, advantages and disadvantages of non-parametric tests. Test for randomness based on total number of runs, Empirical distribution function, Kolmogorov Smirnov test for one sample, Sign tests- one sample.

UNIT-IV

Kolmogorov Smirnov two samples test, Wilcoxon signed rank tests, Wilcoxon-Mann-Whitney Utest, Kruskal-Wallis test.

TEXT BOOKS:

1. Bhuyan, K.C., Multivariate Analysis and its Applications, New Central Book Agency (P) Limited
2. Gun, A.M., Gupta, M.K. and Das gupta, B.: An Outline of Statistical Theory, Vol.II, (4thed.), World res.

SUGGESTED READINGS:

1. Johnson, R.A. and Wichern, D.W. (2007): Applied Multivariate Analysis, 6thEdn., Pearson & Prentice Hall
2. Anderson, T.W. (2003): An Introduction to Multivariate Statistical Analysis, 3 JohnWiley
3. Kshirsagar, A.M. (1972):Multivariate Analysis, 1stEdn. Marcel Dekker.
4. Mukhopadhyay, P.: Mathematical Statistics. Books and Allied (P)Ltd
5. Gibbons, J.D. and Chakraborty, S(2003):Non parametric Statistical Inference.4th Edition. Marcel Dekker, CRC.

PRACTICALCredit : **02****25 Marks****LIST OF PRACTICALS**

1. Multiple Correlation
2. Partial Correlation
3. Bivariate Normal Distribution
4. Test for randomness based on total number of runs.
5. Kolmogrov Smirnov test for one sample.
6. Sign test: one sample, two samples, large samples.
7. Wilcoxon-Mann-Whitney U-test.
8. Kruskal-Wallis test

+3 THIRD YEAR FIFTH SEMESTER**DSE - 1****OPERATIONS RESEARCH**Time : **3 Hrs.**End Semester Theory : **60 Marks**Credit : **04**Mid Semester Theory : **15 Marks****Course outcomes:-**

- Understand maximization and minimization problem (LPP) using different methods.
- Have an idea about to minimax-maximin principle in game theory.
- Be able to know the details about inventory management, its characteristics and various models associated with it.
- Learn about networking using shortest route.
- Be able to find optimal solution in case of transportation and assignment problem.

UNIT-I

Introduction to Operations Research, phases of O.R., model building, various types of O.R. problems. Linear Programming Problem, Mathematical formulation of the L.P.P, graphical solutions of a L.P.P. Simplex method for solving L.P.P. Charne's M-technique for solving L.P.P. involving artificial variables. Special cases of L.P.P. Concept of Duality in L.P.P: Dual simplex method.

UNIT-II

Transportation Problem: Initial solution by North West corner rule, Least cost method and Vogel's approximation method (VAM), MODI's method to find the optimal solution, special cases of transportation problem. Assignment problem: Hungarian method to find optimal assignment problem.

UNIT-III

Game theory: Rectangular game, minimax-maximin principle, solution to rectangular game using graphical method, dominance and modified dominance property to reduce the game matrix and solution to rectangular game with mixed strategy. Networking: Shortest route and minimal spanning tree problem.

UNIT-IV

Inventory Management: ABC inventory system, characteristics of inventory system. EOQ Model and its variations, with and without shortages, Quantity Discount Model with price breaks.

TEXT BOOKS:

1. KantiSwarup, Gupta, P.K. and Manmohan (2007): Operations Research, 13th Edition, Sultan Chand and Sons.

SUGGESTED READINGS:

1. Taha, H. A. (2007): Operations Research: An Introduction, 8th Edition, Prentice Hall of India.
2. Hadley, G: (2002) : Linear Programming, Narosa Publications
3. Hillier, F.A and Lieberman, G.J. (2010): Introduction to Operations Research Concepts and cases, 9th Edition, Tata Mc Graw Hill

PRACTICALCredit : **02****25 Marks****LIST OF PRACTICALS**

1. Mathematical formulation of L.P.P and solving the problem using graphical method, Simplex technique and Charne's Big M method involving artificial variables.
2. Identifying Special cases by Graphical and Simplex method and interpretation (Unbounded, Infeasible and alternate solution)
3. Allocation problem using Transportation model
4. Allocation problem using Assignment model
5. Problems based on game matrix

+3 THIRD YEAR FIFTH SEMESTER**DSE - 2****TIME SERIES ANALYSIS**Time : **3 Hrs.**End Semester Theory : **60 Marks**Credit : **04**Mid Semester Theory : **15 Marks****Course outcomes:-**

- Learn how to decompose time series data into their various components.
- Know various methods of measurement of trend, seasonal, cyclical, and random components.
- Understand a stationary timeseries and exponential smoothing methods.

UNIT-I

Introduction to times series data, application of time series from various fields, Components of a time series, Decomposition of time series. Trend: Estimation of trend by free hand curve method, method of semi averages, fitting various mathematical curve, and growth curves.

UNIT-II

Trend Cont.: Method of moving averages. Detrending. Effect of elimination of trend on other components of the time series. Seasonal Component: Estimation of seasonal component by Method of simple averages, Ratio to Trend.

UNIT-III

Seasonal Component cont: Ratio to Moving Averages and Link Relative method, Deseasonalization. Cyclic Component: Harmonic Analysis. Some Special Processes:

Movingaverage (MA) process and Autoregressive (AR) process of orders one and two, Estimation of the parameters of AR (1) and AR (2) – Yule-Walker equations.

UNIT-IV

Stationary Time series: Weak stationarity, auto correlation function and correlogram of moving average; its applications. Random Component: Variate component method. Forecasting: Exponential smoothing methods.

TEXT BOOKS:

1. Kendall M.G. (1976): Time Series, Charles Griffin.
2. Brockwell, P.J. and Davis, R. A. (2003). Introduction to Time Series Analysis, Springer

SUGGESTED READINGS:

1. Gupta, S. C. and Kapoor, V.K. (2008): Fundamentals of Applied Statistics, 4 (Reprint), Sultan Chand & Sons
2. Chatfield C. (1980): The Analysis of Time Series –An Introduction, Chapman & Hall.
3. Mukhopadhyay P. (2011): Applied Statistics, 2nd ed. Revised reprint, Books and Allied

PRACTICAL

Credit : **02**

25 Marks

LIST OF PRACTICALS

1. Fitting and plotting of modified exponential curve
2. Fitting and plotting of Gompertz curve
3. Fitting and plotting of logistic curve
4. Fitting of trend by Moving Average Method
5. Measurement of Seasonal indices Ratio-to-Trend method
6. Measurement of Seasonal indices Ratio-to-Moving Average method
7. Measurement of seasonal indices Link Relative method
8. Forecasting by exponential smoothing

+3 THIRD YEAR SIXTH SEMESTER

DSE - 3

DEMOGRAPHY AND VITAL STATISTICS

Time : **3** Hrs.

End Semester Theory : **60** Marks

Credit : **04**

Mid Semester Theory : **15** Marks

Course outcomes:-

- Know about the use of various indices to check completeness of registration data.
- Understand various measures of morality and fertility.
- Learn about construction of life table and abridged life tables.
- Know about the measurement of population growth.

UNIT-I

Population Theories: Coverage and content errors in demographic data, use of balancing equations and Chandrasekharan-Deming formula to check completeness of registration data. Adjustment of age data, use of Myer and UN indices, Population composition, dependency ratio.

UNIT-II

Introduction and sources of collecting data on vital statistics, errors in census and registration data. Measurement of population, rate and ratio of vital events. Measurements of Mortality: Crude Death Rate (CDR), Specific Death Rate (SDR), Infant Mortality Rate (IMR) and Standardized Death Rates.

UNIT-III

Stationary and Stable population, Central Mortality Rates and Force of Mortality. Life (Mortality) Tables: Assumption, description, construction of Life Tables and Uses of Life Tables.

UNIT-IV

Abridged Life Tables; Concept and construction of abridged life tables by Reed-Merrell method, Measurements of Fertility: Crude Birth Rate (CBR), General Fertility Rate (GFR), Specific Fertility Rate (SFR) and Total Fertility Rate (TFR). Measurement of Population Growth: Crude rates of natural increase, Pearl's Vital Index, Gross Reproduction Rate (GRR) and Net Reproduction Rate (NRR).

TEXT BOOKS:

1. Pathak, K.B. and Ram, F.: Techniques of Demography Analysis, Himalayan Publishers
2. Gun, A.M., Gupta, M.K. and Dasgupta, B. (2008): Fundamentals of Statistics, Vol. II, 9th Edition, World Press.

SUGGESTED READINGS:

1. Mukhopadhyay P. (1999): Applied Statistics, Books and Allied (P) Ltd.
2. Biswas, S. (1988): Stochastic Processes in Demography & Application, Wiley Eastern Ltd.
3. Croxton, Fredrick E., Cowden, Dudley J. and Klein, S. (1973): Applied General Statistics, 3rd Edition. Prentice Hall of India Pvt. Ltd.
4. Keyfitz N., Beckman John A.: Demography through Problems S-Verlag Newyork.

PRACTICALCredit : **02****25** Marks**LIST OF PRACTICALS**

1. To calculate CDR and Age Specific death rate for a given set of data
2. To find Standardized death rate by:- (i) Direct method (ii) Indirect method
3. To construct a complete life table
4. To fill in the missing entries in a life table
5. To calculate probabilities of death at pivotal ages and use it construct a bridged life table
6. To calculate CBR, GFR, SFR, TFR for a given set of data
7. To calculate Crude rate of Natural Increase and Pearle's Vital Index for a given set of data
8. Calculate GRR and NRR for a given set of data and compare them

+3 THIRD YEAR SIXTH SEMESTER**DSE - 4****PROJECT WORK****Objective:**

The aim of the course is to initiate students to write and present a statistical report, under the supervision of a faculty, on some area of social interest. The project work will provide hands-on training to the students to deal with data emanating from some real-life situation and propel them to do well on some theory or relate it to some theoretical concepts. The project should be prepared basing on the own idea and interpretation of the student. It should not be copied from anywhere. A student has to consult his / her supervisor for the preparation of the project. While writing a project, a student has to present two seminars before the faculties / supervisor from the department.

Seminar - I (Based on Introduction and Review of literature, Methodology) - 10 Marks

Seminar - II (Based on Analysis, Interpretation and Conclusion) - 10 Marks

Project Report - 60 Marks

Viva- Voce (after submission of Project Report)- 20 Marks

OR

+3 THIRD YEAR SIXTH SEMESTER

DSE - 4 ECONOMETRICS

Time : 3 Hrs.

Credit : 04

End Semester Theory : 60 Marks

Mid Semester Theory : 20 Marks

Course outcomes:-

- Learn about the analysis of economic data using linear regression model
- Understand the statistical foundations of regression analysis with OLS

UNIT-I

Introduction: Objective behind building econometric models, nature of econometrics, model building, role of econometrics, structural and reduced forms. General linear model (GLM). Estimation under linear restrictions.

UNIT-II

Multi collinearity: Introduction and concepts, detection of multicollinearity, consequences, tests and solutions of multicollinearity, specification error.

UNIT-III

Generalized least squares estimation, Aitken estimators. Autocorrelation: concept, consequences of auto correlated disturbances, detection and solution of autocorrelation.

UNIT-IV

Heteroscedastic disturbances: Concepts and efficiency of Aitken estimator with OLS estimator under heteroscedasticity. Autoregressive models, Dummy variables, Qualitative data.

TEXT BOOKS:

1. Gujarati, D. and Sangeetha, S. (2007): Basic Econometrics, 4th Edition, McGraw Hill Companies.
2. Maddala, G.S. and Lahiri, K. (2009): Introduction to Econometrics, 4th Edition, John Wiley & Sons.

SUGGESTED READINGS:

1. Johnston, J. (1972): Econometric Methods, 2nd Edition, McGraw Hill International.
2. Koutsoyiannis, A. (2004): Theory of Econometrics, 2nd Edition, Palgrave Macmillan

PRACTICAL

Credit : 02

25 Marks

1. Problems based on estimation of General linear model
2. Testing of parameters of General linear model
3. Forecasting of General linear model
4. Problems related to consequences of Multicollinearity
5. Diagnostics of Multicollinearity
6. Problems related to consequences of Autocorrelation (AR(1))
7. Diagnostics of Autocorrelation
8. Problems related to consequences Heteroscedasticity
9. Diagnostics of Heteroscedasticity

+3 SECOND YEAR THIRD SEMESTER

GE - 3 STATISTICAL METHODS

Time : 3 Hrs.

End Semester Theory : 60 Marks

Credit : 04

Mid Semester Theory : 15 Marks

Course Outcomes:-

- Compute measures of central tendency, dispersion, skewness and kurtosis
- Understand the use of moments, correlation coefficients, regression

UNIT-I

Introduction : Definition and scope of Statistics, concepts of statistical population and sample. Data : quantitative and qualitative, attributes, variables, scales of measurement -nominal, ordinal, interval and ratio. Presentation : tabular and graphic, including histogram and ogives.

UNIT-II

Measures of Central Tendency : mathematical and positional. Measures of Dispersion : Range, Quartile Deviation, Mean Deviation, Standard Deviation, Coefficient of Variation, Moments, Skewness and Kurtosis.

UNIT-III

Bivariate data : Definition, scatter diagram, simple and rank correlation. Simple linear regression, Principle of least squares and fitting of polynomials, Applications.

UNIT-IV

Theory of attributes, consistency of data, independence and association of attributes, measures of association and contingency.

TEXT BOOKS:

1. Gupta, S.C. and Kapoor, V.K.(2008) : Fundamentals of Mathematical Statistics, 4th Edition (Reprint), Sultan Chand & Sons
2. Goon, A.M., Gupta M.K. & Das Gupta, Fundamentals of statistics, Vol.-I & II (2005).

SUGGESTED READINGS:

1. Miller, Irwin and Miller, Marylees (2006): John E. Freund's Mathematical Statistics with Applications, (7th Edn.), Pearson Education, Asia.
2. Mood, A.M. Graybill, F.A. and Boes, D.C. (2007): Introduction to the Theory of Statistics, 3rd Edn., (Reprint), Tata McGraw-Hill Pub. Co. Ltd.

PRACTICAL

Credit : 02

25 Marks

LIST OF PRACTICALS

1. Graphical representation of data
2. Problems based on measures of central tendency
3. Problems based on measures of dispersion
4. Problems based on moments, skewness and kurtosis
5. Fitting of polynomials, exponential curves
6. Karl Pearson correlation coefficient
7. Spearman rank correlation with and without ties.
8. Correlation coefficient for a bivariate frequency distribution
9. Lines of regression, and estimated values of variables.
10. Checking consistency of data and finding association among attributes.

+3 SECOND YEAR FOURTH SEMESTER

GE - 4

INTRODUCTORY PROBABILITY

Time : 3 Hrs.

End Semester Theory : 60 Marks

Credit : 04

Mid Semester Theory : 15 Marks

Course Outcomes:-

- Understand the concept of probability and Bayes' theorem of probability in decision making.
- Derive moments, cumulants, M.G.F. and various constants of probability distributions.

UNIT-I

Probability : Introduction, random experiments, sample space, events and algebra of events. Definitions of Probability – classical, statistical, and axiomatic. Laws of addition and multiplication of probability.

UNIT-II

Conditional Probability, independent events, theorem of total probability, Bayes' theorem and its applications.

UNIT-III

Random Variables : Discrete and continuous random variables, p.m.f., p.d.f., c.d.f. Illustrations of random variables and its properties. Expectation, variance, moments and moment generating function.

UNIT-IV

Standard probability distributions : Binomial, Poisson, geometric, uniform, normal, exponential, beta, gamma and their applications.

TEXT BOOKS :

1. Gupta, S.C. and Kapoor, V.K. (2008) : Fundamentals of Mathematical Statistics, 4th Edition (Reprint), Sultan Chand & Sons
2. Goon, A.M., Gupta M.K. & Das Gupta, Fundamentals of statistics, Vol.-I & II (2005).

SUGGESTED READINGS:

1. Hogg, R.V., Tanis, E.A. and Rao J.M. (2009) : Probability and Statistical Inference, Seventh Ed, Pearson Education, New Delhi.
2. Miller, Irwin and Miller, Marylees (2006) : John E. Freund's Mathematical Statistics with Applications, (7th Edn.), Pearson Education, Asia.

PRACTICAL

Credit : 02

25 Marks

LIST OF PRACTICALS

1. Fitting of binomial distributions for n and $p = q = \frac{1}{2}$ given
2. Fitting of binomial distributions for n and p given
3. Fitting of binomial distributions computing mean and variance
4. Fitting of Poisson distributions for given value of λ
5. Fitting of Poisson distribution after computing mean
6. Application problems based on Binomial distribution
7. Application problems based on Poisson distribution
8. Problems based on area property of normal distribution
9. Application based problems using normal distribution