BERHAMPUR UNIVERSITY
COURSES OF STUDIES

FOR

THE +3 BACHELOR OF ARTS
(Under Revised Structure)

First Year Examination - 2014
Second Year Examination - 2015
Final Year Examination - 2016
BERHAMPUR UNIVERSITY

Bhanja Bihar

BERHAMPUR – 760 007 (GANJAM) ORISSA

COURSES OF STUDIES

FOR

THE +3 BACHELOR OF ARTS

B.A. (PASS)

The Course structure and marks distribution for B. A. (Pass) shall be as follows:

<table>
<thead>
<tr>
<th>First year</th>
<th>Second Year</th>
<th>Final Year</th>
</tr>
</thead>
<tbody>
<tr>
<td>English – I</td>
<td>100</td>
<td>Indian Society and Culture</td>
</tr>
<tr>
<td>M.I.L. , Alt. English-I –</td>
<td>100</td>
<td>Elective –A – II</td>
</tr>
<tr>
<td>Elective –A-I</td>
<td>100</td>
<td>Elective –B – II</td>
</tr>
<tr>
<td>Elective –B –I</td>
<td>100</td>
<td>Pass - A-I</td>
</tr>
<tr>
<td>Pass – A-II</td>
<td>100</td>
<td>Pass – A-IV</td>
</tr>
<tr>
<td>Total-</td>
<td>400</td>
<td>500</td>
</tr>
</tbody>
</table>

A pass student shall offer one pass subject of 400 marks in addition to compulsory and Elective Papers. Each student shall offer two elective subjects.
Each Elective Subject shall consist of two papers each carrying 100 marks. In pass subjects having practicals, A-I and A-II will be broken up as 75 (Theory), 75 (theory) and 50 (Practical). Similarly, A-III and A-IV will be broken as 75 (Theory), 75 (theory) and 50 (Practical).

**B.A. (HONOURS. )**

The course Structure and marks distribution FOR B. A. (Hons. ) shall be as follow.

<table>
<thead>
<tr>
<th>First year</th>
<th>Second Year</th>
<th>Final Year</th>
</tr>
</thead>
<tbody>
<tr>
<td>English –I</td>
<td>100</td>
<td></td>
</tr>
<tr>
<td>M.I.L. , Alt. English-I –</td>
<td>100</td>
<td>Elective –A – II</td>
</tr>
<tr>
<td>Elective –A-I</td>
<td>100</td>
<td>Elective –B – II</td>
</tr>
<tr>
<td>Elective –B –I</td>
<td>100</td>
<td>Honours P-III</td>
</tr>
<tr>
<td>Honours – P-I</td>
<td>100</td>
<td>Honours P-IV</td>
</tr>
<tr>
<td>Honours – P-II</td>
<td>100</td>
<td>Honours P-V</td>
</tr>
<tr>
<td>Total-</td>
<td>600</td>
<td>600</td>
</tr>
</tbody>
</table>

A candidate in B. A. (Honours) shall offer a Honours subject carrying 800 marks and two elective subjects besides compulsory subjects. Each elective subject shall consists of two papers each carrying 100 marks. In Honours subjects
having practical component paper – V and Paper-VIII are practicals of 100 marks each. In Mathematics Paper-VIII is either practical or theory.

A candidate (Honours Or Pass) shall choose two elective subjects, each carrying 200 marks (without any practical component) from the following subjects or other subjects that may be decided by the University according to suitability.

Indian polity, Indian Economy, Indian Geography, Land Marks in Indian History Science and Technology, Mathematics, Statistics, Home Science, Psychology, Education, Hindi, Oriya, Mass Communication, I.R.&P.M. and Philosophy provided that a student (Honours or pass) offering Political Science, Economics, History, Geography, Mathematics, Statistics, Home Science, Hindi, Oriya, Mass Communication, I.R.& P.M. & Philosophy as one or more Pass or honours subject(s) shall not be allowed to take such elective subjects respectively as his/her elective papers.
Duration- 3 Hours. Full Mark- 100

The Course consists of the following units. Alternative questions are to be set on each unit.

**Unit-I**

A book of prose (essays) from which four short questions are to be set.

10 marks

An anthology of poems from which four short questions are to be set.

10 Marks

Objective & multiple choice questions based on essays and poetry

(5 marks each) 10 marks

**Unit-II**

Comprehension of an unknown passage to test general English skills and usage.

5 short questions: 5x2=10 marks

5 objective (Multiple choice ) questions: 5x2=10 marks
Unit-III
Translation from Oriya to English 15 marks

Or

Meeting and Presentations; Organising meetings, Preparing an agenda, Drafting Resolutions, writing Minutes.

Unit-IV
Preparing notes: Summarizing and taking Note making.

Or

Graphs, Charts, Table:
Line graphs: Bar Graphs-Bilateral Bar Graphs, column Bar Graphs, Sub-divided Bar Graphs, Pie charts, xy scatter graphs Bubble Graphs, Area Graphs, Tables.

Unit-V
Objective/multiple choice question carrying one mark each. (20 x 1 = 20 marks)

Communication skill

- Verbal and Non-verbal: Spoken and written
- Language Function: Descriptive, Expressive and Social
- Purpose of Writing and Speaking: To interact. To inform. To find out. To influence, To regulate, To entertain and to record.
- Bias free and plain English
- Formal and informal style.
Communicative Grammar.

- Time, Tense and Aspect.
- Verbs and state and events.
- Statements, Questions and Responses.
- Omission of Information
- Expressing emotions and attitude, hope, pleasure, disappointment regret, approval, surprise.

Doing Things with words

- Asking for information, help, permission
- To instruct, command, request, accept, refuse, prohibit, persuade, and promise.

**BOOKS PRESCRIBED:**

   
   Edited by: Dillip Kumar Das. Anusuya Kumari and Kshirod Kumar Padhi.
   
   Pieces to be studies.
   
   1. G. G. Shaw: Spoken English and Broken English

Poems to be studied

1. Shakespeare: “All the World’s a Stage”,
2. Marvell: “To his Coy mistress”.
3. Pope: “Ode on Solitude”.
4. Wordsworth: “Three years she grew in Sun and Shower”.
5. Keats: “To Autumn”
6. Tennyson: “Ulysses”
7. Arnold: “Dover Beach”
8. Yeats: “The Second Coming”
10. Whitman: “O Captain, My Capitain”.

3. **MASTERING BASIC SKILLS OF COMMUNICATIVE ENGLISH AND BUSINESS COMMUNICATION.**

   - By Dr. Mahajiteswar Das, (New Age Publication).

4. **Communicative Grammar of English**


5. **BUSINESS COMMUNICATION.**

   - By Meenakshi Raman and Prakash Singh, OUP.
6. Contemporary Communicative English

S. Chand Publication by Dr. Shruti Das.

**PAPER-II (Final Year)**

Duration – 3 hours  
Full Marks – 100

The Course consists of five units as prescribed below. Alternative questions are to be set on each unit (texts).

**Unit-I**

Two essay-type questions, one each from fiction and drama  
12 x 2 = 24 marks.

Four short questions from each of the prescribed tests. 
4 x 2 x 2 = 16 marks.

**Unit-II**

Resume curriculum vitae and Bio Data chronological and functional with an application for job. 
10 marks

**Unit-III**

Expansion of ideas contained in proverbs OR editing of a given unknown passage, including correction of errors for improving the presentation. 
10 marks

**Unit-IV**

General essay OR report-writing on a given topic. 
20 marks.
Unit-V

(Language Skills) 20 marks.

Punctuation of a passage, direct/indirect speech, Prepositions, corrections of errors Transformation of sentence; use of articles.

BOOKS PRESCRIBED

1. A. Hand full of rice by Kamala Markendaya.
2. As you like it by William Shakespeare.
3. Fundamentals of English Language and Grammar – Prof. Trilochan Misra, Dr. Suman Mohapatra, GYANAJUGA PUBLICATIONS.
5. Grammar for Degree classes – By R. C. Sahu Taratarini Pustakalaya.
6. A. Remedial English Grammar – By F. T. Wood (OUP)
7. Mastering Basic skills, of Communicative English and Business Communication – Dr. Mahajiteswar Das (New Age Publications)

B. A. ALTERNATIVE ENGLISH

B. A. First Year

Duration – 3 hours Full Marks-100

The Course consists of the following units. Alternative questions are to be set on each unit (texts).
Unit-I

One essay type question on the anthology of essays. 15 marks

Unit-II

One essay-type question on the play of Solman Khursid “Sons of Babar”

15 marks

Unit-III

One essay-type question the anthology of short stories. 15 marks

Unit-IV

Five objective questions out of eight from the prescribed tests. 10 marks

Unit-V

Two annotations from the anthology of essay prescribed in the Unit-I.

2 x 5 = 10 marks

Unit-VI

A passage from the prescribed essays (about 300 words) for comprehension and usage.

10 marks

Unit-VII

Converting one of the prescribed stories in to a script for a short play.

25 marks.
BOOKS PRESCRIBED

1. **New Waves by Board of Editors Orient Black Swan.**
   
   Topics to be studied.

   i) An Astrologer’s Day: R. K. Narayana


   iv) Sir M. Visvesvaraya – A Visionary par Excellence: A. V. Shankar Rao

   v) A. Beautiful Clock: Chudamani Raghavan.

2. **A Train to Pakistan. Khuswant Singh.**

3. **Let us go home and Other Stories Ed. By Meenakshi Mukherjee (Orient Longman)**

   i) “The Meeting Pool”

   ii) “Green Parrot in a Cage”

   iii) “The Death of a Hero”

   iv) “The Cow of the Barricades “

**B. A. Final Year**

Duration – 3 Hours  
Full Marks – 100

The Course consists of the following Units.

(Alternative Questions are to be set on each unit)
Unit-I

One essay-type question to be set from an anthology of poetry. 12 marks

Two short questions. 2 x 4 = 08 marks

Five objective type questions on contents 05 marks

Unit-II

Question to be set as below on a full-length play:

i) One essay-type question. 12 marks

ii) Two Short questions 2 x 4 = 08 marks

iii) Five objective-type questions on contents. 05 marks.

Unit-III

General essay OR Report-writing on a given topic. 20 marks

Unit-IV

Critical analysis a short poem or a passage of 150 words 15 marks

Unit-V

Paragraph-writing OR expansion of proverb. 15 marks

BOOKS PRESCRIBED.


   i. On His Blindness: John Milton.
ii. The Solitary Reaper: Words Worth.


iv. The Last Ride Together: Robert Browning.

v. The Listeners: Water De La Mare.

vi. The Express: Stephen Spender.

2. Justice by John Galsworthy (Orient Longman)


ENGLISH PASS AND HONOURS

PAPER-I

Duration – 3 hours

POETRY

Full Marks – 100

The Course shall comprise the following units

Alternative questions may be set for each unit.

Unit-I

An anthology of Pre-Victorian Poetry, Four General questions from the anthology should be set. The candidate is required to answer two. 15 x 2 = 30 marks.

Unit-II

An anthology of Post – Victorian Poetry. Four General questions from the anthology should be set. The candidate is required to answer two. 15 x 2 = 30 marks
Unit-III

One passage for annotation from the anthology of Pre-Victorian Poetry.

10 marks

Unit-IV

One passage for annotation from the anthology Post-Victorian Poetry. 10 marks.

Unit-V

Rhetoric and Prosody: 20 marks.

a) Two short notes 5 x 2 = 10 marks
b) Two definitions. 5 x 2 = 10 marks

Or

Seanion of Passage. 10 marks.

BOOKS PRESCRIBED

PAPER-I

Unit- I to III

Pre Victorian Poetry.

Magic Casements Editor R. N. Panda, Mac. Millan India Ltd.

Poems to be studies.

1. Death: John Donne.
2. On his Blindness: John Milton.
5. The village School Master: Oliver Goldsmith.
7. Ode to Autumn: John Keats.

**Unit – II & IV**

Post – Victorian Poetry.


Poems to be studies.

1. Hardy: Darkling Thrush.
2. Hopkins: “Good’s Grandeur”,
5. Ted Hughes: “The thought Fox”.
6. Anden: “Unknown Citizen”.
7. Forst: “Stopping by the Woods on a Snowy Evening”.
10. Sutata Bhatta: “Voice of the Unwanted Girl”. 
Unit-V

Subject in Rhetoric and Prosody:

(A)

1. Alliteration
2. Assonance.
3. Onomatopoeia
4. Simile
5. Metaphor.
6. Symbol
7. Image
8. Oxymoron
9. Periphrasis
10. Irony.
11. Euphemism.

(B)

1. Syllabus
2. Foot
3. Lambus.
4. Trochee.
5. Anapaest.
6. Dactyl
7. Spondee.
8. Ampolbrae.
BOOKS RECOMMENDED

Glossary of Literary Teams – M. H. Abrams, (Holt Rinehart & Winston)

Paper-II

(Drama)

The Courses shall comprise two plays of Shakespeare and one Post-Victorian play to be studied in detail. They shall comprise the following units. Alternative may be set for each Unit.

Unit-I

One General question is to be set from Shakespearean Comedy A Mid Summer Nights Dream. 20 marks.

Unit-II

One general question is to be set from Shakespearean Tragedy Othello. 20 marks.

Unit-III

One general question is to be set on the Post-Victorian play. O’Neill’s the Hairy Ape. 20 marks.

Unit-IV

Four passage of annotation out of six i.e. two from each play are to be set. The candidate shall answer at least one from each play. 10 x 4 = 40 marks.
**BOOKS PRESCRIBED FOR DETAILED STUDY**

Unit-I : Twelfth Night – Shakespeare

Unit-II : Macbeth- Shakespeare

Unit-III : All My Son- Arthur Miller.

**PAPER-III**

**HISTORY OF ENGLISH LITERATURE**

The history of English literature will comprise characteristics of ages and genre history.

i) Candidates shall answer two essay-type questions on characteristics of ages out of four to be set from different ages of unit-I
   
   $20 \times 2 = 40$

ii) Candidates shall answer three essay type questions out of three to be set with alternatives form the three genres prescribed (poetry, drama, and fiction ) in Unit-II,III,& IV.
   
   $20 \times 23 = 60$

**COURSES DETAILS AND BOOKS**

**GROUP-A**

Unit-I

Characteristics of Age :

i) The Renaissance

ii) Neo-Classical Age
GROUP-B

Unit-II

Poetry:

a) From Chaucer to Milton
b) From Dryden to Gray
c) The Romantic Revival
d) Victorian Poetry

Unit-III

Drama:

a) From Miracles to Interludes.
b) The Renaissance.
c) Restoration Tragedy & Comedy.
d) Modern Drama 1890 to 1930.

Fiction:

a) From Bunyan to Jane Austen.
b) The Victorian Novel.
c) The Modern Novel 1890 to 1930.
PAPER-IV

1. One Essay on a topic of general nature in not more than 500 words.
   The question shall have alternatives : 30 marks

2. Newspaper Reporting and Feature Writing 20 marks

3. Comprehension : Students are required to answer five questions on a passage containing 300 words. 15 marks

4. Writing a curriculum vitae(Both chronological and functional ) along with an application for a job. 15 marks
   OR
   Letter writing Personal/Business

5. Paragraph writing : The question shall have alternatives. 10 marks
   OR
   Documentation : References, Notes and Bibliographies.

6. English Usage : Students are required to correct ten sentences
   One mark for each. 10 marks

PAPER-V

FICTION

The Course shall comprise four books of Fiction.

Unit-I

The candidate shall answer one essay type question out of the two to be set on novel : Charles Dickens’s A tale of Two cities. 20 Marks
Unit –II
The candidate shall answer one essay type question out of the two general questions to set on the novel: Hardy’s far from the Madding Crowd. 20 Marks

Unit-III
The candidate shall answer one essay-type question out of two general questions to be set on the novel : Jane Austen’s Pride and Prejudice. 20 marks

Unit-IV
The candidate shall answer one essay type question out of the two general questions to be set on the novel : R.K.Narayan’s the Bachelor of Arts.

Unit-V
Two questions from each of the books prescribed in Unit-I,II,III and IV requiring short notes on minor characters and incidents to test the candidate’s first–band knowledge of the text. 4X5=20 marks

PAPER-VI

PROSE & CRITICISM

Unit-I
The candidates shall answer one question from Unit-I, i.e. from the English Prose book-prescribed for detailed study. 20 marks
Unit –II

The candidate shall answer two general questions from English Criticism.

20X2=40 marks

Unit-III

Two annotation from prose only

10X2=20marks

Unit-IV

Two unseen passages, one from prose and one from poetry shall be set as alternatives for critical appreciation.

20X1=20 marks

BOOK PRESCRIBED

Unit-I


Pieces to be Studied :

1. G.B. Shaw : Spoken English and Broken English.
5. Rajendra Singh Bedi : Lajwanti.
Unit-II


Pieces to be Studied :

2. Arnold’s : The study of poetry.

PAPER-VII

LITERARY ESSAY AND CRITICAL TERMS/LANGUAGE

The pattern of the paper shall be as follows.

Unit-I

Candidate shall answer on literary essay out several to be set.  50 marks

Unit-II

Candidate shall answer five, short note type questions out of ten to be set.

The following terms and concepts shall be studied- Aesthetic distance, tension, ambiguity, paradox, Catharsis Mimesis, Tenor and Vehicle, Structure, Texture Person and Voice Pathetic Fallacy and Plot, New criticism, structuralism; Deconstruction.

OR

Candidates shall answer one general question carrying 25 marks out of two alternatives on the History of English Language and 5 short-note type questions each carrying 5 marks of ten short notes.
COURSE DETAILS

I) Characteristics of Old English, Middle English, Modern English.
II) Influences Greek, French and Scandinavian.

PAPER-VII

BOOKS RECOMMENDED

1. A Dictionary of Modern Critical Terms. Roger Fowler (Routledge & Kegan Paul)
2. A Glossary of Literary Terms- M. H. Abrams (Holt, Rinehart & Winston)
4. The making of English – Bradley
5. English Language - Baugn

Paper-VIII

FORMS OF LITERATURE

The following forms shall be studied.

Unit-I

DRAMA

Mysteries, “Miracles, Moralities, Shakespearean Tragedy, Comedy of Manners, Comedy of Humour.

Unit-II

POETRY:

Epic, Mook, epic and Satire, Elegy, Ballad, Sonnet, Ode.
Unit-III

**FICTION:**


Candidates shall answer ten short note type questions out of fifteen to be set, choosing at least three from each genre i.e. Drama, Poetry and Fiction.

10X10=100 marks

**BOOKS RECOMMENDED**

PAPER-VIII

1. Dictionary of Modern Critical Terms-Roger Flower.

M.I.L. (ODIA) AND ODIA (OPTIONAL HONS.) WILL BE UPLOADED SHORTLY
M.I.L.HINDI

FIRST YEAR DEGREE EXAMINATION

Time -3 Hours   Full Marks=100

PAPER-I   25 marks

PROSE TEXT

Unit-I

One long question-15 Marks

One annotation-10 Marks

Text Book : Nibandha Chayan : Ed by Dr. Sudhansu Kumar Nayak

Vidya Sagar, Manik Ghosh Bazar, Cuttack.

PIECES TO BE STUDIED :

1. Gram Laxmi ki Upasansa-Vinoba Bhabe
2. Bharatiya Sanskriti-Dr. Rajendra Prasad
3. Badri Dham- Kaka Kalelkar
4. Siksha ka Uddesa – Dr. Sampurnananda
5. Thuntha Aam- Bhagbatsaran Upadhyay.

Unit-II

Standard Hindi Spelling   15 marks

Manak Hindi Yartani, Manak Hindi Varnamala, Parivardhit Hindi Varnamala,
Hindi Bartani Sambandhi Adyatan Niyam, Hindi ke Sankhyavachak Sabda.
Unit-III

Translation 20 marks

i) Theory of Translation-10
   Anubad-Anubad ki Paribhasa- Anubad ki Prakriya, Anubad ke Prakar,
   Anubad ke Gun,

ii) Translation from English to Hindi-10

Unit-IV

Précis Writing 15 marks

Unit-V

Official Correspondence 25 marks

One long question-15 marks

One short question-10 marks

Sasakiya Patra : Samanya Sasakiya Patra, Ardha Sasakiya Patra, Jnanpan,
Karyalaya Jnanpan, Paripatra, Anusmarik, Karyalaya Adesh, Adhisuchana,
Sankalpa, Press Bingyapti.

BOOKS FOR REFERENCE

1. Asarsha Samanya Hindi- Vijay Agrawal, Jagatram & Sons.
   New Delhi.

2. Samanya Hindi – Dr. Sudhansu Kumar Nayak, Vidya Sagar,
   Manik Ghosh Bazar, Cuttack.

3. Anuprayogik Hindi- Dr. Krishna Kumar Goswami,
   Arunoday Prakasan, Delhi.
FINAL YEAR DEGREE EXAMINATION

M.I.L HINDI

PAPER-II

Time- 3 hours 

Full Marks-100

Unit-I

Poetry Text 

25 Marks

One long question-15 marks

One annotation-10 marks

TEXT BOOKS :

1. Kavya Kallolini- Dr Diptimayee Praharaj

Publisher- Vidyasagar, Manikaghose Bazar, Cuttack.

Pieces to be Studied:

1. Kabir Sakhi(1-10)
2. Surdas Pad (1-5)
3. Tulsi-Vinaya Patrika(1-5)
4. Surya Kanta Tripathy-Nirala-Sandhya Sundari
5. Sumitra Nandan Pant- Manav
7. Agneya –Nadike Dweep
8. Girija Kumar Mathur- Pandarha August.
Unit-II

Expansion (Pallaban) 15 marks

(Three very popular sayings to be given out of which the candidate will be required to expand the idea of any one.)

Unit-III

Hindi Terminology 20 Marks

i) Prasasanik Padawali-10
ii) Pada Nam/ Karyalayan ken am- 10

Unit-IV

Computer Application in Hindi 15 Marks

Computer men Hindi Ka Anuprayog- Computer men Bhasik anuprayog, Hindi Ka Anuprayog- Sobda Sansadhan, Data Sansodhan, Lipyan ntaran, Kosh Nirman, Machini Anubad, Computer Sadhit Hindi bhasa sikshan, Desk top Prakasan, Sandesh Adan Pradan, Bahu sanchar Prakriya.

Unit-V

Hindi Vocabulary

i) Anekarthak Sabda-5
ii) Samanarthak Sabda-5
iii) Biparitarthak Sabda-5
iv) Srutisam Bhinnarthak Sabda-5
v) Anek Sabdon ke lia ek Sabda-5
BOOK FOR REFERENCE


2. Samanya Hindi- Dr. Sudhansu Kumar Nayak, Vidya Sagar, Cuttack.

3. Anuprayagik Hindi- Dr. Krishna Kumar Goswami, Arunodaya Prakasan, Delhi.

HINDI (Optional)

Paper-1  Full Marks-100

Unit-I  30 marks

(Prose)

Nibandha Nikasha – Ed. Mahendra Pratap and K. C. Agrawal

Ravi Prakashan, 11/6 Rangeya Raghav Marg, Agra-2

PIECES TO BE STUDIED.

1. Saradha – Bhakti
2. Ashok Ke – Phool

Unit- II

(Novel)

NIRMALA – PREMCHAND  20 Marks

Unit-III

(Non-detail)

Saptaparna – Ed. Manna Bhandari

Pieces to be studied.

First five short stories.
Unit- IV 20 marks

Criticism on Premchand as a Novelist and short story writer.

BOOKS FOR REFERENCE

1. Premchand – Byaktitwa aur Krutitwa by Hansraj Rohoar.
2. Premchand - by Indranath Madan.

Paper-II

Full Marks – 100

Unit-I 30 marks

(Medieval Poetry)


Pieces to be studied.
1. Kabir ki Pada – 2, 3, 8 and Suktiyan 14 to 20 , Sadhu.
2. Sur Das – Bhramar Geet – 6,7,8
3. Meera – Pada – 1 and 9
4. Rahim – Lok Neeti – 16 to 20
5. Raskhan - - 3,4,5,6
6. Tulsi- A Binaya Publication

Unit- II

(Short Epic – Khanda Kavya) 25 marks

Unit-III

Brief Study on the trends in Bhakti Kal and Reeti Kal. 25 marks

Unit-IV

Alankara to be studied.

Samasokti, Utparakash, Shlesh, Anyokti.

Unit-V

Chhanda – Doha, Chanpai, Sabaiya, Mandakranta. 10 marks

PAPER-III

Time – 3 hours  Full marks-100

Unit-I

1. From Modern Poetry Selection 2 x 7 ½ = 15 marks
2. From Modern Epic poet 2 x 7 ½ = 15 marks

Unit-II

1. One Critical question form Modern poetry selection. 15 marks
2. Short answer type questions from Modern poetry selection. 2 x 5 =10 marks

Unit-III

1. One critical question from Epic Poet. 15 marks
Unit-IV

1. Question on characteristics of Chhayaabad- 3 x 5 = 15 marks

Unit-V

Question of characteristics of Fragatibad - 3 x 5 = 15 marks

BOOKS PRESCRIBED

1. Hindi Kavya Sangraha – Published by Kendriya Hindi Sansthan, Agra-5

PIECES TO BE STUDIED

1. Hindi Poetry
   I. Mahadevi Verma – 1, 2, 3
   II. Nirala – Sandhya Sundari, Bhikshuk
   III. Pant – Pratham Rasmi Taj
   IV. Prasad – Ansu – 1 to 15

2. Modern Epic.
   i. Kamayani – Chinta – Prasad
   ii. Ram Ki Shakti Pooja – “Nirala”

3. i. Chhayabad – by Nambar Singh
   ii. Adhunik Sahitya Ki Prabaritiyan – by N. Singh
   iii. Adhunik Sahitya – by Nanda Lal Bajpeye
   iv. Pragativad – by Rama Murty Tritpathy
   v. Nayi Kavita – by Jagadish Gupta
   vi. Nayi Kavita – by B.P. Tiwari
   vii. Hindi Sahitya Kosh- Part-I by Nagendra
PAPER – IV

Time-3 hours Full Marks-100

Unit-I

Two Annotations from Dramas 10+10=20

Unit-II

Critical Questions on Drama 20 Marks

Unit-III

Critical Question on Jaishankar Prasad as a Dramatist 20 Marks

Unit-IV

Literary Essay 25 Marks

Unit-V

Question on prose Forms. 15 Marks

---------------------------------

Total – 100 Marks

PREScribed BOOKS

1. Drama- Ajat Shatru – Prasad
2. Jai Shankar Prasad- as a dramatist
3. Literary Essay
BOOK FOR REFERENCE

1. Prasad Ka Kabya- Dr. Prem Shankar
2. Prasadaur Natya Silpa- Dr. Govinda Ghatak.
   Pub. Atmaram & Sons, K Gate, Delhi-7
3. Hindi ki Gadya Shili Ka Nikash- J.P. Sharma
4. Hindi Ekanki- Dr. R.C.Mahendra
5. Chandragupta- Ek Alochana Prof. Keshari Kumar
6. Rekhayon aur Rekhayan- By S.Pande
7. Gadya Ki Nayee Dishayen- By Om Prakash Singhal
   Pub. Pitamber Publisher Company, 888
   East Park Road, Karol Bag, Delhi.

HINDI (HONOURS)

Paper-1 Full Marks-100

Unit-I 30 marks

(Prose)

Nibandha Nikasha – Ed. Mahendra Pratap and K. C. Agrawal

Ravi Prakashan, 11/6 Rangeya Raghav Marg, Agra-2

PIECES TO BE STUDIED

3. Saradha – Bhakti
4. Ashok Ke – Phool
Unit- II
(Novel)

NIRMALA – PREMCHAND  20 Marks

Unit-III
(Non-detail)

Saptaparna – Ed. Manna Bhandari

Pieces to be studied.
First five short stories.

Unit- IV  20 marks

Criticism on Premchand as a Novelist and short story writer.

BOOKS FOR REFERENCE

1. Premchand – Byaktitwa aur Krutitwa by Hansraj Rohoar.
2. Premchand - by Indranath Madan.

Paper-II

Full Marks – 100

Unit-I  30 marks

(Medieval Poetry)


Pieces to be studied.
1. Kabir ki Pada – 2, 3, 8 and Suktiyan 14 to 20, Sadhu.
2. Sur Das – Bhramar Geet – 6,7,8
3. Meera – Pada – 1 and 9
4. Rahim – Lok Neeti – 16 to 20
5. Raskhan - - 3,4,5,6
6. Tulsi- A Binaya Publication

Unit- II

(Short Epic – Khanda Kavya) 25 marks


Unit-III

Brief Study on the trends in Bhakti Kal and Reeti Kal. 25 marks

Unit-IV

Alankara to be studied.

Samasokti, Utprakash, Shlesh, Anyokti.

Unit-V

Chhanda – Doha, Chanpai, Sabaiya, Mandakranta. 10 marks

PAPER-III

Time – 3 hours Full marks-100

Unit-I

1. From Modern Poetry Selection 2 x 7 ½ = 15 marks
2. From Modern Epic poet 2 x 7 ½ = 15 marks
Unit-II
3. One Critical question from Modern poetry selection. 15 marks
4. Short answer type questions from Modern poetry selection. 2 x 5 = 10 marks

Unit-III
1. One critical question from Epic Poet. 15 marks

Unit-IV
1. Question on characteristics of Chhayaabad - 3 x 5 = 15 marks

Unit-V
Question of characteristics of Fragatibad - 3 x 5 = 15 marks

BOOKS PRESCRIBED
1. Hindi Kavya Sangraha – Published by Kendriya Hindi Sansthan, Agra-5

PIECES TO BE STUDIED
1. Hindi Poetry
   I. Mahadevi Verma – 1, 2, 3
   II. Nirala – Sandhya Sundari, Bhikshuk
   III. Pant – Pratham Rasmi Taj
   IV. Prasad – Ansu – 1 to 15
2. Modern Epic.
   i. Kamayani – Chinta – Prasad
   ii. Ram Ki Shakti Pooja – “Nirala”
3. i. Chhayabad – by Nambar Singh
   ii. Adhunik Sahitya Ki Prabaritiyan – by N. Singh
iii. Adhunik Sahitya – by Nanda Lal Bajpeye
iv. Pragativad – by Rama Murty Tritpathy
v. Nayi Kavita – by Jagadish Gupta
vi. Nayi Kavita – by B.P. Tiwari
vii. Hindi Sahitya Kosh- Part-I by Nagendra

Time-3 hours

PAPER –IV

Unit-I
Two Annotations from Dramas 10+10=20

Unit-II
Critical Questions on Drama 20 Marks

Unit-III
Critical Question on Jaishankar Prasad as a Dramatist 20 Marks

Unit-IV
Literary Essay 25 Marks

Unit-V
Question on prose Forms. 15 Marks

PREScribed BOOKS

1. Drama- Ajat Shatru – Prasad
2. Jai Shankar Prasad- as a dramatist
3. Literary Essay
BOOK FOR REFERENCE

5. Prasad Ka Kabya- Dr. Prem Shankar

6. Prasadaur Natya Silpa- Dr. Govinda Ghatak.
   Pub. Atmaram & Sons, K Gate, Delhi-7

7. Hindi ki Gadya Shili Ka Nikash- J.P. Sharma

8. Hindi Ekanki- Dr. R.C.Mahendra

9. Chandragupta- Ek Alochana Prof. Keshari Kumar

10. Rekhayon aur Rekhayan- By S.Pande

11. Gadya Ki Nayee Dishayen- By Om Prakash Singhal
   Pub. Pitamber Publisher Company, 888 East Park Road, Karol Bag, Delhi.

Paper- V

History of Hindi Literature

Full Marks – 100

Unit-I  20 Marks

One Question on Adikal

Unit-II  15+15= 30 Marks

Two questions on Bhaktikal

Unit-III  20 marks

One question on Reetikal

Unit-IV  15+15=30 marks

Two question on Adhunik Kal

Total 100 Marks
Stress will be given to outline of the History and distinctive characteristics of different ages with special reference to only eminent and representative anothers of the ages.

(1) Adikal, (2) Bhaktikal, (3) Reetikal, (4) Adhunik Kal

**BOOK REFERENCE**

1) Hindi Sahitya ka Itihas- Dr. Nagendra
2) Hindi Sahitya ka Itihas- R.C. Shukla
3) Hindi Sahitya : Udbhab aur Vikash – Dr. H.P. Dwived
4) Hindi Sahitya ka Sabodh Itihas- Gulab Rai.

Or

5) Any book of the topics
6) Hindi Sahitya Kosh Part-I & II

**PAPER-VI**

*Kavya Shashtra and Literary Criticism*

- **Unit-I** 15 marks
  - Alankar, Reeti & Vakrokti

- **Unit-II** 25 marks
  - Ras Siddhant

- **Unit-III** 15 marks
  - Dhwani Siddhant
Unit-IV
Anukarana Siddhant (Theory of Immitation)

Unit-V
Swachhandatawad (Romanticism)

Unit-VI
Abhivyanjanswad aur Soundhryawad

Total marks - 100

BOOK FOR REFERENCE

1. Ras Siddhant- Dr. Nagendra- Pub- National Pub. House
2. Hindi Sahitya Kosh Part-I, II- Ed. Dr. Dhirendra Verma,
   Pub-Bharatya Gyan Mandir, Varansi
3. Kavya Darpan- Pt. Ram Dahin Mishra
5. Alochana- Itihas avam Sidhant- Dr. H.C.Jaisamal
6. Siddhant aur adhyayan- Dr. Gulab Rai
7. Hindi Sahitya Shashtra Ki Bhumika- Dr. K.V. Joshi
   Pub- Smriti Prasashan, 61, Mahajani Total Allahabad.

PAPER-VII

A. Elementary Linguistics and Scripts - 60 marks
B. Forms of Literature - 40 marks
Unit (A)

i) Origin and development of Hindi language - Indo- Aryan group to present age.  
   20 marks

ii) Origin and development of script - Brahmi to Nagari; including the present from.  
    15 marks

iii) Elementary Linguistics and Phonetics - shabda, Vikas Dheni Yatra and Its working system.  
     15 marks

iv) Bhasha Dhawani Swar Vyanjan Uchharan Prakriya.  
    10 marks

Unit-(B)

i) Mahakavya, Khanda Kavya, Champu, Muktak, Gadya Kavita.  
   and
   Natak, Ekanki, Radio Ekanki and Radio Natak.  
   15 marks

ii) Niband etc. and Alochana.  
    15 marks

iii) Novel, Short-Story, Samsaran, Rekha-Chitra, Atmakotha, Jeewani Diary, Yatra sitta, Reprotaz.  
     10 marks

Total-100 marks

Unit-(A)

Linguistics & Scripts:

a) Origin and development of Hindi Language – from the Indo-Aryan group to the present date.

b) Origin and development of Script - from Brahmi to Nagari upto present from.
c) Elementary Linguistic & Phonetics, Shabda Vikash, Sound organs and their working systems, Dhwani Articulation of vowels and consonants.

Unit (B)

Forms of Literature

1. Mahakavya, Khanda Kavya, Champu and Muktak and Gadya Kavita.
4. Sansmaran Rekha Chitra.
5. Diary, Yatra- Vritta and reports Patro Sakshatkor.
7. Alochana.
8. Atmakatha and jeevani.

BOOK FOR REFERENCE

Unit-(A)

2. Bhasha Vinjan- Dr. Bhola Nath Tiwari
3. Hindi ABhasha Aur Lipi- Dr. Dhirendra Verma.
4. Dhwani Vinja- Prof. Golak Bihari Dhal
5. Hindi ki Dhawani Aur Unka Vivechan- Dr. Bhadnath Tiwari.

Unit-(B)

1. Sahitya Kosh-Dr. Dhirendra Verma.


**PAPER-VIII**

Time-3 hours                                                                 Full Marks-100

A- Introductory Knowledge in Specialised study of an age with particular reference to any one book of a representative author of the Age.

70 marks

B- Literary Isms

30 marks

Total 100 marks

**A- SPECIALISED STUDY**

Unit-I 20 Marks

Author life and compositions

Unit-II 20 marks

Annotations from the book

Unit-III 15+15=30 marks

Critical appreciation (2 questions)

**B - LITERARY ISMS**

Unit-IV 20 marks

Itivrittatmakta Rashsyavad, chhayavad, Pragativad, Nayee Kabita.
Unit-V 20 marks

Yatharthavad Adarshavad, Markavad, Frendvad.

A. SPECIALISED STUDY

   (20 marks for author’s life and composition for annotations and 30 marks for critical on the books)

3. Adhunik Kal(Prose) – Premchand and his Karmabhoomi.

B. LITERARY ISMS

1. Ittivrittantnakta Rehasyavad Prayogavad, Pragativad, chhayavad, Nayee Kavita.
2. Yatharthavad, Adurshavad, Marksvad, Frendvads.

BOOK FOR REFERENCE

A. FOR SPECIAL STUDY.

1. Tulsidas – Ram Chandra Shukla
2. Tulisi – By Dr. Udaya Bhanu Singh
3. Jai Shankar Prasad aur Ansu – By Devendra Sharma
5. Prasad Ki Kala – Dr. Gulab Rai
6. Premchand – Kalam Ka Sipahi- Amrit Rai
7. Premchand – Jiwan our Krittiwa – Hansraj Rabar
8. Hindi Upanyass – S. N. Srivastava
B. ISMS etc.

1. Chayavad – By Nambar Singh
2. Adhunik Kavita Pravritiya – Evam Shath
   Dr. Prem Prakash Jain Pub. Annapoorna Prakasan, Kanpur-12.
3. Pragativad – Dr. Shiva Shankar Misra
   Pub. P. K. Prakashan, Delhi
5. Nayee Kavita – Dr. Viswanath Tripathy,
6. Naya Sahitya – Nanda Dulare Vajapayee,
7. Gadyan Ki Nayee Dishayen – by Na Prakash Singhal
   Pub. Pitambar Publishing Company,
   888, East Park Road, Karul Bag, New Delhi-110 005
   (M.I.L. BENGALI)

Paper-I

There shall be one paper carrying 100 marks of 3 hours duration. The course content and the distribution of marks shall be as follows:

Unit-I

There shall be one long question carrying 10 marks with alternative. There shall be one short question or an explanation carrying 5 marks with alternatives.

Unit-II

There shall be one long question carrying 10 marks with alternatives. There shall be one short question or an explanation carrying 5 marks with alternatives.
Unit-III

An essay carrying 20 marks with two alternatives.

Unit-IV

One long question carrying 15 marks with alternatives. One short question or an explanation carrying 10 marks.

Unit-V

One long question carrying 15 marks with alternatives. There shall be one short question or an explanation carrying 10 marks.

BOOKS RECOMMENDED

1. Bankimachandra Chatterjee – Kamalakantar Dopter (Following Piece to be studied:
   a) Manusya Phal
   b) Patnga
   c) Bada Bazar
   d) Amar Mon
   e) Bidal

   The following pieces are to be studied:
   a) Sonar Tari
   b) Vaisnava Ravita
   c) Dui Pakhi
   d) Deul
3. One Novel - Srikasnt Pt. Sri Sarat Chandra Chatterjee
4. One Anthology of Short Stories – Shrestha Galpa - Tarasankar Bindopadhyaya.
   a) Beteni
   b) Daini
   c) Agradani
   d) Rasakali
   e) Emarat.

Paper-II

Time- 3 hours  Full Marks – 100

Unit-I

There shall be one paper carrying 100 marks of 3 hours duration. The course content and the distribution of marks shall be as follows:

There shall be one long question carrying 30 marks with alternatives. There shall be one short question or an explanation carrying 10 marks.

Unit-II

There shall be one long question carrying 15 marks with alternative. There shall be one short question or an explanation carrying 05 marks.
Unit-III

There shall be one essay carrying 20 marks with two alternative.

**BOOKS RECOMMENDED**

2. Sri Kodhusudan – Bonaphul

**BOOKS FOR REFERENCE**

1. Bangla Natya Sahitya Itihas – Asutosh Bhattacharya
2. Madhusudan – Sasanka Mohan Sen

**BENGALI (OPTIONAL)**

**Paper-I**

Time – 3 hours

Full Marks 100

There shall be two papers carrying 100 marks each of 3 hours duration and the examination shall be held at the end of second year. The Course content and distribution of marks shall be as follows:

**Unit-I**

There shall be one long question carrying 30 marks with alternative. There shall be one short question or an explanation carrying 10 marks with alternative.
Unit-II

There shall be one long question carrying 30 marks with alternative. There shall be one short question or an explanation carrying 10 marks with alternative.

Unit-III

There shall be one long question carrying 15 marks with alternative. There shall be one short question or an explanation carrying 05 marks with alternative.

BOOKS RECOMMENDED

1. Adhunika Sahitya – Rabindranath Tagore

   The following pieces are to studied
   1) Bankim Chandra

   2) Biharial Chakravarty

   3) Rajsinha Rajasingha of

2. Galap Guchha – III Rabindranath Tagore

   The Following stories are to be studied.
   a) Karmya Phala

   b) Master Moshal

   c) Rashmonir Chhele

   d) Himanti

BOOKS FOR REFERENCE

1. Sahityajigaansa Rabindranath – Asit andapadhyaya:
2. Rabindranather Chhotogalya – Pramathanath Bisi.

PAPER-II

Time – 3 hours Full marks-100

Unit-I

There shall be one long question carrying 30 marks with alternatives.

Unit-II

There shall be one long question carrying 20 marks with alternatives. There shall be one short question or an explanation carrying 10 marks.

Unit-III

There shall be one long question carrying 30 marks with alternatives. There shall be one short question or an explanation carrying 10 marks.

BOOKS RECOMMENDED.

1. Chandimangal Kavya – Mukundaram Chakravarty
   (Kalketur’s Upakhyan only)
2. Vaishab Padabali – Calcutta University Edition
   (Purbarag Padas only)
   The following poems to be studies.
a) Purabi  
b) Bijayini  
c) Panchishe Baishak  
d) Topobhange  
e) Lita sengini  
f) Ahwan

**PAPER-III**

Time – 3 hours  
Full Marks-100

There shall be two papers carrying 100 marks each of 3 hours duration which shall be held at the end of third year. The Course content and distribution of marks shall be as follows:

**Unit-I**

There shall be one long question carrying 20 marks with alternative. There shall be one short question or an explanation carrying 10 marks.

**Unit-II**

There shall be one long question carrying 30 marks with alternative.

**Unit-III**

There shall be one long question carrying 25 marks with alternatives. There shall be two short notes carrying 25 marks with alternatives.
BOOKS FOR REFERENCE

1. Chandragupta – D. L. Ray
2. Sahitya – Rabindranath Tagore
   a) Sahitya Tatparya
   b) Sahityer Bicharak.
3. Bhangala Sahityer Sampurna Ittibrittee - Asit Kumar Banerjee (Modern age from 1900 – 1950 only)

PAPER-IV

Time – 3 hours          Full Marks – 100

Unit-I

There shall be one long question carrying 20 marks with alternatives. There shall be one explanation carrying 10 marks with alternatives.

Unit-II

There shall be one long question carrying 20 marks with alternative. And 2 short questions or one explanation carrying 10 marks with alternatives.

Unit-III

Samasa, Alankar, Karak. 20 marks

Unit-IV

One long essay with two alternative questions may be set. 15 marks.
BOOKS RECOMMENDED

1. Falamou – Sanjit Chandra Chatterjee
2. Jiban Smriti – Rabindranath Tagore

BOOKS FOR REFERENCE

1. Banga Sahitya Upanyaser Dhara – By Dr. Sri Kumar Chatterjee
2. Rabindranath – Dr. Subodh Sengupta.

M.I.L. (TELUGU)

FIRST YEAR

PAPER-I

Unit-I

Special Poetry (20 marks)

1. Sakuntalo Pakhyanam – Nannaya Bhattu
2. Bejja Mahadevi Katha – Palkurlkl Somanathudu
3. Droupadi Paridevanam – Tikkana

Unit-II

Modern Poetry (20 marks)

1. Desabhakti – Gurajada Apparao
2. Prabodhamu – Rayaprolu Subbarao
4. Kinnera Nadakaiu – Viswanadha Satyanarayana
5. Gabbllamu – Gurram Jashuwa

Unit-III

(Prose) (20 marks)

1. Sweeya Charma – Chilakamarti Lakshminarasimham
2. Andhra Kavita – Prabandha Yugamu – Veturi Prabhakara Sastri
3. Tikkana Tengudu Teeru Tennulu – Tammavajhaia Kodandaramayya
4. Seshendra Sahitya Vimarsa – Prof. Konka Yadagiri
5. Annamayya Pada Sourabham. Dr. Singupuram Narayana Rao

Non Detail 15 marks

Daksnayani

Unit-IV

Grammar

(15 marks)

1. Sangnuiu : Savarna, Deergha, Guna, Yanadesa, Vrudahi, Akara, Trika,
   Gasadadavadesa, Rugagama, Tugagama, Amredita.
2. Samaseinulu, Tatpurusha, Kannadharaya, Dwandva, Dwigu, Bahuvreehi.

Unit- V

General Essay (10 marks)
BOOKS PRESCRIBED

1. Sahitya Lahari – By Dr. Singupuram Narayana Rao.
2. Vyakarana Parijatamu – By Dr. Singupuram Narayana Rao

M.I.L. (TELUGU)

THIRD YEAR B.A.

PAPER-II

There shall be one paper carrying 100 marks of 3 hours duration to be conducted at the end of third Year B. A.

Unit-I

Classical Poetry (25 marks)

1. Prahalada Charitramu – Potana
2. Satyabhama Santvanam – Nandi Timmanna
3. Nigama Sarma Akka – Tenali Rama Krishnudu

Unit-II

Modern Poetry (20 marks)

1. Pratignya – Sri Sri
2. Arta Geetamu – Tilak
3. Mahandrodymam – Dasaradhi
4. Lakuma Tyagamu – C. Narayana Reddy

Unit-III

Prose (20 Marks)

1. Swabhasha – Panuganti Lakshmi Narasimha Rao
2. Rayalanati Rasikata – Rallapalli Ananta Krishna Sharma
4. Mani Charitra – Divakara Venkatavadhani
5. Trunakankana Kavya Soundarayam – Prof. Kanka Yadagiri
6. Sri Sri Vachana Vinyasam – Dr. Singupuram Narayana Rao

Unit-IV

Drama (15 marks)

Varavikrayam

Unit-V

Prosody and Poetics (20 marks)

1. Alankaramulu: Upama, Rupaka, Utpreksha, Atisayhokti, Swabhavokti, Ardhantarayasa, Drustanta, Slesh
Books Prescribed:
1. Sahitya Ketanam – by Dr. Singupuram Narayana Rao
2. Vyakarana Paritatamu – by Dr. Singupuram Narayana Rao

TELUGU (PASS)
SECOND YEAR EXAMINATION
PAPER – I

Unit – I (25 marks)

Practical: Telugu padya Pathanam – Bhava Vyakeexarana to be examined by both external and internal examiners appointed by the University.

Unit-II

Classical Poetry: (25 marks)

1. Keeratajuneeyamu: Sreenadhudu
2. Nartada Ganamacharyamu – Pingall Surana
3. Vemana Padyalu – Vemana Pasris prati Nundi

Unit-III

Modern poetry (15 marks)

1. Sivaji Pattabhishekam – Gadyaram Venkata Seshi Sastri
2. Koylla – Rayaprolu Subba Rao
3. Telugu Gajallu – C. Narayana Reddy
Unit- IV (Drama) 15 marks

Kanyasulkam

Unit-V (Grammar)

Chinnaya Suri Bala Vyakar4anam nundl Sangnya Sandhi, Samasa Parichedalu.

BOOKS PRESCRIBED:

1. Sahitya Prabha – By Dr. Singupuram Narayana Rao
2. Kanyasulkam – By Gurajada Appa Rao

N.B. There shall bed 25 marks practical examination- Padya Pathanam and Bhava Vyankteekarana to be examined by both internal and external examiners appointed by the University in Paper-I Telugu Pass at the 2nd year examination.

PAPER-II

HISTORY OF TELUGU LITERATURE

Unit-I  20 Marks

1. Prakn Nanavya Yugumu- Sahitya Vikasamu
2. Nannaya Yugamu-Bharatandreekarana Vidhanamu
3. Tikkana Yugamu- Visistata – Kavita Reetuiu
4. Yerrana Yugamu- Vaisistyam- Kavitwamu

Unit-II  20 Marks

1. Sivakavi Yugamu- Nannechodudu
   Panditradhyudu, Palkurik Somana, Dwipada Kavya Sampradayam
2. Sreenadha yugamu- Sreenadhudu, Potaha

**Unit-III**

20 marks

1. Pada Sanityam- Annamayya, Kshetrayya, ATyagayya, Kancharla Gopanna
2. Prabandha Yugam- Prabandha Yuga Lakshanalu, Peddana, Timmana, Krishna Devarayalu, Dhunati, Ramaraja Bhushanudu, Surana, Molla.

**Unit-IV**

20 marks

1. Nayaka Rajua Paianaio Sahityam – Yaksnaganamulu, Vachana Kavyamulu, Satakalu (Sumati, Vemana)Vijaya Vilasumu

**Unit- V**

*(20 marks)*

1. Navaia – Kandukuri, Unnava, Viswanadh, Kodavatiganti
2. Natakam – Dharmavaram, Vedam Venkaraya Sastri, Tirupati Vewnkata Kavulu

**BOOKS RECOMMENDED.**

1. Andhra Sahitya Charitra – by Pingail Lakshmi Kantam
2. Telugu Sahitya Sameeksha – Prof. G. Nagayya
3. Samagrandhra Sahityam- Arudra
TELUGU (PASS)

THIRD YEAR EXAMINATION

There shall be two papers carrying 100 marks each of 3 hours duration in the third year examination to be conducted at the end of third year B.A.

PAPER-III

HISTORY OF TELUGU LANGUAGE

Unit – I

Practical (25 marks)

Telugu Anuvadam sabda Prayogam to be examined by both Internal and External Examiners appointed by the University.

Unit-II

(20 marks)

1. Andhra – Tenugu – Telugu Sabdam vyutpathi – Vyapti
2. Dravida Bhasalu – Tadvyavahartulu – Vam prantalu – Dravida bhashalalo
   Telugu Stanam.
3. Telugulo mandalika Vignanam- Mandalika Bhedalu – Parichayam

Unit-III (20 marks)

1. Dhwani Parinamam – Varna Sameekaranam
2. Varna Vieonegam, Varna Vyatayam, Varna Samyam
3. Talavyeekaranam, Swasata Nadata.
Unit-IV (20 marks)

1. Ardna Parinamamu Ardna Sankocham. Ardha Vyakocham
2. Sakhyokti, Mrudukti
3. Ardha Grahyata Lakshyardhalu

Unit- V (15 marks)

1. Telugulo Anyadesyalu
2. Adana Pradanalu.

BOOKS RECOMMENDED

1. Telugu Bhasha Charitra – by P. S. Subramanyam
2. Telugu Bhasha Charitra Parichayam – by Dr. Singupuram Narayana Rao

N. B. There shall be 25 marks practical examination – Telugu Anuvadam Sabda Prayogam to be examined by both internal and external examiners appointed by the university in Paper-III Telugu Pass at the end of 3rd year examination.

PAPER-IV

LITERARY CRITICISM PROSODY AND POETICS

UNIT-I (20 MARKS)

2. Vimarsa Bhedalu
Unit-II (20 marks)

1. Kavya Niryachanalu – Prachya Paschatya Drukpadhalu
2. Drusya Kavya Bhedalu – Dasavidha Ropakalu

Unit-III (20 marks)

1. Rasa Swrupam – Rasa nista

Unit-IV

Chandassu: 20 marks


Unit – V (20 marks)

Alankaramulu:

Chandralokamu, nundi, upama, Rupaka, Utpreksha, Ardhantanyasam, Sivabhaviki, Atishahokti, Drustantam, Ullekha, Slesha, Anuprasa,

BOOKS RECOMMENDED.
2. Abhinava Sahitya Darsanam- Prof. Konka Yadagiri
3. Sahitya ----- Sangraham – by Dr. Singupuram Narayan Rao
4. Vyakarana Parijatamu – by Dr. Singupuram Narayan Rao

MIL (URDU)

Paper – I Full Marks- 100

Unit-I

( 30 marks)

Prose:

There shall be one long Question Carrying 20 marks with alternatives long questions carrying 20 marks. There shall be one short question carrying 10 marks with an alternative short question of 10 marks.

Unit-II

Poetry:

There shall be one long question carrying 20 marks with alternative and 2 explanations ( 5 marks + 5 marks) with alternative (5 marks + 5 marks).

Unit-III

Non-detailed: 10 marks

One long question carrying 10 marks with alternative question from both the books.
Unit-IV (20 marks)

Grammar:

There shall be 2 questions (10 + 10) with alternative

Unit-V (10 marks)

Essay:

There shall be alternative topics for the essay.

PROSE AND POETRY

BOOKS RECOMMENDED


PORTIONS TO BE STUDIED

PROSE


POETRY

2. From Shaoor – I Abad.

Meer, Sauda, Dand, Dastan Shan Zade Ki Gaid, Honeki, Asdmi, Nama Subha-Shahadat, Ghazar (Ghalib) Nishat – i- Umeed, Ghazal (Shaad) Ghasal,
(Hasrat) Asi Moder, Hindustan (Jamel) Maz heri Ghazal (Firaque), Ghazal (Mohiuddin) Ghazal (Jan Nisar Akhter) Ghazal (Nasir Kazmi).


NON-DETAILED STUDY


Or

IBNUL WAQT BY Nazir Ahmed.
Maktab-e-ZJames – New Delhi.

5. Essay

6. Functional Grammar

Quawaid-o-Insha by Athar Hussain Kitab Manzil, Patna-4

PAPER-II

Full Marks – 100

Unit-I (30 marks)

Prose

There shall be 2 questions each carrying 15 marks with alternatives.

Unit-II (30 marks)

Poetry:

There shall be one long question carrying 20 marks with alternatives and 2 explanation carrying 10 marks with alternative.
Unit-III (10 marks)

Non-detailed:

There shall be one long question carrying 10 marks with alternative question from all the non detailed books.

Unit-IV (10 marks)

Grammar:

There shall be 2 questions carrying 5 marks each with alternative.

Unit-V (10 marks)

Essay:

There shall be alternative topics for the essay carrying.

PROSE

BOOKS RECOMMENDED

1. Ains-e-Near by
   S. A. Saddiqui, Educational Book House, Aligarh.

POETRY


Poems to be studied.
Himala, Mirza Ghalib, Sarguziati- Aadam, Tarena-i-Hindi Jugnu, Naya Bhiwala, K nare Rawi NANAN Tuhid.

Dean – O – Siasat

NON-DETAILED STUDIES


Or

Naye Dame Drama – By Prof. Mohammed Hassan.


5. Essay.

URDU (OPTIONAL)

Paper-I

Time: 3 hours Full Marks – 100

There shall be two papers of 3 hours duration and each paper carrying 100 marks. There shall be four units

Unit-I & II

(60 marks)

Poetry detailed study.

There shall be 3 long question each carrying 20 marks with alternative

Unit-III

Life and style of Poet 20 marks

There shall be one question carrying 20 marks with an alternatives.
Unit-IV

**Rhetories**

20 marks

There shall be 2 questions each carrying 10 marks with alternative.

**BOOKS RECOMMENDED**

**PAPER-I**

**POETRY AND R-HETORICS**

1. Masnavi Mir Hasan, Pustak Bhandar (Patna-4)
2. Majmee Nazam – e – Hali
   (Educational Book House, Alligarh.)
3. Ashaar Akbar – By Prof. Sayed Hassan.
   (Kitab Manzil, Shbixil Bagh, Patna)

The following Rhetorics are to be studied.

Tashbib Istaara, Maratum Nazir, Iham, Luf-o-Nasher Hunsne Talil Talmih, Hussen Talab, Tajnis.

**PAPER-II**

**Time – 3 hours**

**Full Marks- 100**

1. Prose detailed study  
   75 marks
2. Life and style of writer  
   25marks

There shall be 4 units.


**Unit-I, II & III**

There shall be 3 long question each carrying 25 marks with alternatives covering all the 3 books.

**Unit-IV**

There shall be one question carrying 25 marks with alternatives, on life and style of the writer.

**BOOKS RECOMMENDED.**

**PAPER-II**

2. Umarao Jan o Ads – By Dr. Hadi Ruswa. (Bhargava Book Depot. Aminabad Park, Lucknow)
3. Resaela Shibles – By Shibli Nomant, To be had of Aiwane Urdu, Patna-4.

**PAPER-III**

(100 MARKS)

There shall be 4 units.

**Unit-I & II**

**Drama:**

There shall be four questions each of 15 marks with alternatives.
Unit-III

General Essay 25 marks

Unit-IV

(15 marks)

Origin and Development of Urdu Drama:

There shall be one question with alternative carrying 15 marks.

DRAMA

1. Neqshe – Akir – By Ishtyaqu Hussain Quraish
   (Maktaba Jamea De, Delhi)

2. Gudia Ghar – By Qudsia Z – aid
   (Anjuman Tareqi, Urdu, Aligar.)

UNIT-IV

Unit-I Literary Criticism 50 marks

Unit-II Applied criticism 50 marks

UNIT-I 50 marks

Literary Criticism.

There shall be 4 questions each carrying 12 ½ marks with alternative covering from all four books.
Unit-II

**Applied Criticism:**

There shall be 2 questions each carrying 25 marks with alternatives.

**BOOKS FOR REFERENCE:**

Literary Criticism:

1. Dr. Iqbal
2. Prem Chand
3. Shaad Azim Ahabi
4. Dr. Nazir Ahmed.

Unit-II


Portions to be studied (Josh, Faid, Mazhar, Imam).

**INDIAN SOCIETY AND CULTURE**

Section – Indian Society:

Unit-I


Unit-II

Processes of Socio-Cultural change in India: Sanskritization, Secularization. Westernization, Modernization and Democratization.
**Unit-III**

Globalisation and its impact on Indian Society, Local response to globalisation and the role of civil society.

**Section – II – Indian Society and Culture:**

**Unit-I**

Roots of Indian culture: Harappan & Vedic culture, Concept of Bharatavasha, religions faith and belief, Social Systems in vedic Age.

Characteristics of Indian Culture: Protestant Religious Movements during 6th century B. C. Culture attainments with reference to the Gupta period.

**Unit-II**

Cultural Expansion: Overseas trade and commerce and its impact on South-East Asia.

External impact on Indian Culture: Hellenistic impact on art and architecture, impact of Islam on Indian life, Socio-religions reform movements: Bhakti Movement, Brahmo Samaj and Arya Samaj.

**Unit-III**

Nationalism in India: Freedom struggle and the role of Gandhi, Nehru Subhas and Jinna.

**BOOKS RECOMMENDED:**

1. Indian Society and Culture by H. S. Patnaik, Kharavela Mohanty
2. Social and Economic History of India by S. C. Ray Choudhury
3. Indian Society and Culture by Prof. M. R. Patnaik
4. Evolution of Indian Culture by B. N. Luniya
5. The wonder that was In India by A. L. Basham
6. Indian Society and Culture by S. K. Jena
7. Bharatiya Samaj and Sanskruti (Oriya) by Dr. Trilochan Mishra.

ENVIRONMENTAL STUDIES (COMPULSORY)

The theory paper shall carry 100 marks.
The Course is to be covered in 50 lectures.
The Examination shall be of 3 hours duration

Ten Essay type Question covering all units to be set, out of which the students will answer 5 questions.

Unit-I
Basic Concepts of Environmental Studies.
• The environment, Lithosphere, Hydrosphere, Atmosphere and Biosphere.
• Ecology, Ecosystem, Environmental factors; (Abiotic factor – Light, Temperature, Soil & Water) Biotic factor, Ecological adaptation (Plant and Animal)
• Scope and importance of Environmental Studies, Newed for Public awareness and Environemntal Education.

Unit-II (Ecosystem Dynamics)
• Concept of Ecosystem: Ecosystem structure (Biotic and Abiotic Components) Function of Ecosystem: Energy Flow within Ecosystem, food chain, food web, Ecological Pyramids, Bio-Geochemical cycle.
• Types of Ecosystem: Aquatic ecosystem (Fresh water, Marine and Wetland), terrestrial ecosystem (Grassland and forest)
• Population Ecology: Population density, Natality, Mortality, Population age structure, Population growth forms, carrying capacity,
• Community Ecology, Ecological Succession: Hydrosere & Xerosere.

**Unit-III (Biodiversity and conservation ecology)**

• Biodiversity: Definition, Genetics, Species, and Ecosystem diversity, value of Biodiversity, Hot-spots of Biodiversity
• Threats to Biodiversity: Habitat loss, poaching of wild life, Endangered and endemic species of India.
• Sustainable Development: Meaning and Implication.
• Water conservation: Rain water harvesting, Watershed management
• Soil Conservation.

**Unit-IV (Environmental Pollution)**

• Definition of Pollution, Air Pollution, Water Pollution, Terrestrial pollution, Noise pollution, Radiation Pollution, Bio-concentration & Biomagnification.
• Sewage and Sewerage treatment
• Solid Waste management: Cause, effects and control measures of Urban and Industrial wastes.
• Disaster Management: Flood, earthquakes, cyclones and landslides,
• Climate change, global warming, acid rain, ozone layer depletion,

Unit-V (Natural Resources Human Population and Environment)

• Types of Natural resources, Forest as a renewable resource: Need of forest, use and over exploitation of forest, Deforestation and their effects on tribal people, Afforestation & Social forestry.
• Water resources: Use and over utilisation of surface and ground water.
• Energy resources: Growing energy needs, renewable and non-renewable energy resources, use of alternate energy source.
• Land Resources: Lands degradation, Soil erosion and desertification.
• Population Explosion’
• Environment and Human Health.

BOOKS RECOMMENDED

1. Text Book of Environmental Studies (+3 Arts, Science, Commerce) Ashok Kumar Panigrahy and Alaka Sahu. (Giribala Publication, Berhampur)
2. Parivesh Bigyan (+3 Arts, Science, Commerce) Alaka Sahu and Ashok Kumar Panigrahy. (Giribala Publication, Berhampur)
Further Reading


5. Fundamentals Air Pollution: P. C. Mishra

6. Concept of Env. Studies. Dr. R. N. Mishra

7. Fundamental of Env. Studies Dr. N. K. Tripathy.

8. Man and Environment Dr. M. C. Dash.

SECOND YEAR EXAMINATION

STATISTICS (PASS)

PAPER-I

(75 MARKS)

Unit-I
Determinants, Matrices, Matrix-operations, Inverse and rank of matrix, solution of linear equations.

Unit-II
Limit, continuity of function, Differentiation of functions, Integration by Substitutions and Integration by parts. Definite Integral.

Unit-III
Linear Programming problems (formulation and graphical solution), convex sets and related problems.
Unit-IV

Simplex method, duality in linear programming

Unit-V

Transportation and Assignment problems.

BOOKS PRESCRIBED.

1. Text Book Matrices : Shantinarayana
2. Mathematicsl Analysis : Shantinarayana

BOOKS FOR REFERENCE:

1. Theory of Matrices: : B. S. Vatsa
2. Differential Calculus and Integral Calculus : B. C. Das and Mukherjee.

SECOND YEAR EXAMINATION

PAPER-II

(75 MARKS)

UNIT-I

Operation E and Δ and their operation, Factorial notation. Interpolation with equal and unequal interval, Newton’s Forward and Backward formula. Divided difference, Lagrangian formula.
Unit-II

Frequency, distribution, measurement of central tendency, measure of dispersion, moments, measures of skewness and kurtosis.

Unit-III

Simple correlation and regression, curve fitting by the methods of least square (Polynomial, exponential, Logarithmic), Multiple and partial correlation and regression (three variable only) Association of attributes.

Unit-IV

Definition of probability, laws of addition and multiplication of probability, conditional probability, Independent events, Bayesian Rule.

Unit-V

Random variable, Density function, mass function distribution function, joint distribution of the variable, Mathematical expection, Addition and Multiplication theorem, moment generating function.

BOOKS PRESCRIBED

   (Sultan chand and Co)


BOOKS FOR REFERENCE:


2. Numerical Analysis ; Dutta and Jana
PAPER – III

( 50 MARKS)

a. Practical 30 marks

i. Construction of frequency distribution, histogram and frequency polygon.

ii. Calculation of different measure of location, dispersion, skewness and kurtosis from grouped and ungrouped data.

iii. Construction of Bivariate frequency distribution, calculation of simple correlation and regression lines and their interpretation.

iv. Calculation of multiple and partial correlation and regression.

v. Fitting of Polynomials, exponential and logarithmic curves.

vi. Association of attributes.

vii. Interpolation with equal and unequal intervals.

b. Viva-voce and record. 20 marks.

FINAL YEAR EXAMINATION

PAPER-IV

( 75 MARKS)
UNIT-I
Probability Distribution: Binomial, Poisson, Normal, Beta, Gamma, Chi-square, t and F.

Unit-II
Sampling distribution –Large sample theory and small sample theory, tests of significance based on normal, ‘ t ‘ F and X² distribution.

Unit-III
Meaning and concept of tests, simple and composite hypothesis, critical region, error in tests.

Unit-IV

Unit-V
Parametric and non-parametric test, the sign test, median test, run test, Mann- Whitney U –test.

Population Projection

BOOK PRESCRIBED

2. Sampling technique : W.G.Chochran
BOOK FOR REFERENCE

1. Fundamental of statistics (VI-II): Goon. Gupata, Dasgupta
2. Design of Experiment: M.N. Das and N. Giri

PAPER-V

Unit-I

Analysis of Variance, one way and two-way classification, principle of experimental design.

Unit-II

Description of analysis of CRD, RBD, LST, Missing plot technique.

Unit-III

Population and sample, sampling unit, sample survey Vs complete enumeration, steps involved in large scale sample survey, sampling and non-sampling errors.

Unit-IV

Methods of drawing sample- use of Random Number table, SRS, with replacement stratified random sampling, systematic sampling, two stage sampling.

Unit-V

Methods of obtaining vital statistics, measurement of population of rates and ratio of vital events, measurement of mortality C.D.R., S.P.D.R. standardized death rates comparatives mortality index, mortality rate, integral, mortality rate.
PAPER-VI

(50 MARKS)

A. Practical: 30 marks

i. Analysis CRD, RBD and LSD

ii. Missing plot techniques in RBD and LSD

iii. Calculation of mortality and fertility and reproduction rates.


v. Drawing of single random sample and estimation of population total proportion with S.E


vii. Drawing of stateomatic sample and comparison of its efficiency with simple random sampling and stratified random sampling.

B. Record and Viva-voce. 20 marks.

STATISTICS HONOURS:

There shall be three examination, one at the end of first year. One at the end of second year and one at the end Final year. There shall be two theoretical paper each carrying 100 marks in the first examination. In the Second Examination two theoretical papers and one practical paper each carrying 100 marks. Similarly in he Final Examination, there shall be two theoretical papers and one practical paper.
FIRST YEAR EXAMINATION
(At the end of first year)

PAPER-I
(100 MARKS)

A) Matrices
Unit-I (16 marks)
Determinants. Matrix operations, Inverse of matrix, rank of matrix, solutions of simultaneous linear equation, characteristics equations and roots, quadratic form, positive definite form.

B) Calculus and Differential Equation. 50 marks

Unit-II
Limit, continuity, Differentiation, Successive differentiation, tangent normal. (17 marks)

Unit-III
Integration by substitution and by parts definite integrals, Simple problems on area under curve. (17 marks)

Unit-IV
Differential equation of 1\textsuperscript{st} order and of 1\textsuperscript{st} Degree (16 marks)

C) Analysis. (34 marks)

Unit-V
Limit of a sequence and convergence of infinite series, simple tests of convergence. Absolute convergence. (17 marks)

Unit – VI (17 marks)

Convergence of improper integrals, Beta, Gamma Integrals, Definition and evaluation of Double integrals.

PAPER-II

(100 MARKS)

a) Numerical Analysis. (50 marks)

Unit-I

Operation E and ∆ and their operations, factorial notation, Interpolation with equal and unequal intervals, Lagrange Newton forward and back ward, divided differenced interpolation formula. (17 marks)

Unit-II

(17 marks)

Numerical Integration, Trapezoidal and Simpsons one third rule. Numerical solution of simple first order first degree differential equations by Picard’s method and Euler’s method.

Unit-III

(16 marks)
Simple problems on approximate solution of algebraic and transcendental equations by bisection method, regula falsi method, Newton Raphsons method and iteration method.

b) **Statistical Methods – I**

Unit-IV


c) **Probability:**

Unit-V (16 marks)

Classical and axiomatic definition of probability Laws of addition and multiplication of probability, conditional probability, independent events, Bayes rule.

Unit-VI (17 marks)

Random variable, density function, mass function, distribution function. Mathematical expectation, moments, moment generating function, Binomial, Poisson, normal, Beta, Gamma, Cauchy distributions, Marginal conditional and joint distribution.

**BOOKS RECOMMENDED:**

1. Text Book of matrices – Shantinarayan
3. Integral Calculus – Shantinarayan

**PAPER-II**
1. Finite difference and Numerical Analysis – H. C. Saxena

**SECOND YEAR EXAMINATION**
(At the end of Second Year)

**Paper-III**
(100 marks)

a) **Probability – II**

**Unit-I**

**Unit-II**
(17 marks)
Weal laws of large numbers, Chebyehev’s theorem, Bernoulli’s theorem, Central limit theorem, Lindeburg Levy theorem.

b) **Statistical Method – II**

**Unit- III**
Concept of population, sample, parameter, statistic and sampling distribution standard error, sampling distribution of sample mean and Variance, t, F and Chi-square distribution. Tests of significance based on normal, t, F, $X^2$ distribution.

c) Testing of Hypothesis  

Unit-IV  
(16 marks)
Meaning and concept of tests, simple and composite hypothesis critical region, error in tests.

Unit-V  
(17 marks)
M. P. T. Neyman Person Lemma and its application UMPT. Likelihood ratio test and its application.

Unit-VI  
(17 marks)
Parametric Vs non-parametric test, the sign test, Median test Run test, Mann – Whitney U-test.

PAPER-IV  
(100 MARKS)
a) **Operation Research:** (50 marks)

**Unit-I**

(17 marks)
Linear Programming problems (Formulation and graphical solution) convex sets and related problems.

**Unit-II**

(17 marks)
Simplex method, duality in linear programming.

**Unit-III**

(16 marks)
Transportation and Assignment problems.

b) **Computer Programming:** (50 marks)

**Unit-IV**

(17 marks)
Understanding the computer flow charts, basics of the basic programming.

**Unit-V**

(17 marks)
Writing programs to find mean, S. D. Correlation coefficients of given number (simple data).

**Unit-VI**

(16 marks)
Introduction to appear sheet (lotus / Excel) using spread sheet to calculate mean, S. D. And correlation.

PAPER-V
(100 marks)

A) Practical 80 marks.
   i) Construction of frequency distribution, histogram, frequency Polygon, ogine.
   ii) Calculation different measures of location, dispersion, skewness and kurtosis from grouped data.
   iii) Calculation of simple correlation and regression lines.
   iv) Calculation of multiple and partial correlation and regression.
   v) Fitting of polynomials, exponential and logarithmic curves.
   vi) Fitting of Binomial, poisson and normal distribution.
   vii) Test of significance based on t, f, \(X^2\) distribution.
   viii) Interpolation with equal and unequal intervals.
   ix) Numerical Integration – Use of Simpsons one third rule, Trapezoidal rule.
   x) Solution of algebraic and transcendental equation by Regula-Falsi and Newton Raphson’s method.

B) Viva and Record. 20 marks.
BOOKS RECOMMENDED

PAPER-III


PAPER-IV

1. Operation Research: S. D. Sharma

FINAL YEAR EXAMINATION

PAPER-VI

(FULL MARKS – 100)

a) Theory of estimation 34 marks

Unit-I

(17 marks)

Problem of estimation, Estimation and its properties unbiased ness consistency, efficiency, and sufficiency, consistent estimators, Likelihood function, Raw-Cramer inequality and applications.

Unit-II

(17 marks)

b) **Statistical quality control:** 34 marks.

**Unit-III**

(17 marks)

Introduction, process, control charts, S. O Control limits, tools for SQC, control charts for variables X and R charts, control chart for attributes.

**Unit – IV**

(17 marks)

P – chart, D – Charts, C- charts, acceptance sampling by attributes, AQL, LTPD, PAFD, consumers Risk, Producers Risk. AOQ, AOQL, O. C curve.

c) **Demography:** 32 marks

**Unit-V**

(16 marks)

Methods of obtaining vital and use of Abridged life table. Measurement of fertility, CBR. GFR, SFR, TFR, measurement of mortality CDR, SDR standardised DR, Comparative mortality index, Maternal mortality rate.

**Unit-VI**

(16 marks)

Life table-contribution and use of Abridged life table. Measurement of fertility, CBR, GFR, SFR, TFR, Measurement of population growth, Crude rate of Natural increase and Pearle’s vital Index GRR, NRR.
Paper-VII
(100 marks)

a) Design and Analysis of Experiment: 50 marks

Unit-I
(17 marks)
Analysis of Variance, one and two way classification, principles of experimental design. Randomisation and Local Control, Replication.

Unit-II
(17 marks)
Statistical Analysis of CRD, RBD, LSD Missing value in LSD. Factorial Experiments.

Unit-III
(16 marks)
$2^s$ and $2^n$ factorial experiments, Confounding in factorial Designs and experiments. Partial Confounding, BIBD.

b) Sampling Technique: 50 marks

Unit-IV
(16 marks)
Population and sample, sampling Vs census, steps involved in a sample survey, sampling and sampling errors.

Unit – V
(17 marks)
Sample random sampling. Restricted random sampling, Stratified sampling, systematic sampling, non-random sampling methods.

**Unit-VI**

**(17 marks)**

Estimation of population value and SE with respect to above methods of sampling. Ratio and regression Estimation, Estimation of population means, Total properties with respect to above methods of sampling.

**PAPER-VIII**

**(100 MARKS)**

A) Practical: 80 marks

1. Conversation of Physical Problem to L. P. Problem.
2. Solution L. P. P. By graphical method.
4. Analysis of CRD, RBD, LSD
5. Missing plot techniques in RBD and LSD
8. Drawing of simple random sample and estimation of population
9. Drawing of systematic sample comparison of efficiency SRS and ST. RS.

B) Viva and Record. 20 marks.

**BOOKS RECOMMENDED**

**PAPER-VI**

PAPER-VII

1. Sampling Technique : W. G. Chochran

ANTHROPOLOGY (PASS)

There shall be four theory and two practical papers for three years degree course.

Two theory and one practical paper shall taught in the Second year and two theory and one practical shall taught in the third year.

SECOND YEAR EXAMINATION

Paper – 1 (Theory): Prehistoric Archaeology 75 marks
Paper-II (Theory) Physical Anthropology 75 marks
Practical 50 marks

FINAL YEAR EXAMINATION

Paper – III (Theory) Social and Cultural Anthropology 75 marks
Paper-IV (Theory) Applied Anthropology 75 marks
Practical 50 marks

DETAILED SYLLABUS

PAPER-I (THEORY)
3 HOURS 75 MARKS

(PREHISTORIC ARCHAEOLOGY)

Unit-I

(15 marks)
Definition, Scope and methods of study of prehistoric archaeology, Relations of prehistoric archaeology with other disciplines.

Unit-II

(15 marks)
Geological time scale with special reference to climatic fluctuation during Ice Age.

Unit-III

(15 marks)
Typology, techniques and functions of lithic tools.

Unit-IV

((15 marks)
Lithic cultures in India: Introduction, Lower Palaeolithic, Upper Palaeolithic and Mesolithic,

Unit-V

(15 marks)
Neolithic age in India, Indus valley Civilisation in India.

BOOKS PRESCRIBED

1. Bhattacharya, D. K. - Prehistoric Archaeology, (Hindusthan Publishing Corporation, Delhi.)
2. Sankalia H. D. - Stone Age Tools (Decan College, Post Graduate and Research Institute, Poona)

3. Sankalia H. D - Indian Archaeology Today

4. Krishnaswamy V. D- Stone Age India (in Ancient India No. 3 January, 1947)

BOOKS FOR REFERENCE

1. Burkitt, M. C - Old Stone age.
2. Braidwood R. J. - Prehistoric Mon.

PAPER-II (THEORY)

( 75 MARKS)

(PHYSICAL ANTHROPOLOGY)

UNIT-I

(15 MARKS)

Physical Anthropology: Definition, scope and various branches, relationship with other sciences.

Unit-II

(15 marks)

Meaning, evidences and theories ( Lamarckism and Darwinism ).

Unit – III

(15 marks)
Genetics: The structure and function of cell, Cell division. Mendel’s laws in inheritance.

**Unit-IV**

(15 marks)


**Unit-IV**

(15 marks)

The concept of race, mechanisms of race formation, racial criteria (metric and non-metric) major racial divisions of mankind and their distribution.

**PRACTICAL**

(50 MARKS)

*(Prehistoric Archaeology and Physics Anthropology)*

Typology, Drawing and Description of Lithic tools.

The Students shall draw to scale and describe the tools

Minimum of three tools in each Section shall be drawn.

1. a) Palaeolithic -(5 tools) 
   b) Mesolithic - (5 tools)  
   c) Neolithic - (3 tools)  

   (10 marks)

2. Practical Record. 

   05 marks.

3. a) Somato metry 

   10 marks
b) Samoto Scopy 05 marks

c) Craniometry 10 marks

d) Mandibulometry 05 marks

4. Practical Record. 05 marks.

A. Somatometry:

Candidates shall be familiar with the procedure adopted and descriptive terms used in making observations. Measurement of the following external characters and take measurements on adults.

1. Heitht Vertex
2. Sitting Height
3. Weight
4. Maximum Head Length
5. Maximum Head Breadth
6. Minimum Frontal Diameter
7. Bizygomatic Breadth
8. Bigonial Diameter
9. Nasal Height
10. Nasal Breadth
11. Morphological Facial Height
12. Horizontal Circumference of Head.

B. Somatoscopy:

Candidates shall be familiar with the procedure adopted and descriptive terms used in making observations on the following.

1. Skin – Colour
2. Eye – Colour, Fold, Eye, Brow
3. Hair – Form, Texture
4. Super – Orbital ridges
5. Face – Prognathism
6. Lips – Shape of Lips
7. Earlobe – Size and attachment
5. Nose – Depression, Bridge, Septum

C. **Craniometry:**

Candidates shall be familiar with procedure adopted and descriptive terms used in the following measurement and take measurement on 10 skulls.

1. Maximum Cranial Length.  
2. Maximum Cranial Breadth  
3. Glabellas Inions Length  
5. Least Frontal Breadth.  
6. Bizygomatic Breadth  
7. Nasal Breadth

D. **Mandibalometry:**

Candidate shall be familiar with procedure adopted and descriptive terms used in the following measurements and take measurement on 10 mandibles.

1. Bicondylar Breadth  
2. Bigonial Breadth  
3. Mandibular Length.  
4. Height of Ramus  
5. Breadth of Ramus

**BOOKS FOR PRACTICAL**

1. Sarkar R. M.  
   Fundamental of Physical Anthropology (Latest Edition)


**PAPER –III**

*Time – 3 hours*  
*Full Marks-75*
SOCIAL ANTHROPOLOGY AND CULTURAL ANTHROPOLOGY

Unit-I
(15 marks)

Society and Social Anthropology, Meaning and importance of association and institutions.

Concept of family, features, types and functions of family meaning and types of marriage rules, mating and marriage.

Unit-II
(15 marks)

Concept of Kinship, Kin types and kinship terminology, kinship usages, meaning and functions of lineage, clan moiety and phratry, primitive sodalities and their functions.

Unit-III
(15 marks)


Unit-IV
(15 marks)

Concept of culture and society, scope of cultural anthropology, study on culture-trait, culture complex, culture-area.

Unit-V
(15 marks)

Theoretical ideas on culture growth: Evolutionism, diffusion and diffusionism.
BOOKS RECOMMENDED
1. Majumdar and Madan – Introduction to Social Anthropology
2. Beals and Hoijer – Introduction to Social Anthropology
3. Herskovit M. J. – Cultural Anthropology

BOOKS FOR REFERENCE
1. Bohanan P – Social Anthropology
2. Lowie R. H – Social Organisation
3. Merdock G. P. – Social Structure

PAPER - IV
APPLIED ANTHROPOLOGY
(Full Marks – 75)

Unit-I

Unit-II
Tribe: Definition geographical distribution of different tribes in Orissa. Tribe and caste differentiation, Scheduled caste and scheduled tribe, major problems of Tribes. Various approaches and strategic.

Unit-III
Population study as a science: Scope and methods of population study, its relationship with Anthropology, Geography, Economic and Ecology. Important landmarks in development of population study.

Unit-IV

Applied physical Anthropology: Medicolegal problems, Forensic Anthropology, Ergonomics Applications of Anthropological Knowledge to problems of Public Health, Disease fertility and mortality in India.

Unit-V

Research Methodology: Tools of data collection: Observation schedule, Questionnaire, Case study, Interviews sampling.

BOOKS RECOMMENDED

1. Mason, Philip (ed) : India & Ceylon, Unity and Diversity
2. Cohen B. S. India : Social Anthropology of Civilization
3. Kopadia, K. M., : Marriage and family in India
4. Moriott Mc.Kim (Ed.) : Village India
5. Srinivas,M.N. : Social Change in Modern India
6. Srinivas, M.N. : Caste in Modern India and other Essays
8. Singh Y. : Modernization of Indian Tradition

PRACTICAL

(50 MARKS)

A) Technology – 15 marks
B) Methodology – 10 marks
C) Statistics – 15 marks

Practical Record – (5 marks + 5 marks) = 10 marks

A. Primitive Technology:

The candidate shall draw to scale and describe implements or models of food-gathering, hunting, fishing, agriculture and items of baskets and transport devices. They also be familiar with their identification labelling of various parts and drawing of neat sketches.

B. Methodology:

The candidates shall be familiar with the following field methods and techniques: Observations, Interview, Questionnaire, Case Studies and Sampling.

C. Statistics:

The candidates shall calculate the following measurement:

a) Mean  b) Mode  c) Median  d) Standard Deviation.

BOOKS FOR REFERENCE

1. Royal Anthropology : Note and Queries and Anthropology Institute.
2. Houng P. V. : Scientific Social Surveys and Social Research
3. Das R. R. : Statistics

BOOKS FOR REFERENCE:

1. Royal Anthropology : Note and Queries on Anthropology Institute
2. Gooda and Hatt : Scientific Methods Research
3. Ghosh B. N. : Scientific Methods and Social Research
4. Sharma B. A. V. Etial Research Methods in Social Science
5. Young P. V. Scientific Social Survey and Research.

ANTHROPOLOGY (HONLURS)

FIRST YEAR EXAMINATION

Paper – 1 (Theory) Prehistoric Archaeology 100 marks
Paper-2 (Theory) Physical Anthropology 100 marks

SECOND YEAR EXAMINATION

Paper – 3 (Theory) Social Anthropology 100 marks
Paper – 4 (Theory) Human Genetics 100 marks
Paper – 5 (Practical) 100 marks

FINAL YEAR EXAMINATION

Paper – 6 (Theory) Indian Society 100 marks
Paper – 7 (Theory) Cultural and Applied Anthropology 100 marks
Paper – 8 (Practical) 100 marks

DETAILED SYLLABUS

FIRST YEAR EXAMINATION

PAPER – 1 (THEORY)

Time 3 hours Full Marks-

100

PREHISTORIC ARCHAEOLOGY

Unit-I
Definition, Scope and methods of study of prehistoric archaeology, Relations of prehistoric archaeology with other disciplines. Geological time scale with special reference to Pleistocene, great Ice Age of Europe in brief.

Unit-II

Dating methods (a) Absolute dating: Radio, Carbon methods, Dendrochronology, Pollen analysis, Thermoluminiscene, Potassium argon test (b) Relative dating: Stratigraphy Glacial Verve, river terrace, typological similarity state of preservation.

Unit-III

Classification of tools, Typology, techniques and functions of Lithic tools – with reference to prehistoric periods.

Unit-IV

Lithic cultures in India: Introduction and nomenclature problems. Lower, Middle and Upper Palaeolithic age in India Mesolithic in India.

Unit-V

Chaleolithic period in India: Indus Valley Civilisation. Iron age in India.

BOOKS RECOMMENDED

2. Sankalia, H. D. : Indian Archaeology Today
3. Sankalia, H. D : Stone Age Tool (Deccan College, Post Graduate and Research Institute, Poona.
4. Krishnaswamy V. D. Stone Age India (In Ancient India. No.3 January, 1947)

BOOK FOR REFERENCE

1. Burkitt, M. C. Old Stone Age
2. Braidwood, R. J. Prehistoric Men
3. Sankalia, H. D. Prehistory and Protohistory and India & Pakistan

PAPER – II (Theory)

PHYSICAL ANTHROPOLOGY (100 Marks)

Unit-I

Definition, Scope and development of Physical Anthropology and its Relation with other branches of Anthropology and other Sciences.

Unit-II

The concept of organic evolution, Theories of organic evolution, Lamarckism, Darwinism, Neo-Darwinism, Synthetic theory, Micro and Macro Evolution, Adaptation, Isolation, Mutation, Selection and Speciation.

Unit-III

Important stages of human evolution in different geological terms from proplopithecus to Homo Sapien Stage.

Unit-V
Human variation and Biological concept of Race: Race and Ethnic group, Role of heredity and environment in the formation of race: Racial criteria: Major race of the world and their distribution, Racial classification of Indian Population (Risley, Guha, Sarkar).

**BOOKS RECOMMENDED:**

2. Stein and Rowe: Physical Anthropology
4. Das B. M. Outlines of Physical Anthropology.
6. Das B. M. Micro Evolution
7. Ashley Montague, M. F. Men’s Evolution Introduction to Physical Anthropology.

**BOOKS FOR REFERENCE:**

1. Donson, E. O. Evolution, Process and Procedure
2. Lasker, G Physical Anthropology
3. Comas. J Manuals of Physical Anthropology
4. Eckant, R . E The Study of Human Evolution
5. Hules, F The Human Species, An Introduction to Physical Anthropology.

**SECOND YEAR EXAMINATION**

**PAPER-III (THEORY)**

Time – 3 hours Full Marks – 100
SOCIAL ANTHROPOLOGY

Unit-I
Scope of social Anthropology, Relationship of Social Anthropology with other branches of Anthropology.
Community and Society, Nature and Features of group, Meaning and importance of association and institution.

Unit-II
Concept of family and its Universality, features, types of marriage, marriage rules, mating and marriage.

Unit-III
Concept of Kinship kintype and kinship terminology, Kinship usages, Kin categories meaning and function of Lineage, clan moiety and pharatry.

Unit-IV
Sodalities and their function, Nature and features of primitive economy, Primitive modes of exchange, barter and ceremonial exchange Rank and Status.

Unit-V
Primitive law and justice. Theories on religion, types of magic relationship of religion with magic and Science.

BOOKS RECOMMENDED

1. Beals and Joijer  Introduction to Anthropology
2. Hoebel, E. A  Man in the Primitive world
3. Majumdar and Madan  Introduction to Social Anthropology
4. Majumdar D. N  Races and culture of India.

BOOKS FOR REFERENCE:

1. Beattie, J. M.  Other Culture
2. Bobannan P  Social Anthropology
3. Linton R.  The Study of Man
4. Lowie, R. H  Social organisation
5. Murdock G. P.  Social Structure
7. Evaus Pritchard E. H  The Neur
8. For, Robin  Kinship and marriage
9. Goode, J.  Family
10. Mair, Lucy  An Introduction to Social Anthropology
11. Herskovits, M. J  Economic Anthropology

PAPER-IV (THEORY)
Time – 3 hours  Full Marks – 100
(Human Genetics)
Unit-I
Development and scope of human genetics.

Unit-II

Structure and function of human cell, Mitotic and Meiotic type of cell division. Human Chromosome; Karotypes, Structure and functions of D. N. A. And R. N. A.

Unit-III

Mendel’s Law of inheritance and its application to human population, mode of inheritance of autosomal, dominant, recessive, sex-linked lethal and suitable genes and abnormal alleles, sex determination.

Unit-IV

Polygenetic inheritance in man, multiple alleles ABO, Rh and MN Blood Group.

Unit-V

Application of Human Genetics, Genetic Engineering and Gene Therapy.

BOOKS RECOMMENDED:

1. Stern, C  
   Principles of Human Genetics
2. Shull and Neel J. V  
   Human Heredity
3. Harrison, G. A Barnicnot  
   Weiner, J. S. Tuner Human Biology
4. Periasamy, K  
   An Introduction of Cytology, Genetics of Evolution.
5. Clellrge, E. J  
   An Introduction to Biology.

BOOKS FOR REFERENCE

1. Buras G. N.  
   Science of Genetics, An Introduction to Heredity

**PAPER- V**

**(100 MARKS)**

**PRACTICAL– A (50 MARKS)**

1. Prehistory – 12 marks
2. Technology – 10 marks
3. Musicology and Museum Management – 05 marks
4. Practical Note Book – 08 marks
5. Serology – 10 marks

A. Prehistory:  12 marks

The candidates shall draw to scale and describe ten prehistoric tools i.e. Palaeolithic, Mesolithic and Neolithic tools. They shall also be familiar with identification, labelling and drawing of prehistoric tools sketches.

B. Technology  10 marks

The candidate shall draw to scale and describe implements (or models) of food gathering, hunting, fishing, agriculture and transport devices. They shall also be familiar with the identification and labelling of various parts of the above implements.

C. Museology and Museum Management:  05 marks
The candidates shall pressure the organic and inorganic materials (Wood, Bamboo, Leather, Feather, fibre, books and manuscripts, iron, and classification of specimens in anthropological museum and the management of museums.

**BOOKS FOR REFERENCE:**


**PRACTICAL (B)**

( 50 MARKS)

a) Somatometry and Somatoscopy – (10 + 5 ) = 15 marks

b) Indices – 02 marks

c) Craniometry and Madibulometry ( 10 + 5 ) = 15 marks

d) Record – 08 marks

e) P. T. C. – 05 marks

f) Viva- voce. - 05 marks.

A) Somatometry:

Candidates shall be familiar with the procedure adopted descriptive terms used in making observations, measurements of the following external characters and take measurements on five adults.

1. Height Vertex

2. Height Acromion

3. Height Tragus

4. Sitting height

5. Height Radius

6. Chest Breadth
7. Chest Depth
8. Maximum Head Length
9. Maximum Head Breadth
10. Minimum Frontal Diameter
11. Bizygomatic Oneler
12. Bigonial Diameter
13. Nasal Height
14. Nasal Breadth
15. Morphological Facial Height
16. Uppers Facial Height

Indices:
1. Cephalic or Length Breadth Index
2. Length – Height Index
3. Breadth – Height Index
4. Morphological Facial Index

Somatoscopy.
Candidate shall be familiar with the procedure adopted and descriptive terms used in making observation on the following:
1. Skin Colour
2. Eye Colour, Fold, Eye word
3. Hair form, Texture
4. Nose
5) Lip
6) Chin
7) Prognathism
8) Spra-orbital ridges

craniometry and Mandibulometry:
Candidates shall be familiar with procedure adopted and descriptive terms used in the following measurements. They will take measurements 5 skulls.

1. Maximum Cranial Length
2. Maximum Cranial Breadth
3. Glabella inion length
4. Nasion inion length
5. Nimastoidal Breadth
6. Last frontal Breadth
7. Bizygomatic Breadth
8. Breadth of Upper Jaw
9. Basion – Bregona Height
10. Nasal breadth
11. Nasal height

Frontal Choral
Parietal Choral

Mandibulometry:
Candidate shall be familiar with procedure adopted and descriptive terms used in the following measurements and take measurements on five mandible.

1. Bicondylar Breadth
2. Bingonial Breadth
3. Mandibular Length
4. Height of Ramus
5. Breadth of Ramus.
BOOKS RECOMMENDED

1. Single. I and Bhasin - Anthropology
2. Sen. Tulike - Anthropology
3. Das B. M. And Rajan Deku - Practical Anthropology

FINAL YEAR EXAMINATION

PAPER-VI

Time – hours Full Marks – 100

INDIAN SOCIETY

UNIT-I

India: Unity in diversity, race, language and culture.

Unit-II

Indian Social System: Varna, Caste, joint family, village communities

Unit-III

Study of tribal, peasant and urban societies, great tradition and little tradition.

Unit-IV

Sacred complex, universalization and parochialization Sanskritization and Westernization.

Unit-V
Dominant caste, tribe, caste integration and continuum urbanization and industrialization process in India:

BOOKS RECOMMENDED:

1. Mason. Phillip (ed.) Indian and Ceylon: Unity and diversity
2. Cohen B. S. India Social Anthropology of Civilization.
3. Kapadia K. M. Marriage and Family in India
4. Mariott Mc. Kin (ed.) Village India
5. Srinivas M. N. Social change in Modern India.

BOOKS FOR REFERENCE:

1. Srinivas M. N. Caste in Modern India and Others
2. Dube, S. C Essays

PAPER-VII

(100 MARKS)

CULTURAL AND APPLIED ANTHROPOLOGY

UNIT – I

Concept of culture, Culture and Societies, Scope of cultural Anthropology, universal aspect of culture, study on cultural trait, culture complex, culture area, culture pattern.

Unit-II

Evolutionary School or thought: Evolution and Evolutionism, contribution of E. B. Tylor, James Frazer, Maine, Mclennan, Herbert Spancer, L. H. Morgan and Bachofen Neo-evolutionism and Neo-evolutionist, contributions of V. Gorden Clhilde, Julian, HSteward and Leslie A. White.
Unit-III

Diffusionists school of thought: Diffusion and Diffusionism, Contributions of British, German and American Diffusionists.

Unit-IV

Nature and scope of Applied Anthropology, action anthropology role of Anthropology in tribal Development.

Unit-V

Distribution of tribal population in India with reference to Orissa constitutional safeguards for scheduled caste and scheduled tribes and back ward classes.

Applied Physical Anthropology: Medicolegal application of Genetics Forensic Anthropology, Medical Anthropology, Applications of Anthropological Knowledge to problems of public Health, disease, fertility and mortality in India.

BOOKS FOR REFERENCE:

2. Elwin, V : A new Deal for Trivial India
3. Herskovits, M. J. : Man and his Works
4. Sharma, B. D : Trival Development
5. Keesing and Keesing : New Perspective in Cultural Anthropology

BOOKS RECOMMENDED:

1. Keesing M. F : Cultural Anthropology
2. Hoebal and Forst : Social and Cultural Anthropology
3. Herskovit, M. J. : Cultural Anthropology
4. Bose, N. K : Society and Culture in India
5. Vidyarthi L. P. (Ed.) : Applied Anthropology in India

**BOOKS RECOMMENDED**

1. Jha Makhan : An Introduction to Anthropological Thought
2. Herskovits : Cultural Anthropology
4. Radcliffe Brown : Structure and Function in Primitive Society
5. Upadhyay and Pandey : History of Anthropological Thought

**BOOKS FOR REFERENCE**

Benedict, Ruth : Patterns of Culture.
White, L. A : The Science and Culture.
Kuper, Adam : Anthropology and Anthropologist.

**BOOKS RECOMMENDED**

1. Kothari C. R. : Research Methodology
2. Bajpai : Methods of Social Research

**BOOKS FOR REFERENCE**

1. Young P. V : Scientific Social Survey and Research
2. Govde and Hatt : Scientific Methods in Research.

**PAPER – VIII**

**(PRACTICAL**
FIELDS WORK

(100 MARKS)

The candidate shall submit an illustrated field report basing on 15 days field work on a community or tribe selected by the Head of the Department. The report shall cover all important aspects of Socio-cultural and physical features of the people selected for study by the Head of the Department from time to time.

The distribution of marks shall be as follows:

1. Field Report 60 marks
2. Viva Voce 20 marks
3. Statistics 20 marks

BOOKS FOR REFERENCE

1. Royal Anthropology: Note and Queries on Anthropology institute
2. Gooda and Hatt: Scientific Methods Research
3. Ghosh B. N: Scientific Methods and Social Research
4. Sharma, B. A. V. Btial: Research Methods in Social Science
5. Young. P. G: Scientific Social Survey and Research

PSYCHOLOGY (General)

The B. A./ B. Sc. TDC course will have examination in 2nd year and Final Year. The T. D. C. Psychology (Pass) course shall be carrying 400 marks and the marks distribution of Course structure for the two examination shall be as follows:
<table>
<thead>
<tr>
<th>Examination</th>
<th>Paper</th>
<th>Course, Subject</th>
<th>Marks</th>
<th>Examination duration</th>
</tr>
</thead>
<tbody>
<tr>
<td>First TDC</td>
<td>Nil</td>
<td>Nil</td>
<td>Nil</td>
<td>Nil</td>
</tr>
<tr>
<td><strong>Second TDC</strong></td>
<td>Paper-I</td>
<td>General Psychology</td>
<td>75</td>
<td>3 hours</td>
</tr>
<tr>
<td></td>
<td>Paper-II</td>
<td>Psychology Statistics</td>
<td>75</td>
<td>3 hours</td>
</tr>
<tr>
<td></td>
<td>Paper-III</td>
<td>Practical (General)50 marks</td>
<td>50</td>
<td>3 hours</td>
</tr>
<tr>
<td><strong>Final TDC</strong></td>
<td>Paper-IV</td>
<td>Fundamentals of Educational Psychology</td>
<td>75</td>
<td>3 hours</td>
</tr>
<tr>
<td></td>
<td>Paper-V</td>
<td>Applied Educational Psychology</td>
<td>75</td>
<td>3 hours</td>
</tr>
<tr>
<td></td>
<td>Paper-VI</td>
<td>Practical (Testing)</td>
<td>50</td>
<td>3 hours</td>
</tr>
</tbody>
</table>

**PAPER-I**

**GENERAL PSYCHOLOGY**

(75 MARKS)

I. Introduction to Psychology:

Definition and goals of Psychology: Approaches; Biological, Psycho-dynamic, behaviourist, cognitive, humanist and evolutionary: Experiment, Observation, Interview, questionnaire and case study.

II. Biological basis of Behaviour:

Nervous system: the Neuroa. The central Nervous system (Spinal Cord and brain) cerebral hemispheres, cerebral localisation, split-brain studies, Autonomic Nervous system, Endocrine glands.
III. Perceptual Process:
Definition, perceptual organisation, Functional determinants of perception, perceptual constancies and illusions, Extrasensory perception (ESP).

IV. Learning:
Classical and operant conditioning: Basic process; Extinction, Spontaneous recovery, Generalisation and discrimination, Reinforcement schedules, Tolman’s sign learning, observational learning.

V. Memories and Forgetting:
Encoding, storage and retrieval, processing sensory, Short-term and Long-term memories, Forgetting: Decay, interference retrieval, failure, motivated forgetting and amnesia, state dependent forgetting.

VI. Motivation and Emotion:
Indicators of motivation, Biogenic and Sociogenic motives, need hierarchy model, techniques of assessment of motivation.


VII. Personality – Definition, Trait and type approaches, Biological and Sociocultural determinants, techniques of assessment Psychometric and Projective.
VIII. Thinking of Intelligence:

   Concept of thinking, creative thinking. Influenced of heredity and environment on intelligence, Intelligence tests.

READING:


   PAPER-II

   PSYCHOLOGICAL STATISTICS

   ( 75 MARKS)

1. Nature of Psychological data and measurement:

   Levels of measurement: Scales; discrete and continuous; scores, application of statistics in psychology.

2. Measures of Central Tendency:

   Characteristics and computation of mean, median and mode, Uses of various measures of central tendency.

   Measures of variability.
Concept of variability; Range and semi-inter quartile range, Mean deviation, standard deviation.

3. Normal distribution;
   Properties of Normal probability curve; Deviation from NPC-Skewness & Kurtosis, Application of NPC.

4. Correlation:
   Concept of correlation; Peason’s Product-moment correlation, Spearman’s Rank-Order correlation.

5. Sampling and Tests of significance:
   a) Types Sampling, Sampling distribution; standard error of mean.
   b) ‘t’ tests for independent and dependent samples; interpretation ‘t’ values – level of significance. Errors in inference making.

READING


PAPER-III
(PRACTICAL (GENERAL)
(50 MARKS)

1. Special learning:
2. Paired associate learning (Learning and Saving method)
3. Bilateral Transfer of training
4. Phenomenon of Retroactive inhibition.
5. Recognition of nonsense materials in similar and dissimilar context.

READING
1. Moshin, Experiments in Psychology, (O.L BOMBAY)
2. Wood Worth and Schlosberg, Experimental Psychology: (Oxford & I. B. H)
3. Underwood, Experimental Psychology : (Times of India)

PAPER-IV
(FUNDAMENTALS OF EDUCATIONAL PSYCHOLOGY)
(75 MARKS)

2. Learning:
   Definition, Learning Event, Basic conditions of learning, contiguity, practice, reinforcement, generalization and discrimination.
   The nature of verbal learning, conditions of verbal learning, conditions of verbal learning.
a) Internal conditions: meaningfulness and verbal mediation.
b) External condition: Instructions to learn, practice, reinforcement interference and methods of measurement.

3. Skill learning:
The nature of skill learning: phases of skill learning, basic conditions of skill learning, contiguity, practice Feedback.
Transfer of training/learning, types of transfer; positive, negative, specific and non-specific, theories of transfer, theory of mental discipline theory of identical elements, theory of generalisation, transposition theory.

4. Creativity:
Nature of creativity, creativity and learning, creativity and learning, Instructions for fostering creativity.

5. Achievement Tests;
a) Objective and essay type of tests – merits and demerits, construction of objective tests.
b) Concept of aptitude; Types of aptitude and measures of aptitude.

PAPER-V
APPLIED EDUCATIONAL PSYCHOLOGY
( 75 MARKS)

1. General Themes:
a) Psychological assessment of the child
b) Psychological management of childhood problems.

2. Education of the Exceptional Children.

3. Education of mentally retarded children:
   Definition and concept of mental retardation, levels of mental retardation, causes of mental retardation, training and prevention of mentally retarded children.

4. Educational of the Juvenile delinquent children.
   Definition, etiological factors of juvenile delinquency education, Management and prevention of juvenile delinquency.

5. Guidance and counselling:
   Meaning, definition, nature, need and functions of guidance and counselling, areas of counselling and guidance, techniques of guidance.

READINGS


2. Advanced Educational Psychology – S. K. Mangal

3. Educational Psychology – Dr. S. S. Mathur (13th Revised edition)

4. Mental health of Indian Children – Malvika Kapur (Sage Publication)

5. Exceptional Children – Heward and Omlansky

PAPER – VI

PRACTICAL (TESTING)

(50 MARKS)
1. Non-verbal Intelligence Test (Raven’s progressive matrices/ Bhatia Battery of Intelligence Test)
2. Eysenck’s personality test (EPI).
3. Word association test (Jung/Kent Rosanoff)
4. Differential Aptitude Test (DAPT)
5. Weschler’s memory scale / PGT

READINGS
2. Mohanty G. B., Experiments in Psychology

PSYCHOLOGY (HONOURS)

The B. A/ B. Sc. TDC will have examination in every year as 1st TDC, 2nd TDC and Final TDC. The T. D. C. Psychology (Honours) course shall be carrying 800 marks and the marks distribution of course structure for three examination shall be as follows:

<table>
<thead>
<tr>
<th>Examination</th>
<th>Paper</th>
<th>Course Subject</th>
<th>Marks</th>
<th>Examination duration</th>
</tr>
</thead>
<tbody>
<tr>
<td>First TDC</td>
<td>I</td>
<td>General Psychology</td>
<td>100</td>
<td>3 hours</td>
</tr>
</tbody>
</table>
PAPER – I

(General Psychology)

(100 marks)

1. Introduction to Psychology:

   Definition and development of Psychology, Current Psychological
   Perspectives, Behavioural, cognitive, Psychodynamic Humanistic
   Neuroscience, Evolutionary, Socio-Cultural, Multicultural, Methods of
   Psychology-experiment, observation, interview questionnaire and case
   study.

2. Biological basis of Behaviour:
Structure and function of neurons, synaptic transmission, Neurotransmitters.
The Central Nervous system (Spinal cord and brain)
Structure of brain, Lashley’s studies of brain localisation, Autonomic Nervous system, Endocrine glands.

3. States of mind:
Nature of conscious, changes in conscious consciousness, day dreaming, sleep and dream, extended states of consciousness, Hypnosis, Meditation and hallucination psychoactive drugs.

4. Perception.
Definition of perception, key perceptual processes, perceptual organisation, functional determinants of perception, extrasensory perception.

5. Learning:
Classical and operant conditioning: Nature and basic Principles, Tolman’s sign learning, Observational learning:

6. Memory:
The information processing approach, sensory memory, short term memory, Long-term memory, Forgetting from LTM. Improving your memory.

7. Motivation of Emotion:
Theories of motivation. Biogenic and Sociogenic motives. Intrinsic motivation.
8. Intelligence:

9. Personality:
   Trait and type approaches, Freud’s Theory of Personality, Humanistic Theories of Personality.
   Assessment of personality – Psychometric and projective techniques.

10. Thinking:
   Thinking of reasoning. Thinking as problem solving behaviour, creative thinking.

   **REFERENCE:**
   Freeman, F. S, (1972) psychology Testing:

   **PAPER – II**
   (PSYCHOLOGICAL STATISTICS)
   (100 MARKS)

   1. Nature of psychological data and measurement.
Levels of measurement: discrete and continuous variables application of statistics in psychology.

2. **Measures of Central tendency:**
   Concept and measures of central tendency – Characteristics of mean, median and mode; Computation of mean, median and mode and used in statistical measurements.

3. **Measures of variability:**
   Concept of measures of variability, computation and uses of range, semi-inter quartile range, Average deviation and standard deviation.

4. **Normal Distribution:**
   Properties and application of Normal probability curve, Deviation from NPC - Skewness and Kurtosis.

5. **Correlation:**
   Concept of correlation, Pearson’s product-moment correlation Spearman’s Rank-order (rho) correlation.

6. **Hypothesis testing and making inferences:**
   a) Population and sample: Random sampling : sampling distribution, standard error of mean.
   b) Students “t” test, level of significance, Type – I and Type – II error in inference making.

7. **ANOVA:**
   Purpose and assumptions of ANOVA; One way and two-way analysis of variance.
8. **Non-parametric Statistics:**

   Difference between parametric and non-parametric statistics, chi-square, Kruskal-Welli (One way ANOVA), Friendman’s Two way ANOVA – for Testing the difference between several Group means.

**REFERENCES**


**PAPER-III**

**(100 MARKS)**

**ORGANISATION BEHAVIOUR**

1. **Introduction to organisational Behaviour.**
   Historical context of OB, Definition of OB; challenges, scope and opportunities for OB.

2. **Perspectives for understanding OB:**
   Open system approach, Human relations perspective, socio-technical approach.

3. **Person in the organisation:**
Biographical characteristics, Major personality attributes affecting OB, measurement of personality in OB context. Matching personality and job, personality and culture.

4. **The individual and organisation.**


5. **The individual in the organisation:**

Concept and early theories of motivation-need hierarchy theory; Theory X and Y and two factor theory. Skills involved in motivating workers, MBO, Employee involvement programmes.

6. **The group of organisation.**

Nature, types and stage of group development, conditions affecting group functioning, group structure: Sociometry, group Decision Making.

7. **Communication in Organisation:**

Communication Model, Barriers to effective communication, Direction and network of communication, communication and decision making, skills involved in communication and listening.

8. **Leadership in Organisation:**

Nature and types, behavioural theories, contingency theories and contemporary issues in leadership. Leadership and power, Base of power and power in action, skills involved in meaning politicking.

10. Organisational change and development, natured, forces and approaches to change management, organisational development techniques, cultural issues in change and development skill in managing change in individual level.

REFERENCE:

PAPER-IV
(FULL MARKS -100)
EDUCATIONAL PSYCHOLOGY

1. Introduction to Educational Psychology, aims and objective of Educational Psychology, Basic teaching model, Theory of teaching and Theories of Learning.

2. Learning:
Definition, basic conditions of learning – contiguity, practice reinforcement, generalisation discrimination verbal learning – Nature of verbal learning, conditions of verbal learning.
   a. Internal conditions of verbal learning
i) Meaningfullness  ii) Verbal mediation

b. External conditions of verbal learning

Instruction to learn, practice, reinforcement, interference and methods of measurement.

3. **Skill learning:**

   Nature of skill learning, basic conditions of skill learning, contiguity, practice and feedback.

   Transfer of Training/learning, types of transfer; positive negative, specific and non-specific, theories of transfer of training. Theory of mental discipline, theory of identical elements theory of generalisation, transposition theory.

4. Creativity – nature of creativity, creativity and learning, creativity and intelligence, Instructions for fostering creativity.

5. **General Themes:**

   a) Psychological assessment of the child.

   b) Psychological management of the child.

6. **Education of Exceptional Children.**

   Education of the gifted children:

   Meaning and definition of concept of gifted children, Nature and characteristics of gifted children, Assessment of gifted children and education of gifted children.

7. Education of the mentally retarded children Definition and concept of mental retardation, levels of mental retardation, causes of mental retardation, training and prevention of mental retardation.
8. **Guidance and counselling:**
   Meaning and definition, Nature, Need and function of guidance and counselling, techniques of counselling.

9. The child in the community:
   a) The child in the community
   b) The child in the family
   c) The child at risk in the community

**READINGS**

1. Psychology of learning and instructions – Deucce and Crawford,
2. Educational Psychology – Dr. S. S. Mathur
3. Advanced Educational Psychology – S. Chauhan
5. Guidance in Indian Universities – S. K. Kochhar

**PAPER – V**

(FULL MARKS – 100)

**PRACTICAL (GENERAL)**

1. Serial Learning
2. Bilateral transfer of training.
3. Phenomenon of Betroactive inhibition
4. Recognition of NS in similar and dissimilar context
5. Retention and amount of materials
6. Knowledge of result in Muller Lyer-illusion
7. R. L. By method of limits
8. R. L. By method of constant stimuli
9. D. L. By method of limits
10. D. L. By method of constant stimuli

**READINGS**


**REFERENCE:**


**PAPER – VI**

**(FULL MARKS – 100)**

**Psychopathology**

1. Introduction to Psychopathology:

   The concept of normality and abnormality, criteria for defining abnormality.

   Psychological Assessment of Psychopathology: Diagnostic Tests, Rating Scales: History taking interview orientation to projective tests.

2. Psychological model of psychopathology:

   Psycho-dynamics, Behavioural, Cognitive, Humanistic and Existential.
3. Anxiety Disorders:

   Panic disorder and Agoraphobia, specific phobias, social phobia, obsessive compulsive disorder, generalized anxiety disorder.

4. Somatoform Disorder:

   Dissociative disorders conversion disorder.

5. Mood Disorder:

   Manic episode, Depressive episode, Bipolar affective disorder.

6. Schizophrenia:

   Definition and clinical symptoms of schizophrenia
   Diagnostic types of schizophrenia
   Etiology of schizophrenia
   Therapies of schizophrenia

7. Disorder due to psychoactive substance use

   Alcohol and drug dependence.

8. Stress:

   Definition, nature and types of stress, stress management.

9. Psychotherapies:

   General goals of Psychotherapy, Psycho-analytic therapy, Humanistic and existential therapy, Gestalt therapy cognitive and behaviour therapy.

10. Community psychology and community mental health.
a) Crisis intervention  
b) Consultation  
c) Non-professional community  
d) Mental Health Education  

BOOKS FOR REFERENCE: 


PAPER – VII 

SOCIAL PSYCHOLOGY  
(FULL MARKS – 100) 

1. Introduction. 
Nature, goal and scope of social Psychology, social psychology and other social sciences: Methods of social Psychology: Experimental and non-experimental methods, correlational approach. 

2. Attitudes: 
Attitude and function of attitudes, Attitudes and behaviour: Formation, change and measurement of attitude. 

3. Prejudices and Discrimination. 
Nature and components of prejudice: Acquisition of prejudice, Reduction of Prejudice.
4. Groups and leadership:
   Group structure and function, Groups cohesiveness, norms and decision making, leadership- Definition and function: Traits situational, interactional and contingency approaches to leadership; Leadership effectiveness, the characteristic leadership.

5. Communication:
   Communication models: Verbal and nonverbal communication language and social interaction, Barriers in communication.

6. Aggression: Its Nature, Causes and control:
   Theoretical perspectives – Trait, Situational and Social learning approaches; Social and personal determinants of aggression; prevention and control of aggression.

7. Environmental influence on behaviour:
   The Urban environmental stress: Noise, Pollution and atmospheric conditions, density and crowding, avoiding the effects of crowding, intervention for environmental management.

REFERENCES:
Kretck, Crutchfield and Ballachy – Individual in Society.
Semin, G. R. And Fielder, K (Eds.) (1996)
Lindgreen, Social Psychology.
PAPER – VIII
(100 MARKS)
(PRACTICAL (TESTING)
Time – 6 hours

A. 1. Non-verbal Intelligence Test (Raven’s Progressive Matrices/ Bhatia
Battery

   Intelligence Test.

2. Eysenck’s Personality Inventory (SPI)

3. Word – Association Test (Jung/Kent Rosanaff)

4. Differential Aptitude Test (DAPT)

5. Weachter’s Memory Scale / PGI Memory scale.

B. Advanced case study report on a client in the field of clinical
   psychology/organisational psychology/Educational Psychology/ Social
   Psychology.

   or

   1. Bell’s Adjustment Inventory.

   2. Cattell’s 16 PF.

   3. Spielberge’s anxiety trait and State inventory

   4. Beck’s Deparession inventory (BDI)

   5. Thematic Appreciation Test (TAT)

   Children Apperception Test (CAT)

READINGS;

   Edinburg.

B.A. / B.SC. (GENERAL)
MATHEMATICS

There shall be two theory papers 100 Marks each and of three hours duration at the end of Second year.

PAPER-I
Analysis 100 Marks

PAPER-II
Differential Equation 50 Marks
Discrete Mathematics 50 Marks

There shall be two theory papers 100 marks each and of three hours duration at the end of Third year.

PAPER-III
DETAILS OF THE COURSE

SECOND YEAR EXAMINATION

(At the end of second year)

PAPER-I

ANALYSIS

Unit-I

Ordered, field of Real numbers, l.u.b. and g.l.b. completeness of R(Not through Dedkind cuts), complex numbers, Inequalities, Metric Properties of R, limit points, closed sets, Open sets, Bolzano-Weierstrass theorem.

Unit-II

Convergence of real sequence and series, monotonic sequences, Cauchy criteria of convergence, limit superior, limit inferior. Tests of convergence of spaces of positive terms, Comparison tests, Ratio test, Root test, Absolute convergence, Alternating series test.
Unit-III
Limit and continuity of functions, properties of continuous functions, discontinuities, uniform continuity, Differentiability of real functions, Higher derivatives, Leibnitz theorem, Mean value theorem, Taylor's theorem with reminder, Taylor's series.

Unit IV
Riemann integration, its properties, Riemann integrability of continuous and monotonic functions, Fundamental theorem of calculus.

Unit-V
Improper Integrals and Fourier Series.

Unit-VI
Functions of several variables, Neighbourhood of points in $\mathbb{R}^2$ and $\mathbb{R}^3$. Limit of a function, repeated limits, continuity, Partial derivatives, differentiability, partial derivative of higher orders, Derivatives of composite functions, change of variables, Taylor's Theorem, Extreme value, Implicit functions (Statement of implicit function theorem only) Jacobians, derivatives of implicit functions, Lagranges method of multipliers (application without proof).

BOOKS PRESCRIBED
S.C. Malik and S. Arora-Mathematical Analysis (New Age International)
 Chapters-1 (excluding 4.3 and 4.4), 2, 3, 4 (up to Art. 5 and 10.1, 10.2), 5, 6, 9 (up to Art 9), 11 (excluding Art 5), 14, 15 (up to Art 10) and 16.

BOOKS FOR REFERENCE
1. Fundamentals of Real Analysis-S.L.Gupta and Nisha Rani
2. Mathematical Analysis-II-Sharma and Vasistha.
3. Fundamental of Mathematical Analysis - G. Das & S. Pattanayak.

PAPER-II 100 Marks

(A) DIFFERENTIAL EQUATIONS 50 Marks

Unit-I
Introduction and some basic concept of differential equations. Solution of Higher order Linear differential equations with constant coefficients and equations with variable coefficients

Unit-II
Power Series solutions about ordinary point, Legendre's Equation and its simple properties.

Unit-III
Power Series solutions about singular points, Bessel's Equation and Bessel's Function.

BOOKS PRESCRIBED

BOOKS FOR REFERENCE
1. Introductory course in differential equations - D.A. Murray
2. Elements of Ordinary Differential Equations and Special Functions - A. Chakrabarty (New Age International)

(B) DISCRETE MATHEMATICS 50 Marks

Unit IV
Mathematical Logic; Properties and Logical Operators, Construction of Truth tables, Tautologies and contradictions. Equivalence and Implication, NAND and NOR, Functionally Complete sets, Two state Devices and Statement Logic, Normal Forms.

Unit-V

Lattices and Boolean Algebra: Partially order sets, Hasse Diagram of Partially order Sets, Lattices, Boolean Algebra, Karnaugh Map Representation of Logical Functions.

Unit-VI

Graph Theory: Basic Concepts, Operations on Graphs, Isomorphism, Connected Graphs, Distance in a Graph, Cut-vertices and Cut -edges, Connectedness in Directed Graph, Incidence and Adjacency Matrices, Eulerian and Hamiltonian Graphs, Euler Circuits, Eulerian Diagraphs, Trees, Application of Trees, Trees and Sorting, Spanning Trees, Optimal Spanning Graph., Depth-First Search and Breadth-First search

BOOKS PRESCRIBED


BOOKS FOR REFERENCE

Fundamental Approach to Discrete Mathematics- D.P. Acharya and Sreekumar (New Age International)

FINAL YEAR EXAMINATION
(At the end of the 3\textsuperscript{rd} year)

PAPER – III  100 Marks

(A) CALCULUS  50 Marks

Unit-I
Integration of $\mathbb{R}^2$

Unit-II
Integration on $\mathbb{R}^3$

Unit-III
Vector Calculus, Differentiation of Vector functions, Gradient, divergence and curl of a Vector, Green, Gauss and Stokes theorems (Statements without proof) their applications.

BOOKS PRESCRIBED

1. Mathematical Analysis - S.C Mallik, Chapters: 17 and 18 (up to Art 5)

2. Topics of Calculus-Panda and Satapathy, Chapters- 6,7

BOOKS FOR REFERENCE

Vector Analysis with Applications — Ali and Hazra (New Age International )

(B) LINEAR ALGEBRA  50 Marks

Unit-I
Vector space, definition and examples: Subspaces, span of a set, linear dependence and independence, dimension and basis.

Unit-II
Linear transformation, definition and examples, range and vernal, rank and utility, the space L (U, V), composition of Linear Maps, matrix and linear map, linear operations, matrix multiplication, rank and nullity of matrix, transpose of a matrix.

Unit-III

Elementary row-operations, systems of Linear equations, matrix inversion, determinants, minors and rank of a matrix, product of determinants, application to linear equations, eigen values and eigen vector.

BOOKS RECOMMENDED

1. An Introduction to Linear Algebra: V.Krishnamurty et al. (affiliated East-West Press) Chapters: 3, 4 (4.1 to 4.7), 5, 6 (6.5 to 6.8)

BOOKS FOR REFERENCE

1. Basic Structures in Algebra, Part-I, J.N.Patnaik
3. First course in Linear algebra - Bhattacharya Jain and Nagpaul ( New Age International )

PAPER-IV

100 Marks

(A) NUMERICAL ANALYSIS 50 Marks

Unit-I
Numerical Analysis and errors, Interpolation.

Unit-II
Numerical Integration, solution of Algebraic and transcendental equations.

**Unit-III**

Solution of system of linear equations, Numerical solution of ordinary differential equations.

(Examinees are to use pocket calculator)

**BOOKS PRESCRIBED**


Chapters: I, II (2.1 to 2.9 and 2.13 to 2.16), III (3.7 to 3.14), IV (4.1 to 4.7), V (5.1 to 5.3) VI (6.1 to 6.3).

**BOOKS FOR REFERENCE**

Numerical Methods for Scientific and Engineering Computation - Jain and Iyengar (New Age International)

(B) **ALGEBRA** 50 Marks

Group Theory-Definitions and Examples, Sub-groups.

**Unit-V**

Counting, Principles, Normal subgroups, Quotient groups, Homomorphism.

**Unit-VI**

Ring theory-definitions and examples, some special class rings, Homomorphism.

**Unit-VII**

Theory of equations: Roots of an equation, relations between roots and coefficients, sum of powers of roots, symmetric functions, transformation of equations, repeated roots, common roots, some standard reduction of cubic, and biquadratic, Cardan's solution of a cubic, Descartes solution of biquadratic.
BOOKS PRESCRIBED

   Chapters: I, II (Art 2.1 to 2.7), III (Art 3.1 to 3.4)

2. Text Books of Algebra: Ravindra Kumar and Srikrishna Wassn (Pitambar Publication) Chapter-III (3.1 to 3.9)

BOOKS FOR REFERENCE


2. Modern Algebra - Vatsa and Vatsa (New Age International)

B.A./B.Sc. (HONOURS)
2011-2014

MATHEMATICS

There shall be in all seven theoretical papers and one practical paper or eight theoretical papers. The duration of each theoretical papers is three hours and practical paper is of six hours. Paper I and II Papers in 1st year, Paper III, Paper IV and Paper V in, Second year and, Papers VI, VII & VIII will be taught in Final year.

PAPER-I 100 Marks

a. Analysis 100 Marks

PAPER-II 100 Marks

a. Differential Equation 50 Marks

b. Discrete Mathematics 50 Marks
PAPER-III  100 Marks

a. Linear Programming  50 Marks
b. Abstract Analysis  50 Marks

PAPER-IV  100 Marks

a. Mathematical Modeling  50 Marks
b. Probability  50 Marks

PAPER-V  100 Marks

a. Partial Differential Equations  50 Marks
b. Computer Programming C  50 Marks

PAPER-VI  100 Marks

a. Calculus  50 Marks
b. Linear Algebra  50 Marks

PAPER-VII  100 Marks

a. Numerical Analysis  50 Marks
b. Algebra  50 Marks

PAPER-VIII  100 Marks

Practical  100 Marks

Or

Operations Research  100 Marks

FIRST YEAR EXAMINATION

(At the end of first year)

PAPER-I
ANALYSIS

100 Marks

Unit-I
Ordered, field of Real numbers, l.u.b. and g.l.b. completeness of R (Not through Dedkind cuts), complex numbers, Inequalities, Metric Properties of R, limit points, closed sets. Open sets, Bolzano-Weirstrass theorem.

Unit-II
Convergence of real sequence and series, monotonic sequences, Cauchy Criteria of convergence, limit superior, limit inferior, Tests of convergence of spaces of positive terms, comparison tests, Ratio test, Root test, Absolute convergence, Alternating series test.

Unit-III
Limit and continuity of functions, properties of continuous functions, discontinuities, uniform continuity, Differentiability of real functions, Higher derivatives, Leibnitz theorem, Mean value theorem, Taylor's theorem with reminder, Taylor's series.

Unit-TV
Riemann integration, its properties, Riemann integrability of continuous and monotonic functions, Fundamental theorem of calculus.

Unit-V
Improper Integrals and Fourier Series

Unit-VI
Functions of several variables, Neighbourhood of points in $\mathbb{R}^2$ and $\mathbb{R}^3$. Limit of a function, repeated limits, continuity, Partial derivatives, differentiability, artial derivative of higher orders, Derivatives of composite functions, change of variables, Taylor's Theorem, Extreme value, Implicit functions (Statement of implicit function theorem only) jacobians, derivatives of implicit functions, Lagranges method of multipliers (application without proof).

**BOOKS PRESCRIBED**

S.C. Malik and S. Arora-Mathematical Analysis (Wiley Eastern) Chapters-1 (excluding 4.3 and 4.4), 2 , 3, 4 (up to Art. 5 and 10.1,10.2), 5, 6 , 9(up to Art 9), 11 (excluding Art 5), 14, 15 (up to Art 10) and 16.

**BOOKS FOR REFERENCE**

1. Fundamentals of Real Analysis-S.L. Gupta and Nisha Rani
2. Mathematical Analysis-II-Sharma and Vasistha.
3. Fundamental of Mathematical Analysis-G.Das & S.Pattanayak.

**PAPER-II**

100 Marks

**(A) DIFFERENTIAL EQUATIONS** 50 Marks **Unit-I**

Introduction and some basic concept of differential equations. Solution of Higher order Linear differential equations with constant co-efficients and equations with variable co-efficients

**Unit-II**

Power Series solutions about ordinary point, Legendre's Equation and its simple properties .

**Unit-III**
Power Series solutions about singular points, Bessels Equation and Bessels Function.

**BOOKS PRESCRIBED**


**BOOKS FOR REFERENCE**

1. Introductory course in differential equations-D.A. Murray

2. Elements of Ordinary Differential Equations and Special Functions- A. Chakrabarty (New Age International)

(B) DISCRETE MATHEMATICS 50 Marks

**Unit-IV**

Mathematical Logic: Properties and Logical Operators, Construction of Truth tables, Tautologies and contradictions, Equivalence and Implication, NAND and NOR, Functionally Complete sets, Two state Devices and Statement Logic, Normal Forms.

**Unit-V**

Lattices and Boolean Algebra: Partially order sets, Hasse Diagram of Partially order Sets, Lattices, Boolean Algebra, Karnaugh Map Representation of Logical Functions.

**Unit-VI**
Graph Theory: Basic Concepts, Operations on Graphs, Isomorphism, Connected Graphs, Distance in a Graph. Cut-vertices and Cut-edges, Connectedness in Directed Graph, Incidence and Adjacency Matrices, Eulerian and Hamiltonian Graphs, Euler Circuits, Eulerian Dragraphs, Trees, Application of Trees, Trees and Sorting, Spanning Trees, Optimal Spanning Graph., Depth-First Search and Breadth-First search

**BOOKS PRESCRIBED**


Chapters: 3, 6, 7

**BOOKS FOR REFERENCE**

Fundamental Approach to Discrete Mathematics- D.P.Acharya and Sreekumar (New Age International)

**SECOND YEAR EXAMINATION**

(At the end of second year)

**PAPER-III**

100 Marks 50 Marks

(A) **LINEAR PROGRAMMING**

Unit-I
Mathematical formulation, Graphical solution, Simplex method.

Unit-II

Duality in linear Programming, Post-Optimal Analysis.

Unit-III

Transportation Problem and Assignment Problem.

BOOKS PRESCRIBED


Chapters : 2,3,4,5 (except 5.8 ), 6,10,11 (11.1 to 11.4 )

BOOKS FOR REFERENCE


2. Linear Programming: Methods and Applications - G.V.Shenoy (New Age)

(B) ABSTRACT ANALYSIS 50 Marks

Unit-IV

Metric space, with examples, R, R^2, R^J and C(a,b) as metric spaces, limit in metric spaces, continuous function on a metric space, open sets, closed sets, Discontinuous function on R.

Unit-V
Connected sets, Bounded sets, Totally bounded sets, complete metric spaces.

**Unit-VI**

Compact metric spaces, uniform continuity

**BOOKS PRESCRIBED**

Methods of Real analysis-R.G.Goldberg Chapters: 4, 5, 6 (up to 6.8) and 10(10.1 to 10.2).

**BOOKS FOR REFERENCE**

S.C. Malik and S.Arora -Mathematical Analysis (New Age International)

**PAPER-IV**

(A) **PROBABILITY**

50 Marks

**Unit-I**

Aximoatic approach of probability theory, finite sample spaces, conditional probability, Independent events.

**Unit-II**

Concept of random variable, Distribution functions moments of the random variable, Biuomial, passion, uniform and normal distribution.

**Unit-III**
Joint distribution functions and density functions conditional densities of continuous random variables, conditional expectation and variance.

**PAPER-V**

**100 Marks**

**(B) MATHEMATICAL MODELLING**

**50 Marks**

**Unit-IV**

Mathematical modeling through ordinary differential equations of first order.

**Unit-V**

Mathematical modelling through the systems of ordinary differential equations of the first order.

**Unit-VI**

Mathematical Modelling through ordinary differential equations of second order.

**BOOKS PRESCRIBED**

1. Probability of Random Processes-Srinivasan and K.M. Mehta (II edition)

   Chapter: 3, 4 (excluding absolute moments), 5(excluding 5.4).

2. Mathematical Modelling- J.N. Kapoor(New Age International)

   Chapters: 2,3 (except 3.13 and 3.14) and 4. BOOKS FOR REFERENCE

   1. Kai Lai Chung

PAPER – V 100 marks

(A) PARTIAL DIFFERENTIAL EQUATIONS 50 Marks

Unit-I

Unit-II
Linear partial differential equations with constant coefficients Homogeneous linear equations Reducible non-homogeneous linear equations.

Unit-III
Partial Differential Equations of Order two with variable coefficients Particular forms. Transformation of the independent variable, Manges, methods of integrating Rr-Ss-Tt =V

BOOKS PRESCRIBED
A Text book of Differential Equations - N.M.Kapoor (Pitambar Publication) Chapters: 9(9.1 to 9.7), 10,11(11.1 to 11.11), 12(12.1 to 12.9)

BOOKS FOR REFERENCE
(B) COMPUTER PROGRAMMING - C  50 Marks

Unit-I

Getting started: What is C, Getting started with C, C instructions, The First C Programme, control instruction in C.

Decision control Structure: Decisions! Decisions! The if statement. The if-else statement, use of Logical operators, A word of caution. The conditional operations

Unit-II

The Loop Control statement: Loop. The break statement, The continue statement, The do while Loop. The case control structure: Decision using switch, the go to statement. Functions: What is function, passing value between functions, Scope Rule of functions, Advanced features of Functions.

Unit-III

Data Types Revised: Integers, long and short, integers-signed and unsigned, chars-signed and unsigned, Floats and Doubles, Storage class in C, C preprocessor: Features of C preprocessor, Macro Expansion. File Inclusion, Conditional Compilation, Arrays: What are arrays, more on arrays, pointers and Arrays, More than and Dimension, Array of Pointers..

BOOKS RECOMMENDED

Let us C (third Editions): by Yashvant Kanetkar, BPB Publication., Chapter: 1,2,3,4,5,6,7,8.
FINAL YEAR EXAMINATION
(at the end of third year)
PAPER-VI (A) CALCULUS

Unit-I
Integration on $\mathbb{R}^2$

Unit-II
Integration on $\mathbb{R}^2$

Unit-III
Vector Calculus, Differentiation of Vector function. Gradient, divergence and curl of a Vector function. Green, Gauss and Stokes theorems (Statements without proof).

BOOKS PRESCRIBED
1. Mathematical Analysis-S.C. Mallik, Chapters: 17 and 18 (up to Art 5)
2. Topics of Calculus-Panda and Satapathy, Chapters 6, 7

BOOKS FOR REFERENCE
Vector Analysis with Applications — Ali and Hazra (New Age International)

(B) LINEAR ALGEBRA 50 Marks

Unit-I
Vector spaces, definition and examples, subspaces, span of a set linear dependence and independence, dimension and basis.

Unit-II
Linear transformation, definition and examples, range and kernel, rank and nullity, the space L(U,V), composition of Linear maps, matrix and linear map, linear operations, matrix multiplication, rank and nullity of matrix, transpose of a matrix.

Unit-III

Elementary row operations, systems of linear equations, matrix inversion, determinants minors and rank of a matrix, product of determination, application to linear equations, eigen values and eigen vector.

BOOKS RECOMMENDED

1. An Introduction to Linear Algebra-V.Krishnamurty and others (affiliated East-West Press). Chapters: 3,4(4.1 to 4.7), 5,6(6.5 to 6.8)

BOOKS FOR REFERENCE

1. Basic Structures in Algebra, Part-I, J.N. Patnaik
3. First course in Linear algebra - Bhattacharya Jain and Nagpaul (New Age International)

PAPER-VII 100 Marks

(A) NUMERICAL ANALYSIS 50 Marks

Unit-I

Numerical Analysis and errors, Interpolation
Unit-II
Numerical Integration, solution of Algebraic and transcendental equations.

Unit-III
Solutions of system of linear equations, Numerical solution of ordinary differential equations. (Examinees are allowed to use pocket calculator)

BOOKS PRESCRIBED
Introductory Numerical Analysis-R.N.Jena and N.Dutta (Sridhar Prakashini)
Chapters: 1, 11 (2.1 to 2.9 and 2.13 to 2.16), 111(3.7 to 3.14), IV (4.1 to 4.7) V(5.1 to 5.3),VI (6.1 to 6.3)

BOOKS FOR REFERENCE
2. Fundamentals of Numerical Analysis-Akshay Kumar Ojha (Multisoft Publication)

(B) ABSTRACT ALGEBRA (50 marks)

Unit-IV
Group Theory-Definition and Examples, Sub-groups.

Unit-V
Counting Principles, Normal Subgroups, Quotient Groups, Homomorphism.

Unit-VI
Ring theory-definitions and examples, some special class rings, Homomorphism, Ideals, quotient ring.

Unit-VII
Theory of equations: Roots of an equation, relations between roots and coefficients, sum of powers of roots, symmetric functions, transformation of equations, repeated roots, common roots, some standard reduction of cubic and biquadratic, Cardan's solution of a cubic, Descartes solution of biquadratic.

BOOKS PRESCRIBED

Topics in algebra-I.N.Herstein (Vikas Pub. House) Chapters: I, II(Art 2.1 to 2.7), III(Art 3.1 to 3.4) Text Book of Algebra-Ravindra Kumar and Srikrishna Wasan (Pitambar Publication) Chapter-III(3.1 to 3.9)

BOOKS FOR REFERENCE

1. University Algebra-N.S. Gopalkrishna (Wiley Eastern)

2. Modern Algebra - Vatsa and Vatsa (New Age International)

PAPER-VIII (PRACTICAL) 100 Marks

A student is required to perform two experiments, one from each group, each of three hours duration. A student has to perform at least 70% of the number of experiments prescribed for practical.

First Experiment (Gr.A) 30 marks
Second Experiment (Gr.B) 30 marks
Practical Records 10+10 marks
Viva 10+10 marks
A student shall be required to maintain two records one for each group certified by the teacher and produce them at the time of examination.

**List of Experiments:**

**GROUP-A**

i. Determination of the value of "e" the use of Maclaurins' series,

ii. Finding primes less than or equal to a prescribed number by the shieve method

iii. Numerical solution of polynomial equations correct to desired decimal by linear iteration,

iv. Problem (iii) Above by bisection method

v. Problem (iii) Above by Newton Raphson method

vi. Numerical solution of transcendental equation by the above methods,

vii. Fitting of curves by Lagrange and Newton interpolation method. (Forward and back ward),

viii. Numerical Integration by Composite trapezoidal rule and composite Simpson's rule.

ix. Tracing of curves: Cartenary, clssoid, astrol, cardiode and folium of Descrates.

x. Graphical solution of Linear Prrogramming problems.

**GROUP-B**

*(Programming in C/Fortran/Basic)*

xi. Flow chart and Formation of C / Fortan / BASIC program for searching of primes less than or equal to 'A'.
xii. Write a programme for arranging given numbers in a specific order (ascending or descending).

xiii. Write a programme to evaluate the area under the curve \( Y + ax + b \) and \( X \)-axis between the limits \( X = 0 \) and \( X = 10 \) using trapezoidal rules,

xiv. Write a programme to evaluate the integral \( [f(x) \, dx] \) using Simpson's rule.

xv. Write a programme to solve a quadratic equation.

xvi. Write a programme to evaluate the sum \( N(2n+1) \, (n+1) \).

xvii. Write a programme and draw the flow chart to evaluate the following function for values of \( x = 1 \) to 3 in increments of 0.1 for \( t(x) = 2x^2 + 3x + 4 \) for \( v < 2 = 0 \) for \( x = 2 = -2x^2 + 3x + 3 \) for \( x > 2 \).

xviii. Write a programme to find the product of two matrices,

xix. Write a programme and draw the flow chart to find the Armstrong Number between 1 to 100.

xx. Write a programme and draw the flow chart to find the sum of \( n \) odd / even natural numbers,

xxi. Write a programme to evaluate the series. \( 1 \, / \, 1 - x = 1 + x + x^2 + x^3 + \) for \(-1 > x > 1\) to (0.01)% accuracy.

OR

PAPER-VIII 100 Marks

OPERATION RESEARCH

Unit-I

Introduction definition, modelling characterization methods and scope of OR.

Unit-II
Deterministic Inventory Models: Elementary Inventory Models. Dynamic or Fluctuating Demand Models.

**Unit-III**

Replacement Types of replacement Problems, replace of items that deteriorate, replacement of items that fail completely.

**Unit-IV**

Theory of Games

**Unit-V**

Project Management by PERT-CPM.

**Unit-VI**

Job sequencing.

**BOOKS PRESCRIBED**


Chapters: 1, 19,20 (20.1 to 20.17),22 (22.1 to 22.13 ),23 (23.1 to 23.12 ),24,25 (25.1 to 25.13)

**BOOKS FOR REFERENCE**

Operations Research for Management- Shenoy, Srivastava and Sharma (New Age International)

**SOCIIOLOGY (General)**

<table>
<thead>
<tr>
<th>Paper –I (Pass)</th>
<th>Fundamentals of Sociology</th>
<th>100 marks</th>
</tr>
</thead>
<tbody>
<tr>
<td>Paper-II (Pass)</td>
<td>Society in India</td>
<td>100 marks</td>
</tr>
<tr>
<td>Paper-III (Pass)</td>
<td>Sociology of Social Change</td>
<td>100 marks</td>
</tr>
</tbody>
</table>
Paper-IV (Pass) Social Research Methods 100 marks

Paper-I

Fundamentals of Sociology 100 marks,

3 hours

Unit-I

Meaning, Nature, scope and importance of Sociology, Sociology and Social Sciences.

Unit-II

Society and Individual, Culture and personality, Socialisation Stages, theories and agencies.

Unit-III

Social stratification-Types, Theories, Types of Social Mobility, Status and Role.

Unit-IV


Unit-V

Economy and Society, The concept of property, private property, Merits and Demerits, Types of Exchange.

BOOKS RECOMMENDED:

1. Sociology: Themes and perspectives – Harlambos, M
2. What is Sociology? – Inkeles, Alex
4. Samaja Vigyana – Mishra T
5. Sociology – Parimal Kar, B.

PAPER – II

3 Hours

SOCIETY IN INDIA

Full Marks – 100

Unit-I

Composition of Indian Society, unity, in Diversity.

Unit-II


Unit-III

Basic institutions of Indian Society Caste: Characteristics Functions and change.

Family – Structure and change:

Hindu marriage – Its changing dimensions.

Unit-IV

Status of Hindu and Tribal Women in traditional and contemporary Indian Society.

Unit-V

Scheduled Castes
Scheduled Tribes
Other Backward classes.

BOOKS RECOMMENDED
PAPER – III

(100 MARKS)

SOCIOLOGY OF SOCIAL CHANGE

UNIT-I
Social change – Meaning, nature Social Change, progress and development.

UNIT-II
Theories of Social Change – Evolutionary, Conflict, Deterministic.

UNIT-III
Factors of Social change: Demographic, Technological, Cultural.

UNIT-IV
Processes of Social Change: Sanskritization, Secularization, Modernisation.

UNIT-V
Obstacles of Social change: Psychological, Cultural, Social.

BOOKS RECOMMENDED

1. Sociology of Social change: Mohanty R. N.
3. Samajika Paribartana : Mishra T
4. Social Change: Lappiere, R. T
5. Social Change in Modern India – Srinivas M. N.

PAPER – IV
3 Hours  
SOCIAL RESEARCH METHODS  
Full Marks – 100

**Unit-I**
Social Research : Major steps in Social Research.
Social Methods: Characteristics, Its applicability in the Study of social Phenomena.

**Unit-II**
Hypothesis – Definition, Sources and role of Hypothesis in Social Research.

**Unit – III**
Observation Types and Importance

**Unit-IV**
Questionnaire – Types and Importance.
Interview Schedule – Merits and Demerits.
Questionnaire and schedule, problems of response.

**Unit-V**
Interview- Types and role of Interview
Case study – Sources, Merits and Demerits.

**BOOKS RECOMMENDED:**
2. Methodology and Techniques of Social Research – Bhandarkar and Wilkinson
3. Social Research : K. S. Mothari
5. Parambhika Samajika Pavasana – Mishra T.
B.A. PASS IN EDUCATION
PAPER – I
EDUCATION AND SOCIETY
( 75 MARKS)

COURSE OBJECTIVES:
To enable the students understand:

1. General aims of education along with nature, types and scope of education.
3. Meaning of Social-cultural change, social mobility and role of education in social change and social mobility.
4. The importance of play and activity oriented education and modern methods of teaching:
5. Specific aims of education as per the present day needs.

COURSE CONTENTS:

Unit-I
- Nature and scope of education, Education as a science, Education as a social process, factors of education.
- Aims of education – individual, social vocational and democratic
- Formal, informal and non-formal agencies of education Relation between school and society.
Unit-II


Unit-III

a) Individual development  
b) Transmission of cultural heritage.  
c) Acquisition of skills  
d) Acquisition and generation of human values and  
e) Social Cohesion.

Unit-IV

Factors influencing social-cultural changes, Education as an instrument of social change.  
Indian society-Social stratification and social mobility. Role of education in social mobility.

Unit-V

- Freedom and discipline, need of discipline in and our of school discipline and order, free discipline.  
- Value of education, meaning of human values, their development some transactional strategies.

PAPER-II

EDUCATION AND HUMAN DEVELOPMENT
COURSE OBJECTIVE:

To make the students understand about:

1. The meaning, scope and uses of psychology in education.
2. Human growth and development up to the stage of adolescences.
3. Meaning and purpose of learning and factors influencing learning.
4. The concept of intelligence, its meaning and measurement.
5. Heredity and environment and their roles in causing individual differences.

COURSE CONTENTS:

Unit-I

- Psychology – Its meaning, nature and scoped, Relationship between education and psychology Distinction between psychology.

Unit- II

- Stage of Human development: Infancy, childhood, latency and adolescence their needs, significance and problems. Human development. Development and education, role of educational psychology in understanding the individual.

Unit-III


Unit-IV
Intelligence-concept, definition, theories and measurement.

**Unit-V**

- Heredity and environment and their implications for education.
- Individual differences-causes of individual differences, significance of individual differences and educational implications.

**PRACTICAL – PROJECT WORK**

Each student has to complete by any one project work from the following and prepare a report there of under the guidance of a member of the staff.

The report is to be typed/written in book form or bound form. The project will be evaluated by External and Internal Examiners jointly.

1. Conducting educational survey of a village
2. Maintenance of cumulative record card of 5 students
3. Study of health status and food habits of 10 families
4. Action Research on any significant issue related to education.
5. Case Study of five under-achievers.

**PAPER-III**

**EDUCATION AND INDIAN HERITAGE**

(75 MARKS)

**COURSE OBJECTIVES:**

To enable the students to gain knowledge about:

1. The system of Indian education during Vedic, Buddhist and Medieval periods.
2. Britishers influence on Indian education.
3. Role of Indian thinkers in education during British period.
4. Growth and development of Education since independence.

**Course content:**

**Unit-I**
- Education in India during (a) Vedic (b) Buddhist and (c) Medieval periods.

**Unit-II**
- Maculay’ minutes and Benthick’s resolution of 1835. Adam’s report and its recommendations.
- Wood’s Despatch – 1854

**Unit-III**
- Recommendations of Indian Education commission – 1882 influence on the subsequent development of education.
- Wardha Scheme of Education.

**Unit-IV**

Recommendation of :
- Radhakrishna Commission, 1948
- Mudaliar Commission – 1953
- Kothari Commission – 1964 – 66

**Unit-V**
• Education and national development.

PAPER – IV

EMERGING TRENDS IN INDIAN EDUCATION

(75 MARKS)

Unit- I

Education for national integration.
Education for international understanding
Education for human resource development’
Education and environment awareness population education.

Unit-II

Experiments of Indian thinkers Viz. Gandhi, Tagore, Aurobindo and Gopabandhu and their relevance i the modern context.

Unit-III

Curriculum – Definition, Types of Curriculum, principles of curriculum construction child-centred and life-centred curricular co-curricular activities.

Unit-IV

Minimum Guidance programme-pupil Inventory service, Occupational Information service and counselling service.

Unit-V

PRACTICAL (TEACHING)

Each student has to select one school subject and will be oriented with the importance, objectives and methods of teaching of these subjects by the teachers in a few practical classes in the college. Each student has to prepare ten lesson plans in the subject out of which five must be corrected by the teacher in the practical classes, to be held in the college and five lesson should be delivered in real class-room condition. The Final teaching will be evaluated by both Internal and external examiners according to the scheme of evaluation given below.

A. Assessment of Practical Record - 10 marks
B. Final lesson plan - 10 marks
C. Teaching performance - 10 marks
D. Teaching Aids used - 10 marks
E. Viva-voce on importance, Objectives and Methods of Teaching - 10 marks

Total - 50 marks

B.A. (HONOURS)

EDUCATION

PAPER-I

(PHILOSOPHICAL AND SOCIOLOGICAL FOUNDATION OF EDUCATION)

COURSE OBJECTIVES:
1. To develop understanding of the meaning, aims, objectives; and functions of education.
2. To develop an understanding of the roles of Philosophy and Sociology in Education.
3. To develop an understanding of the attempts of same great educators for the evolution of sound philosophy of education a better understanding of the process of education.
4. To develop understanding of major components in education and their interrelationship.
5. To develop knowledge of the structure and functions of the Society and its process of social interaction for a change towards better human relationship.

**COURSE CONTENTS:**

**Unit-I**

- Concept and scope of Education:
  a) Education as a Science
  b) Education as a Social process
  c) Education as human resource development.

- Aims of Education
  a) Individual and social aims of Education.
  b) Purpose, goals, aims and objectives of education at different levels starting from primary to higher education.

- The function of Education.
a) Individual development (Development of skill, basic knowledge, interest and appreciation).

b) Acquaintance with heritage (preservation and transmission.)

c) Development of human values (Social, Moral and Aesthetic)

d) Acquisition of skills leading to self actualization and successful living.

e) Social cohesion and social progress.

**Unit II**

- Role of Philosophy in Education.
  
a) Science of Education and Philosophy of Education.
  
b) Some major schools of Philosophy; Idealism, Naturalism Realism and pragmatism-their contribution to present day education.
  
c) Emergence of educational thoughts through the works of great educators like Rousseau, J. Dewey, Tagore and Gandhi.

**Unit III**

- Freedom and discipline.
  
a) The concept of freedom and discipline.
  
b) The interrelation between discipline, Liberty and democracy.
  
c) Importance of discipline in social life.

- Components of Education and their relationship.
  
a) Pupils
  
b) Teacher
  
c) Curriculum
d) Educational Institution.

**Unit-IV**

- Nature and scope of educational sociology, Need for sociological approach in Education.
- Education as social heritage, education as an instrument of social change, education as a factor of social change, education as a reflection of social change, Agencies of social change.
  i) School as a social sub system
  ii) Mass media as a social means, Education for socially disadvantaged groups.

**Unit-V**

- Social groups-Primary and Secondary: Social interaction and social stratification.
- Culture-Education and Cultured, Cultural heritage of India, Equalisation of Educational opportunities, problems of Illiteracy and social education, specific problems of education in urban and rural areas, rate of community in solving social problems in the field of education.

**PAPER-II**

**EDUCATIONAL PSYCHOLOGY AND PEDAGOGY**

**COURSE OBJECTIVES:**
1. To initiate students in understanding the structure and functions of higher mental processes.
2. To enable the student in understand the meaning and scope of educational Psychology.
3. To enable them to understand the dimensions of growth (e.g. social, emotional, creative and intellectual) and the causes of individual differences.
4. To enable them to understand different aspects of personality and means of developing an integrated personality.
5. To develop understanding of the process of learning and teaching and problems of learning.
6. To understand the role of the school, the teacher and the environment for the growth of children.
7. To understand the problems of adolescents and role of education in solving those problems.
8. To develop understanding of various theories of teaching.
9. To initiate students to the field of pedagogy.
10. To develop the ability to analyse classroom teaching-learning and the ability of observe classroom behaviour and group dynamics.
11. To develop a positive attitude towards life and the teaching profession.

Unit-I

- Definition of Psychology, Relationship between psychology and Education, Nature, Scope and methods of Educational Psychology applications of
Educational Psychology in teaching-learning and in understanding individual behaviour.

- Psychological basis of human/mental life, functions of the human nervous system and the Endocrine system (Preliminary ideas).
- Meaning of development areas of development-social emotional and intellectual: Fundamentals of plagetian development psychology.
- Adolescence – Psychological characteristics and problem of adolescents, role of education in solving their problems.

**Unit-II**

Concept of Individual Differences:

- Intelligence definition and nature of intelligence, Determinants of intelligence-heredity and environment Theories of Intelligence, Measurement of Intelligence.
- Creativity – Its meaning and nature characteristics of creative person, Relationship between creativity and intelligence and mental health.
- Personality-Definition, meaning and nature, development of personality, type and trial theories of personality.

**Unit-III**


**Unit-IV**
• Science of Teaching – Relation between teaching and learning, factors affecting teaching-process input and output variables, general principles of teaching Maxima of Teaching. Fundamentals of teaching.

Unit-V

• Factors affecting perception, attention and attitude.
• Teaching Methods – Lecture, Demonstration, problem solving and programme instruction, story-telling, function of a teacher as a planner, as a facilitator, as a counsellor, as a researcher.

PAPER – III

DEVELOPMENT OF EDUCATION IN INDIA

COURSE OBJECTIVES:

1. To held students understand the development of education in India in historical perspective.
2. To understand the salient features of education in ancient, medieval and British India.
3. To acquaint with significant points of selected educational documents and reports of these periods.
4. To have an adequate knowledge of the recommendations of various commissions and committees on Indian Education.
5. To compare the different features of Education system of ancient Indian and with those of present system of Education.

COURSE CONTENTS:

Unit-I
• Education in Ancient India. Vedic and Brahmanic period.
  
a) Vedic Education:
   Aims of Education process of education, curriculum and organisation.
  
b) Buddhist Education
   Aims of Education, curriculum, Relevance of concepts like Madhyama pratipada, Pratiyasumutpad. The four internal truths.

  Unit-II

• Education Medieval India:
  Types of Educational Institution. State patronage in Educational Endeavour, Islamic Education. Its salient features, objectives and curriculum.

  Unit-III

• Education in British India:

  Unit-IV

• Development of Indian education during the Post-independence period with special reference to secondary education commission 1952 Kothari

Unit-V

Critical study of the educational thoughts and Practice on the following Educationists.
1. Vivekananda
2. Sri Aurobinda
3. Montesson
4. Froebel

PAPER-IV

EDUCATIONAL EVALUATION AND STATISTICS IN EDUCATION

Course Objectives:
1. To develop understanding of the concepts of measurement and evaluation in the field of education.
2. To acquaint with different types of measuring instruments and their uses.
3. To acquaint with the principles of test construction both educational and psychological. To develop understanding of the concepts of validity and reliability and their importance in education.
4. To develop the ability to organise relevant educational data. To develop the ability to use various statistical measures in analysis and interpretation of education data. To develop the ability to interpret test data results.
5. To develop the ability to represent educational data through graphs. To develop skill in analysing different descriptive measures.

COURSE CONTENTS:
Unit-I
- Meaning and nature of educational measurement—need for measurement in education—concept of evaluation in education – relation between measurement and evaluation, norms, referenced and criterion references tests.

Unit-II
- Measuring instruments and their classification, errors in measurement, types of scales in educational measurement, characteristics of a good measuring instrument –validity, reliability and objectivity-methods of determination. Measurement of interest, attitude and personality-different tools.

Unit-III
- General principles of test construction and standardization scoring of student achievement, methods of interpreting test scores, Reporting test results-cumulative record card.

Unit-IV
- Meaning, nature and scope of educational statistics Sources of educational data and use of educational statistics, Difference between statistics and parameter, significance or statistics.
- Measures of central tendency-its uses and limitations.
- Measures of variability – its use and limitation.
- Concept of normal distribution – properties and uses of normal profitability curve in interpretation of test score. Divergence from normality skewness and kurtosis, derived scores, Linear and normalized – their uses.
Unit-V

• Concept of variable variate – Types of data – Grouped and ungrouped data
  – Graphical presentation of data – pre-diagram, histogram frequency polygon, cumulative frequency graph-Ogive and their uses.
• Bivariate Distribution – Scatter gram. Correlation, computation of coefficients of correlation by rank difference, product moment method interpretation of coefficients of correlations.
• Application of computer in data processing.

PAPER-V

PROJECT WORKS (PRACTICAL)

Each student has to complete two project work one from each group and to prepare reports their on under the guidance of a member of the staff. The reports are to be typed/written book form or bound form. These project will be evaluated by External and Internal Examiners jointly.

GROUP “A”

1. Conducting Educational Survey.
2. Maintenance of Cumulative Record card of five students.
3. Administration and interpretation of a standardised Psychological test and writing the report.
4. Study of wastage and stagnation at the elementary level.
5. Study of Health status and food habits of 20 families.
6. Action research on any significant issues related to education.

GROUP ‘B’

1. Interview schedule
2. Observation schedule
3. Questionnaire
4. Cheek – list
5. Rating scale
6. Adjustment inventories.

PAPER – VI

ISSUES AND TRENDS IN CONTEMPORARY INDIAN EDUCATION

COURSE OBJECTIVES:

1. To develop understanding of significant trends in contemporary education.
2. To develop awareness of various organisation and their role in the implementation of politics and programmes.
3. To locus attention on certain major national and social issues and role of education in relation to them.
4. To acquaint with the role of technology/mass media in spreading education among the masses.
5. To develop understanding of the alternative systems/modes of education and their implications in the Indian scenario.

Unit-I

COURSE CONTENTS.

1. Elementary Education – Aims and objectives, universalisation girls, education problems of non-enrolment and non-retention, functions of DIET, NCERT, SCERT. Operation Blackboard, District primary Education programme.
• Secondary Education – Aims and objectives of general and vocational education, role of NCERT, SCERT, NIEPA, CBSE.

• Higher education – General and Technical Role of UGC, AIU, AICTE, ICSSR, NAAC, Types of universities and equivalent institutes of Higher learning.

**Unit-III**

• Elementary – Non-formal, national Adult Education Programme (NAEP) National literary Education and Further Education (Global and Indian contest)

• Continuing Education – General / Liberal Education through open learning system.

• Life Long Education – Re – Channelling to Formal Education.

**Unit-IV**

• Educational finance in Grant-in-aid system. Population education, family of life and sex education, value oriented education, work experience & SUPW, Environmental education, Education of Women, Education of Minority Community with reference to their aims and objectives methods and problems.

**Unit-V**

• Mass-media, communication process, programming, use of software in education, the programmes conducted by UGC open learning system.

**PAPER – VII**

**EDUCATIONAL MANAGEMENT GUIDANCE AND EDUCATIONAL TECHNOLOGY**

**COURSE OBJECTIVES**
1. To develop knowledge and understanding of the meaning. Scope process and types of management.
2. To develop the ability to identify the roles of participating members (individual or collective) and to plan various institutionalized managerial activities.
3. To develop the ability of making objective decisions in educational management.
4. To enable the students to understand about the concept nature and scope of educational technology.
5. To exceed the students to the basic development in Educational Technology.

GROUP ‘A’
EDUCATIONAL MANAGEMENT

Course contents:

Unit-I
- Concept of Educational Management: Meaning nature and needs and scope.
- Types of Educational Management: Centralised and decentralised, Authoritarian/autocratic and democratic dynamic/creative and Laissez-faired.

Unit-II
- Managerial Behaviour : Factors affecting managerial behaviours personal, social, cultural political institutional etc.
Aspects of institutional management; Curricular and co-curricular programmes, student welfare, auxiliary services including school health services, school plant including equipments and assets, sanitation and beautification, institutional planning, time table, interpersonal relationship, institutional climates and discipline, home, school and community relationship.

Unit-III

- Meaning, nature and scope of guidance.
- Types of guidance – Educational, vocational and personal and their internationship.
- Basic data necessary for guidance-pupils abilities, aptitudes, interests and attitudes, educational attainments and personality traits.
- Counselling – Meaning Nature and types.

Unit-IV

- Communication process: Theory, concept, nature, process, components, types of classroom communication, mass media approach in educational technology.

Unit-V

- System approach to instruction: System approach instructional process, instructional system designing, concept, components physical and human resources steps.

Unit-VI

- Innovation in Educational Technology: programmed learning micro and macro teaching team.
• Personalized system of instruction, computer assisted instruction, simulated teaching-distance teaching.

PAPER-VIII

DEVELOPMENT OF TEACHING SKILLS (PRACTICAL)

Each student has to select one school subjects and will be oriented with the importance, objectives and methods of teaching of those subjects by the teachers in a few practical classes in the college. Each student has to prepare ten lesson plans in each subject out of which five must be connected by the teacher in the practical classes, to be held in the college and five lessons should be delivered in the real class-room, condition. The final teaching in both the subject will be evaluated by both Internal and External examiners according to the scheme of evaluation given below.

A. Assessment of Practical Record. -- 20 marks
B. Final lesson plan -- 20 marks
C. Teaching performance -- 20 marks
D. Teaching Aids used -- 20 marks
E. Viva-voce on Importance, Objectives and Methods of Teaching -- 20 marks

Total -- 100 marks

BOOKS RECOMMENDED

P. I for both (Pass and Honours) and Elective subject.

PAPER – II
(PASS AND HONOURS AND ELECTIVE SUBJECTS)
   New Delhi.
5. Gage, N. L. And Berliner, C : Educational Psychology, Psychology, Houghton Mifflin Co.

EDUCATION (HONOURS)

PAPER –III

(DEVELOPMENT OF EDUCATION IN INDIA)

PASS PAPER-III

EDUCATION AND INDIAN HERITAGE


Education (Honours)
Paper-VI

Issues and Trends in Contemporary Indian Education.


PAPER – VII

EDUCATIONAL MANAGEMENT, GUIDANCE AND EDUCATIONAL TECHNOLOGY


BOOKS RECOMMENDED

FOR PASS PAPER – IV

8. Chakrabarti, M., Philosophy of Education of Rabindra Nath Tagore, Atlantic Publisher and Distributors, New Delhi.
11. Ghash, A., Life Divine, Pondicherry Ashram, India

**HISTORY**

**B.A. EXAMINATION (PASS)**

**2\textsuperscript{ND} YEAR:**

Paper – I - History of India from 6\textsuperscript{th} Century B. C. To 1526 A. D

Paper- II - History of India from 1526 A. D to 1885 A. D

**3\textsuperscript{rd} Year**

Paper-III - History of Freedom movement in India from 1587 to 1947

Paper-IV - History of Orissa from Earliest time to 1936
Paper –I

HISTORY OF INDIA FROM 6TH CENTURY B.C. TO 1526 A.D.

Unit-I

Political Condition of Northern India during the Sixth Century B. C - Sixteen Mohajanapadas – Republican States.

The Mauryas – Chandragupta Maurya – Conquests and Administration

Ashoka, - Kalinga War – Religious Policy – Hist place in History, Decline and fall of the Mauryan Empire.

Unit-II

The Kushanas – Kanishka Military Administrative and cultural Achievement.

The Guptas – Chandragupta-I , Samudragupta – His Conquests , Chandragupta-II. His Conquests and Administration, Gupta Culture.

Unit-III

Harshavardhan – His conquests, Administration, Religious Policy, Literary Activities.

Muslim Invasions: Arab Invasion of Sindh, Mahmud of Ghazani . Invasions, Muhammad of Ghur-Invasions and consequences.

Unit-IV

Foundation of Delhi Sultanate:

Iltutmish – His Achievements

Balban – His Administration

Alaudin Khaliji – His conquests and reforms.

Unit-V

Decline of Delhi Sultanate:

Causes of the decline of Delhi Sultanate.

**SUGGESTED READINGS:**

1. A. L. Basham - The Wonder that was India
2. A. L. Srivastava - Sultanate of Delhi
3. -- Medieval India
4. A. B. Pandey -- Delhi Sultanate
5. Arun Bhattacharya -- History of India
6. D. Behera -- Glimpses of Ancient India
7. H. Kulke & D. Rothermond - History of India
8. H. C. Roy Choudhury -- Political History of Ancient India
9. Iswari Prasad -- A Short History of Muslim rule in India
10. J. L. Mehta -- History of Early Medieval Period
11. K. A. N. Sastri -- A History of South India
12. K. A. N. Sastri (ed.) -- A Comprehensive History of India Vol-II
13. N. N. Ghosh -- Early History of India
14. P. Maiti -- Ancient India
15. -- Medieval India
16. R. K. Mukherjee -- History of Ancient India
17. R. C. Mujumdar -- History of Ancient India
18. -- The classical Accounts of India
19. R. C. Majumdar (ed.) -- History and culture of the India People
Vol. I  The Vedic Age
Vol. II  The Age Imperial Unity
Vol. III The Classical Age
Vol. IV  The age of Imperial Kanauj
Vol. V Delhi Sultanate.

20. R. S. Tripathy -- History of Ancient India
21. ,, ,, -- The age of Imperial Kanauj
22. R. S. Sarma -- Aspects of Political ideas and Institution in Ancient India

23. Ray Chouduury, Majumdar
   And Dutta -- An advanced History of India
24. Romila Thaper -- A History of India
25.,,, -- Ashok and the decline of the Mauryas

26. S.A.A. Rizvi - The Wonder that was India, Vol. II
27. S.N. Sen - Ancient Indian History and Civilization
28. Satish Chandra - Medieval India, From Sultanate to the Mughals.
29. V.A. Smith - Oxford History of India
30. - - Early History of India

PAPER –II
HISTORY OF INDIA FROM 1526 TO 1885 A.D.

Unit-I
Foundation of the Mughal Empire:
Babar-Conquests,
Sher Shah- Achievements

Unit-II
Consolidation of the Mughal Empire:
Akbar: His Conquests, Religious Policy, Rajput Policy, Administration.
Jahangir: Role of Nurjahan
Shah Jahan : Deccan Policy, Achievements.

Unit-III
Decline of the Mughal Empire:
Aurangzeb:-Rajput Policy, Religious Policy, Deccan Policy.
Shivaji- His conflict with the Mughals, Administration

Unit-IV
Foundation of the British Empire:
Robert Clive: Battle of Plessey and his administration.

Unit – V
Consolidation of the British Empire:


SUGGESTED READINGS

1. A. Beveridge - The Emperor Akbar
2. A.B.Pandey - Later Madieval India
3. A.L. Srivastava - The Mughal Empire
4. B.L. Grover - A New look on Modern Indian History
5. Beni Prasad - History of Jahangir
6. Elliot and Dowson - History of India as told by its own Historians
   8 Volumes
7. C.S. Chhabra (ed.) - Advanced study in the History of India, 3 Vols.
9. Iswari Prasad - History of Medieval India
10. J.Ted - The Annals and Antiquities of Rajasthan
12. J.N. Sarkar - Studies in Mughal India
   - History of Aurangzeb
   - The Fall of the Mughal Empire
   - Mughal Administration
   - Shivaji and his times
13. K.A. Nizami - Studies in Medieval Indian History and Culture
<table>
<thead>
<tr>
<th>Author</th>
<th>Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>K.M. Panikkar</td>
<td>Evolution of British Policy towards the Indian States.</td>
</tr>
<tr>
<td>K.R. Qanungo</td>
<td>Sher Shah</td>
</tr>
<tr>
<td>K.S. Lal</td>
<td>Studies in Medieval Indian History</td>
</tr>
<tr>
<td>P. Maitri</td>
<td>Medieval India</td>
</tr>
<tr>
<td>P.E. Roberts</td>
<td>History of British India</td>
</tr>
<tr>
<td>R.P. Tripathy</td>
<td>Rise and Fall of the Mughal Empire</td>
</tr>
<tr>
<td>S. Gopal</td>
<td>British Policy in India, 1858-1905</td>
</tr>
<tr>
<td>S. Lane Poole</td>
<td>Aurnagzeb Medieval Indian Under Mohammadan Rule (A.D. 712-1764)</td>
</tr>
<tr>
<td>S.R. Sharma</td>
<td>Mughal Empire in India</td>
</tr>
<tr>
<td></td>
<td>The Crescent in India</td>
</tr>
<tr>
<td>S.S. Sardesai</td>
<td>The Main Currents of Maratha History</td>
</tr>
<tr>
<td>Sir Welseley Haig</td>
<td>Cambridge History of India, Vol –III</td>
</tr>
<tr>
<td>Sumit Sarkar</td>
<td>Modern India, 1885-1947</td>
</tr>
<tr>
<td>T.G.P. Spear</td>
<td>History of India, Vol. II</td>
</tr>
<tr>
<td>W.H. Morelant</td>
<td>From Akbar to Aurangzeb</td>
</tr>
<tr>
<td>Sahiruddin Faruki</td>
<td>Aurangzeb and his times</td>
</tr>
</tbody>
</table>

**PAPER-III**

**HISTORY OF FREEDOM MOVEMENT IN INDIA**

*(1857-1947 A.D.)*

*Unit-I*
Emergence of Organised Nationalism:

Revolt of 1857- Its nature, causes and effects, Factors responsible for the growth of nationalism.

Unit-II

Foundation of the Indian National Congress:

Role of the Moderates, Role of the Extremists, Partition of Bengal, Swadeshi Movement.

Unit-III

Gandhian Phase:

Khilafat and Non-cooperation Movement, Civil-Disobedience Movement, Quit India Movement.

Unit-IV

Constitutional Developments:


Unit-V

Towards Independence:

**SUGGESTED READINGS**

2. A.R. Desai - *Social Background of Indian Nationalism*
3. B.R. Nanda - *Indian Moderates and the British Raj*
4. Bipin Chandra - *India’s Struggle for Independence*
   - *Nationalism and Colonialism in Modern India*
   - *Communalism in Modern India*
5. Bipin Chandra, Barun De - *Indian Freedom Struggle*
   Amalesh Tripathy
6. G. Pandey - *Indian Nation in 1942*
7. G.N. Singh - *Landmarks in National and constitutional development in India*
8. Hiren Mukherjee - *India’s Struggle for freedom*
9. J.N. Vajpai - *Extremist Movement in India*
10. Jim Masselos - *Indian Nationalism*
11. M.N. Das - *British Versus Indian National Congress*
   - *India under Minto Morley*
12. M.N. Gupta - *History of Indian Revolutionary Movement*
15. R.C. Majumdar - History of Freedom Movement in India 3 Vols.
16. R.C. Majumdar (ed.) - Struggle for Freedom
17. S.N. Sen - History of Freedom Movement in India
18. Sumit Sarkar - Modern India, 1885-1947
19. R.S. Sareen - Indian Revolutionary Movement Abroad

**PAPER-IV**

**HISTORY OF ORISSA FROM EARLIEST TIMES TO 1936**

**Unit-I**

**Sources of Indian History**

Historical Geography - Kalinga, Odra, Tosali, Utkala and Kosala
Kalinga under Ashoka - Kalinga War –Administration
Kharavela - His career and Achievements

**Unit – II**

The Sailodbhavas - Origin, Madhavaraja-II
The Bhaumakaras - Origin, Sivakara Deve-I, Subhakaradeva-I
Tribhubana Mahadevi

The Somavansis - Janamejaya –I, Yayati-I, Yayati –II

**Overseas Contacts of Ancient Orissa**

**Unit- III**

Later Eastern Gangas - Origin, Chodaganga Deva, Anangabhima
Deva – III, Narisimha Deva –I

The Suryavamsi Gahapatis - Kapilendra Deva, Purushottam Deva
And Prataparudra Deva.

Decline of Orissa - i. Mukunda DSeva

ii. Causes of Decline of Odisha

**Unit- IV**

**Socio-Religious Developments in Orissa:**

i. Jainism, Buddhism

ii. Saivism, Shaktism

iii. Vaishnavism, Cult of Jagannath.

**Unit-V**

**British Occupation in Orissa:**

Resistance Movement against the Paik Rebellion,Ghumsur Rebellion
British Rule
Formation of Orissa Province - Role of Madhusudan Das, K.C.

Gajapati

**SUGGESTED READINGS**

1. A.C. Mital - An Early History of Orissa
2. A.K. Panda - Four Hundred Years of Orissa
3. A.K. Pattanayak - Religious Policy of the Imperial Guptas
4. A.K. Rath - Some aspects of History and Culture of Orissa
5. A.P. Shah - Life in Medieval Orissa
6. B.C. Ray - Orissa under the Mughals
7. - - Orissa under the Marathas
8. - - Foundation of British Rule
9. B.K. Rath - Cultural History of Orissa
10. B.K. Sarma - Somavamsi Rule in Orissa
11. Biswarup Das - Bhaumakaras: The Buddhist kings of Orissa
12. Bishnu Prasad Panda - Orissa History
13. C.V. Ramachandra - Administration and the Society in the Andhra under the later Eastern Gangas and the Suryavamsi Gajapatis
14. D.K. Ganguly - Historical Geography and Dynastic History of Orissa
<table>
<thead>
<tr>
<th>No.</th>
<th>Author(s)</th>
<th>Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>16</td>
<td>Herman Kulke, et. al</td>
<td>The Cult of Jagannath and Regional Traditions of Orissa</td>
</tr>
<tr>
<td>17</td>
<td>J. Pattnaik</td>
<td>Feudatory States of Orissa, Vol-I &amp; II</td>
</tr>
<tr>
<td>18</td>
<td>J.K. Samal</td>
<td>Orissa under the British Crown</td>
</tr>
<tr>
<td>19</td>
<td>K.C. Jena</td>
<td>Ascendancy of British Raj in Orissa</td>
</tr>
<tr>
<td>20</td>
<td>K.C. Mishra</td>
<td>The Cult of Jagannath</td>
</tr>
<tr>
<td>21</td>
<td>K.C. Panigrahy</td>
<td>History of Orissa</td>
</tr>
<tr>
<td></td>
<td></td>
<td>- Chronology of the Bhaumakaras and Somavamisis.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>- Archaeological Remains at Bhubaneswar</td>
</tr>
<tr>
<td>22</td>
<td>K.M. Patra</td>
<td>Orissa under the East India Company</td>
</tr>
<tr>
<td>23</td>
<td>L.K. Panda</td>
<td>Saivism in Orissa</td>
</tr>
<tr>
<td>24</td>
<td>L.N. Raut</td>
<td>Socio-Economic Life in Medieval Orissa</td>
</tr>
<tr>
<td>25</td>
<td>M.M. Ganguly</td>
<td>Orissa and her Remains</td>
</tr>
<tr>
<td>26</td>
<td>M.N. Das (ed)</td>
<td>Sidelights on the History and Culture of Orissa</td>
</tr>
<tr>
<td>28</td>
<td>-</td>
<td>Buddhism in Orissa</td>
</tr>
<tr>
<td>29</td>
<td>N.R. Patnaik</td>
<td>Economic History of Orissa</td>
</tr>
<tr>
<td>30</td>
<td>P. Mukherjee</td>
<td>History of Gajapati Kings of Orissa.</td>
</tr>
<tr>
<td>31</td>
<td>-</td>
<td>Medieval Vaishnavism in Orissa</td>
</tr>
<tr>
<td>32</td>
<td>P.K. Mishra and J.K. Samal (ed)</td>
<td>Comprehensive history of Orissa</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Vol-I (Part I&amp;II)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Vol-II (Part I&amp;II)</td>
</tr>
<tr>
<td>Authors</td>
<td>Books/Subjects</td>
<td></td>
</tr>
<tr>
<td>--------------------</td>
<td>-------------------------------------------------------------------------------</td>
<td></td>
</tr>
<tr>
<td>R. Subba Rao</td>
<td>History of Eastern Gangas of Kalinga</td>
<td></td>
</tr>
<tr>
<td>R. Subramanyam</td>
<td>Suryavamsi Gajapatis of Orissa</td>
<td></td>
</tr>
<tr>
<td>R.C. Majumdar</td>
<td>Surarnadvipa</td>
<td></td>
</tr>
<tr>
<td>R.D. Banerjee</td>
<td>History of Orissa Vol I &amp; II</td>
<td></td>
</tr>
<tr>
<td>R.L. Misra</td>
<td>Antiquities of Orissa Vol I &amp; II</td>
<td></td>
</tr>
<tr>
<td>R.P. Malhotra</td>
<td>Archaeology of Orissa Vol I &amp; II</td>
<td></td>
</tr>
<tr>
<td>S.C. Behera</td>
<td>Rise and fall of Sailodhavas</td>
<td></td>
</tr>
<tr>
<td>S.C. Padhi</td>
<td>British Relation with the Chiefs and Rajas of Orissa</td>
<td></td>
</tr>
<tr>
<td>S.K. Panda</td>
<td>Political and Cultural History of Orissa</td>
<td></td>
</tr>
<tr>
<td>S. C. Padhi</td>
<td>Medieval Orissa- A Socio Economic Study</td>
<td></td>
</tr>
<tr>
<td>S. N. Rajguru</td>
<td>History of Gangas Part I &amp; II</td>
<td></td>
</tr>
</tbody>
</table>

**HISTORY**

**B.A. Examination (Hons.)**

<table>
<thead>
<tr>
<th>Paper</th>
<th>Subjects</th>
</tr>
</thead>
<tbody>
<tr>
<td>I</td>
<td>Cultural History of India</td>
</tr>
<tr>
<td>II</td>
<td>History of Modern Europe – 1789 to 1918</td>
</tr>
<tr>
<td>III</td>
<td>History of India from 6th Century B.C. to 1526 A.D.</td>
</tr>
<tr>
<td>IV</td>
<td>History of India from 1526 A.D. to 1885 A.D.</td>
</tr>
<tr>
<td>V</td>
<td>Western World from 15th to 19th Centuries A.D.</td>
</tr>
</tbody>
</table>
Paper – VI  History of Freedom Movement in India from 1857-1947
Paper – VII  History of Orissa from Earliest times to 1936

PAPER-I

CULTURAL HISTORY OF INDIA

Unit-I

General Features of Indian Culture - Unity in Diversity

Legacy of the Indus Valley Culture - Features of the Urban life, Religious Practices and beliefs Art, Architecture and Script

Vedic Age - Polity, Social Formation, Caste System and Religious practices and Literature.

Unit-II

Religious Movements in the Sixth Century B.C.

Jainism and Buddhism - Emergence and impact

Kushana Culture - Cultural Synthesis, Gandhara School of Art, Hellenism in India

Unit – III
Gupta Culture – Development of Art, Architecture, Sculpture, Religion, Science and Literature

Hindu Cultural Expansion - South East Asia

Unit-IV


Unit-V

Socio Religious Reform Movements: Raja Rammohan Ray and Brahmo Samaj, Dayanand Saraswati and Arya Samaj, Ramakrishna, Vivekananda and Ramakrishna Mission.

Rise of Modern Education and press.

SUGGESTED READINGS;

1. A.L. Basham - The Wonder that was India
   - A Cultural History of India
2. A.L. Srivastava - Medieval Indian Culture
3. B.N. Lunia - Evolution of Indian Culture
   Life and Culture in Ancient India
<table>
<thead>
<tr>
<th>No.</th>
<th>Author(s)</th>
<th>Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>4.</td>
<td>Bipan Chandra</td>
<td>Rise and Growth of Economic Nationalism in India</td>
</tr>
<tr>
<td>5.</td>
<td>D.D. Kosambi</td>
<td>The Culture and Civilisation of Ancient India</td>
</tr>
<tr>
<td>6.</td>
<td>K.K. Dutta</td>
<td>Social History of Modern India</td>
</tr>
<tr>
<td>7.</td>
<td>K.M. Panikkar</td>
<td>Survey of Indian History</td>
</tr>
<tr>
<td>8.</td>
<td>K.N. Chitnis</td>
<td>Socio-economic History of Medieval India</td>
</tr>
<tr>
<td>9.</td>
<td>K.P. Jayaswal</td>
<td>Hindu Polity</td>
</tr>
<tr>
<td>10.</td>
<td>M.P. Srivastava</td>
<td>Society and Culture in Medieval India.</td>
</tr>
<tr>
<td>11.</td>
<td>P. N. Chopra</td>
<td>Society and Culture during the Mughal Age</td>
</tr>
<tr>
<td>12.</td>
<td>P. N. Chopra, B.N. Puri &amp; M.N. Das</td>
<td>A Social, Cultural and Economic History of India</td>
</tr>
<tr>
<td>13.</td>
<td>P.N. Ojha</td>
<td>Aspects of Medieval Society and Culture</td>
</tr>
<tr>
<td>14.</td>
<td>R.C. Dutta</td>
<td>Economic History of</td>
</tr>
<tr>
<td>15.</td>
<td>R.C. Majumdar (ed.)</td>
<td>The Vedic Age</td>
</tr>
<tr>
<td>17.</td>
<td>R.S. Sharma</td>
<td>Social Changes in Early Medieval India</td>
</tr>
<tr>
<td>18.</td>
<td>R.S. Sharma</td>
<td>Sudras in Ancient India</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Indian Feudalism, Origin of State</td>
</tr>
<tr>
<td>19.</td>
<td>S. Chattopadhyaya</td>
<td>Social Life in Ancient India</td>
</tr>
<tr>
<td>20.</td>
<td>S.A.A. Rizvi</td>
<td>The wonder that is India</td>
</tr>
</tbody>
</table>
21. S.C. Raychoudhury - Social, Cultural and Economic History of Ancient India

22. S.R. Singh - Nationalism and Social Reform in India

23. Salotore - Economic History of Ancient India

24. Tarachand - Influence of Islam on Indian Culture

PAPER-II

HISTORY OF MODERN EUROPE: 1789-1918.

Unit-I

French Revolution:

Crisis of Ancient Regime Intellectual Current Participation of Social Classes
Role of Women.

Emergence of Napoleon Bonapart – Expansion, Consolidation and downfall.

Unit-II

Congress of Vienna and the concert of Europe:

Era of Metternich – Forces of Conservatism and Restoration of Old Hierarchies.

Unit-III

Crimean War - Causes and Consequences

Napoleion III- Second Empire, home and Foreign Policies.

Czar Alexander II of Russia-Reforms
Unit-IV

Making of the Nation States: Italy and Germany.

Unit-V

Europe between 1871-1914: Bismarkian Diplomacy and System of Alliances

Causes of the First World War

Russian Revolution of 1917: Causes and Effects.

SUGGESTED READINGS

1. Albert Soboul - History of French Revolution
2. Andrew Porter - European Imperialism
3. C.D. Hazen - Modern Europe upto 1945
5. C.J.H. Hayes - History of Modern Europe Vol-I & II
6. David Thomson - Europe since Napoleon
7. E. Lipson - Europe since Napoleon
8. Grant and Temperley - Europe in the 19th and 20th Centuries
9. H.A. L Fisher - History of Europe
10. J.M. Roberts - Europe 1880-1945
11. L. Mukherjee - History of Modern Europe
12. L.G.B Seaman - From Vienna to Versailles
13. Michael Vovelle - Fall of the French Monarchy
14. P. Maiti - History of Europe
15. Seton Watson - The Russian Empire

PAPER – III

HISTORY OF INDIA FROM 6th CENTURY B.C. TO 1526 A.D.

Unit –I

Political Condition of Northern India during the Sixth Century B.C. – Sixteen Mahajanapadas- Republican States

The Mauryas- Chandragupta Maurya- Conquests and Administration Ashoka, Kalinga war- Religious policy – His place in History Decline and Fall of the Mauryan Empire.

Unit-II

The Kushanas- Kanishka: His Military, Administrative & Cultural Achievement.

The Guptas- Chandragupta-I, Samudragupta- His Conquests, Chandragupta-II: His Conquests and Administration, Gupta Culture.

Unit- III

Harshavardhan: His Conquests, Administration, Religious Policy, Literary Activities.

Unit –IV

Foundation of Delhi Sultans:

Iltutmish-His Achievements

Balban- His Administration

Alauddin Khaliji_ His Conquests and Reforms.

Unit- V

Decline of Delhi Sultanate:

Muhammad-bin-Tughluq – His experiments of Administrative reforms-failures.

Causes of the Decline of the Delhi Sultanate.

SUGGESTED READINGS

1. A.L. Basham - The wonder that was India
2. A.L. Srivastava - Sultanate of Delhi
3. - Medieval India
4. A.B. Pandey - Delhi Sultanate
5. Arun Bhattacharya - History of India
6. D.Behera - Glimpses of Ancient India
7. H. Kulke & D. Rothermond - History of India
8. H.C. Roychoudhury - Political History of Ancient India
9. Iswari Prasad - A short History of Muslim rule in India
10. J.L. Mehta - History of early Medieval Period
<table>
<thead>
<tr>
<th></th>
<th>Author</th>
<th>Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>11.</td>
<td>K.A.N. Sastri</td>
<td>A. History of South India</td>
</tr>
<tr>
<td>12.</td>
<td>K.A.N. Sastri (ed.)</td>
<td>A Comprehensive History of India, Vol-II</td>
</tr>
<tr>
<td>13.</td>
<td>N.N. Ghosh</td>
<td>Early History of India</td>
</tr>
<tr>
<td>14.</td>
<td>P.Maiti</td>
<td>Ancient India</td>
</tr>
<tr>
<td>15.</td>
<td></td>
<td>Medieval India</td>
</tr>
<tr>
<td>16.</td>
<td>R.K. Mukherjee</td>
<td>History of Ancient India</td>
</tr>
<tr>
<td>17.</td>
<td>R.C. Majumdar</td>
<td>History of Ancient India</td>
</tr>
<tr>
<td>18.</td>
<td></td>
<td>The Classical Accounts of India</td>
</tr>
<tr>
<td>19.</td>
<td>R.C. Majumdar (ed)</td>
<td>History and Culture of the Ancient Indian people</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Vol. I- The Vedic Age</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Vol. II- The Age Imperial Unity</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Vol. III – The Classical Age</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Vol. IV- The Age of imperial Kanauj</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Vol. V- Delhi Sultanate</td>
</tr>
<tr>
<td>20.</td>
<td>R.S. Tripathy</td>
<td>History of Ancient India</td>
</tr>
<tr>
<td>21.</td>
<td></td>
<td>The Age of Imperial Kanauj</td>
</tr>
<tr>
<td>22.</td>
<td>R.S. Sarma</td>
<td>Aspects of Political ideas and Institutions in Ancient India</td>
</tr>
<tr>
<td>23.</td>
<td>Ray Choudhury, Majumdar &amp; Datta</td>
<td>An Advanced History of India</td>
</tr>
<tr>
<td>24.</td>
<td>Romila Thaper</td>
<td>A History of India</td>
</tr>
</tbody>
</table>
25.- Ashok and the decline of the Mauryan Empire.

26. S.A.A. Rizvi - The Wonder that was India, Vol. II

27. S.N. Sen - Ancient Indian History and Civilization

28. Satish Chandra - Medieval India, From Sultanate to the Mughals.

29. V.A. Smith - Oxford History of India

30. Early History of India

PAPER - IV

HISTORY OF INDIA FROM 1526 TO 1885 A.D.

Unit-I

Foundation of the Mughal Empire:

Babar-Conquests, Sher Shah- Achievements

Unit-II

Consolidation of the Mughal Empire:

Akbar- His Conquests, Religious Policy, Rajput Policy, Administration.

Jahangir- Role of Nurjahan

Shah Jahan – Deccan Policy, Achievements.

Unit-III

Decline of the Mughal Empire
Aurangzeb- Rajput Policy, Religious Policy, Deccan Policy.

Shivaji- His conflict with the Mughals, Administration

**Unit-IV**

Foundation of the British Empire:

Robert Clive- Battle of Plassey and his administration.


**Unit – V**

Consolidation of the British Empire:


**SUGGESTED READINGS**

1. A. Beveridge - The Emperor Akbar
2. A.B.Pandey - Later Medieval India
3. A.L. Srivastava - The Mughal Empire
4. B.L. Grover - A New look on Modern Indian History
5. Beni Prasad - History of Jahangir
6. Elliot and Dowson - History of India as told by its own Historians 8 Volumes
<table>
<thead>
<tr>
<th></th>
<th>Author</th>
<th>Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>7</td>
<td>C.S. Chhabra (ed.)</td>
<td>Advanced study in the History of India, 3 Vols.</td>
</tr>
<tr>
<td>8</td>
<td>H.H. Dodwell</td>
<td>Cambridge History of India. Vol. V and VI.</td>
</tr>
<tr>
<td>9</td>
<td>Iswari Prasad</td>
<td>History of Medieval India</td>
</tr>
<tr>
<td>10</td>
<td>J.Ted</td>
<td>The Annals and Antiquities of Rajasthan</td>
</tr>
<tr>
<td>11</td>
<td>J.L. Mehta</td>
<td>History of Medieval India, 2 Vols.</td>
</tr>
<tr>
<td>12</td>
<td>J.N. Sarkar</td>
<td>Studies in Mughal India</td>
</tr>
<tr>
<td></td>
<td></td>
<td>- History of Aurangzeb</td>
</tr>
<tr>
<td></td>
<td></td>
<td>- The Fall of the Mughal Empire</td>
</tr>
<tr>
<td></td>
<td></td>
<td>- Mughal Administration</td>
</tr>
<tr>
<td></td>
<td></td>
<td>- Shivaji and his times</td>
</tr>
<tr>
<td>13</td>
<td>K.A. Nizami</td>
<td>Studies in Medieval Indian History and Culture</td>
</tr>
<tr>
<td>14</td>
<td>K.M. Panikkar</td>
<td>Evolution of British Policy towards the Indian States.</td>
</tr>
<tr>
<td>15</td>
<td>K.R. Qanungo</td>
<td>Sher Shah</td>
</tr>
<tr>
<td>16</td>
<td>K.S. Lal</td>
<td>Studies in Medieval Indian History</td>
</tr>
<tr>
<td>17</td>
<td>P.Maitri</td>
<td>Medieval India</td>
</tr>
<tr>
<td>18</td>
<td>P.E.Roberts</td>
<td>History of British India</td>
</tr>
<tr>
<td>19</td>
<td>R.P. Tripathy</td>
<td>Rise and Fall of the Mughal Empire</td>
</tr>
<tr>
<td>20</td>
<td>S.Gopal</td>
<td>British Policy in India, 1858-1905</td>
</tr>
<tr>
<td>21</td>
<td>S. Lane Poole</td>
<td>Aurnagzeb Medieval Indian Under Mohammadan Rule (A.D. 712-1764)</td>
</tr>
<tr>
<td>22</td>
<td>S.R. Sharma</td>
<td>Mughal Empire in India</td>
</tr>
</tbody>
</table>
23. S.S. Sardesai - The Main Currents of Maratha History
25. Sumit Sarkar - Modern India, 1885-1947
26. T.G.P. Spear - History of India, Vol. II
27. W.H. Morelant - From Akbar to Aurangzeb
28. Sahiruddin Faruki - Aurangzeb and his times

PAPER –V

WESTERN WORLD FROM 15th TO 19th CENTURIES A.D.

Unit- I

Feudalism in Europe - Origin, Growth and Decline
Geographical Discoveries - Columbus, Vascodagama
Renaissance - Social Roots, Humanism, art and Spread in Europe
Reformation - Origin, Course, Results.

Unit-II

Thirty year’s War - Significance
Commercial Revolution - Mercantilism in Europe.
Beginning of Colonialism - Spain, Portugal, Holland, England, France

Unit-III

Conflict between king and parliament during 1st half of 17th century in Britain
Constitutional Experiments of Oliver Cromwell
Glorious Revolution – Nature and Effects
British Reform Act of 1882

**Unit-IV**

American War of Independence - Colonial Background, R.
Evolutionary Groups
Sectional conflicts and The Civil War- Basic and Conflicts, Issues and Interpretation.
Role of Abraham Lincoln in the emancipation of Slavery

**Unit-V**

Scientific Revolution - Industrial Revolution
- Agricultural Revolution
- Emergence of New Social Classes

**SUGGESTED READINGS:**

1. C.D. Hazen - History of Modern Europe
2. C.H.C Blount - Davi’s Outline History of the World
3. C.M. Cipolla - Before the Industrial Revolution
4. Carter and Mears - History of Britain
5. Dexter Perkins and G.V. Dauson - The United States of America-A History, Vo. I&II
6. Elson - History of the United States
8. G.R. Elton - Reformation in Europe
9. M. Miskimin - The Economy of later Renaissance Europe
11. J.E. Swain - A History of world civilization
12. James Randal - The Civil war and Reconstuction
13. L. Mukherjee - British History
14. M.S. Anderson - Europe in Eighteenth Century
15. P. Maiti - History of Europe
17. Ramasay Muri - British History
18. Tripathy, Dwilendra and S.C. Tiwari: - Themes and Perspectives in American History
19. Vernan Louis Parrington - Main Currents of American Thought
20. Warner, Martin and Muir - The New Ground work of British

PAPER-VI

HISTORY OF FREEDOM MOVEMENT IN INDIA

(1857-1947 A.D.)

Unit-I

Emergence of Organised Nationalism:

Revolt of 1857- Its nature, causes and effects, Factors responsible for the growth of nationalism.

Unit-II

Foundation of the Indian National Congress:

Role of the Moderates, Role of the Extremists, Partition of Bengal, Swadeshi Movement
Unit-III

Gandhian Phase: Khilafat and Non-cooperation Movement, Civil-Disobedience Movement, Quit India Movement.

Unit-IV

Constitutional Developments:


Unit-V

Towards Independence:


SUGGESTED READINGS

2. A.R. Desai - Social Background of Indian Nationalism
3. B.R. Nanda - Indian Moderates and the British Raj
4. Bipin Chandra - India’s Struggle for Independence
   - Nationalism and Colonialism in Modern India
   - Communalism in Modern India
5. Bipin Chandra, Barun De - Indian Freedom Struggle
   Amalesh Tripathy
6. G. Pandey - Indian Nation in 1942
7. G.N. Singh - Landmarks in National and constitutional development in India
8. Hiren Mukherjee - India’s Struggle for freedom
9. J.N. Vajpai - Extremist Movement in India
10. Jim Masselos - Indian Nationalism
11. M.N. Das - British Versus Indian National Congress
   - India under Minto Morley
12. M.N. Gupta - History of Indian Revolutionary Movement
15. R.C. Majumdar - History of Freedom Movement in India 3 Vols.
16. R.C. Majumdar (ed.) - Struggle for Freedom
17. S.N. Sen - History of Freedom Movement in India
18. Sumit Sarkar - Modern India, 1885-1947
19. R.S. Sareen - Indian Revolutionary Movement Abroad

PAPER -VII

HISTORY OF ORISSA FROM EARLIEST TIMES TO 1936

Unit-I

Sources of Indian History
<table>
<thead>
<tr>
<th>Historical Geography</th>
<th>Kalinga, Odra, Tosali, Utkala and Kosala</th>
</tr>
</thead>
<tbody>
<tr>
<td>Kalinga under Ashoka</td>
<td>Kalinga War – Administration</td>
</tr>
<tr>
<td>Kharavela</td>
<td>His career and Achievements</td>
</tr>
</tbody>
</table>

**Unit – II**

<table>
<thead>
<tr>
<th>The Sailodbhavas</th>
<th>Origin, Madhavaraja-II</th>
</tr>
</thead>
<tbody>
<tr>
<td>Manabhita Dharmaraja</td>
<td></td>
</tr>
<tr>
<td>The Bhaumakaras</td>
<td>Origin, Sivakara Deve-I, Subhakaradeva-I</td>
</tr>
<tr>
<td>Tribhubana Mahadevi</td>
<td></td>
</tr>
<tr>
<td>The Somavansis</td>
<td>Janamejaya –I, Yayati-I, Yayati –II</td>
</tr>
</tbody>
</table>

**Overseas Contacts of Ancient Orissa**

**Unit- III**

<table>
<thead>
<tr>
<th>Later Eastern Gangas</th>
<th>Origin, Chodaganga Deva, Anangabhima</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Deva – III, Narisimha Deva –I</td>
</tr>
<tr>
<td>The Suryavamsi Gajapatis</td>
<td>Kapilendra Deva, Purushottam Deva</td>
</tr>
<tr>
<td></td>
<td>and Prataparudra Deva.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Decline of Orissa</th>
<th>i. Govindavidyadhara</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>ii. Mukunda Deva</td>
</tr>
</tbody>
</table>

**Unit- IV**

**Socio-Religious Developments in Orissa:**
Jainism, Buddhism Shaktism Vaishnavism,
Cult of Jagannath.

Unit-V

British Occupation in Orissa:

Resistance Movement against the British Rule Paik Rebellion, Ghumsur Rebellion
Surendra Sai

Formation of Orissa Province Role of Madhusudan Das, K.C.
Gajapati

SUGGESTED READINGS

1. A.C. Mital - An Early History of Orissa
2. A.K. Panda - Four Hundred Years of Orissa
3. A.K. Pattanayak - Religious Policy of the Imperial Guptas
4. A.K. Rath - Some aspects of History and Culture of Orissa
5. A.P. Shah - Life in Medieval Orissa
6. B.C. Ray - Orissa under the Mughals
7. - Orissa under the Marathas
8. - Foundation of British Rule
9. B.K. Rath - Cultural History of Orissa
10. B.K. Sarma - Somavamsi Rule in Orissa
11. Biswarup Das - Bhaumakaras: The Buddhist kings of Orissa
12. Bishnu Prasad Panda - Orissa History
<table>
<thead>
<tr>
<th>No.</th>
<th>Author</th>
<th>Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>13.</td>
<td>C.V. Ramachandra</td>
<td>Administration and the Society in the Andhra under the later Eastern Gangas and the Suryavamsi Gajapatis</td>
</tr>
<tr>
<td>14.</td>
<td>D.K. Ganguly</td>
<td>Historical Geography and Dynastic History of Orissa</td>
</tr>
<tr>
<td>16.</td>
<td>Herman Kulke, et. Al</td>
<td>The Cult of Jagannath and Regional Traditions Of Orissa</td>
</tr>
<tr>
<td>18.</td>
<td>J.K. Samal</td>
<td>Orissa under the British Crown</td>
</tr>
<tr>
<td>19.</td>
<td>K.C. Jena</td>
<td>Ascendency of British Raj in Orissa</td>
</tr>
<tr>
<td>20.</td>
<td>K.C. Mishra</td>
<td>The Cult of Jagannath</td>
</tr>
<tr>
<td>21.</td>
<td>K.C. Panigrahy</td>
<td>History of Orissa</td>
</tr>
<tr>
<td></td>
<td></td>
<td>- Chronology of the Bhaumakaras and Somavamisis.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>- Archaeological Remains at Bhubaneswar</td>
</tr>
<tr>
<td>22.</td>
<td>K.M. Patra</td>
<td>Orissa under the East India Company</td>
</tr>
<tr>
<td>23.</td>
<td>L.K. Panda</td>
<td>Saivism in Orissa</td>
</tr>
<tr>
<td>24.</td>
<td>L.N. Raut</td>
<td>Socio-Economic Life in Medieval Orissa</td>
</tr>
<tr>
<td>25.</td>
<td>M.M. Ganguly</td>
<td>Orissa and her Remains</td>
</tr>
</tbody>
</table>
26. M.N. Das (ed) - Sidelights on the History and Culture of Orissa


28. - - Buddhism in Orissa

29. N.R. Patnaik - Economic History of Orissa


31. - - Medieval Vaishnavism in Orissa

32. K. Mishra and J.K. Samal (ed) - Comprehensive History of Orissa
   Vol-I (Part I & II)
   Vol-II (Part I & II)

33. R. Subba Rao - History of Eastern Gangas of Kalinga

34. R. Subramanyam - Suryavamsi Gajapatis of Orissa

35. R.C. Majumdar - Surarnadvipa


39. S.C. Behera - Rise and fall of Sailodhavas

40. S.C. Padhi - British Relation with the Chiefs and Rajas of Orissa

41. S.K. Panda - Political and Cultural History of Orissa

42. - - Medieval Orissa - A Socio Economic Study

43. S. N. Rajguru - History of Gangas Part I & II

PAPER – VIII
<table>
<thead>
<tr>
<th>Unit-I</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Paris Conference</td>
<td>Treaty of Versailles</td>
</tr>
<tr>
<td>League of Nations</td>
<td>Organisation and Failure</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Unit-II</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>French Search for Security</td>
<td>Locarno Pact, Kellogg-Briand pact</td>
</tr>
<tr>
<td>Mussolini</td>
<td>Rise to power, Domestic and Foreign Policies</td>
</tr>
<tr>
<td>Hitler</td>
<td>Rise to Power Domestic and Foreign Policies</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Unit- III</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Washington Conference</td>
<td></td>
</tr>
<tr>
<td>Mustafa Kamal Pasha</td>
<td>Domestic and Foreign Polities</td>
</tr>
<tr>
<td>Causes of the Second World War</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Unit- IV</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>United Nations Organizations</td>
<td>Origin and Objectives</td>
</tr>
<tr>
<td>Cold War and Military Alliances</td>
<td>NATO and Warsaw Pact</td>
</tr>
<tr>
<td>Non-Aligned Movement</td>
<td>Origin and Objectives</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Unit- V</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Indo-Pak Relations</td>
<td></td>
</tr>
<tr>
<td>Gorbochov Phenomenon and the Disintegration of Soviet Union,</td>
<td></td>
</tr>
</tbody>
</table>
SAARC: Origin, Aims and Objectives.

SUGGESTED READINGS

1. A.C. Ray - International Relations
2. A.D. Taynbee - Survey of International Affairs
3. A.K. Sen - International Relations
4. Charles H. Heimaath & Surjeet Mansingh - A Diplomatic History of Modern India
5. D. Thompson - Europe since Napoleon
6. D.C. Jha - Indo-Pakistan Relations
7. E. Lipson - Europe in the 19th and 20th Centuries
8. E.H. Carr - International Relations between two World Wars
9. G.A. Craig - Europe Since 1914
10. G.D. Laswell - Scientific study of International Relations
11. Gathrone Hardy - International Relations
12. H.J. Morgenthman - Politics of the Third World
13. J.w. Burton - International Relations
14. Lee Bens - Europe Since 1914
15. M.G. Gupta - International Relations
17. Palmer and Parkins - International Relations
18. Percival Spear - India Pakistan and the West
19. Peter Volcoarezi - World Politics since 1945
20. R. Jaipal - Non-Alignment - Origin, Growth and world Peace
21. S.P. Nanda - History of Modern World
22. S.W. Dhar - International Relations
24. U.S. Bajpayee (ed) - Non-Alignment, Perspectives and Prospects
25. V.K. Malhotra - International Relations
26. W. Norman Brown - The United States and India and Pakistan
27. W.C. Langsam - The World since 1919

HOME SCIENCE (PASS)
THIRD YEAR DEGREE COURSE
SECOND YEAR EXAMINATION

(Two theory and one Practical paper)

Paper-1 Food and Nutrition 75 marks
Paper-2 Child Development 75 marks
Paper-III (Practical) Nutrition and Tailoring 50 marks

THIRD YEAR EXAMINATION
(Two theory and one practical paper)

Paper-IV Home Management and Family studies 75 marks
Paper-V Extension Education Textile & Laundry 75 marks
Paper-VI Textile, Home Management and
Extension Education (Practical) 50 marks

Total 400 marks
Paper – I (Theory)

Unit-I

(Food and Nutrition)

Full Marks – 75 (Time – 3 hours)

1. Definition, classification and functions of foods.

2. Study of nutritive constituents of food.
   a) Classification function, sources, requirements, fats and carbohydrates.
   b) Classification of vitamins – Fat soluble vitamin and water soluble vitamin, functions, sources, requirements of fat soluble vitamins A, D, E, & K and water soluble vitamins B₁, B₂, Niacin, B₁₂ and C.
   c) Functions, sources and requirements of minerals-Calcium, Iron, Iodine.

Unit-II

3. Study of food stuffs:
   a) Cereals – Structure and nutritive value of cereals-Rice, Wheat, maize and ragi.
   b) Pulses – Nutritive value of pulses, importance in diet.
   c) Vegetables – Classification and nutritive value of vegetables.
   d) Fruits – Importance of fruits in human diet.
   e) Fleshy food – Nutritive value and types of fleshy food-Meat, fish and poultry.
   f) Egg – Composition and nutritive value of egg.
g) Milk ad milk products – Nutritive value of cows milk, Buffalo’s milk and goat’s milk, processing of milk.

Unit-III

4. Methods of cooking – Classification and advantages, disadvantages of different methods of cooking.

5. Food preservation – Importance, principles and methods of food preservation – Dehydration, refrigeration, chemical preservation, use of oil and spices and sterilization by cooking.

Unit-IV


7. Study of daily dietary allowance of nutrients recommended by ICMR for normal healthy individuals of different age groups, their importance.

Unit-V

8. Balanced diet – Importance and balanced diet for normal pre-school child, adolescent boys and girls, adult man women of different work habit.


Time – 3 hours

PAPER – II (THEORY) FULL MARKS-75

CHILD DEVELOPMENT

UNIT-I

1. Definition and principles of child development.
2. Prenatal growth and development – Importance of fertilisation, stages and factors influencing prenatal development.

**Unit-II**

3. Development from birth to two years of age, physical development, growth cycles, body size, Body proportion, bones, teeth, fat and muscle.


**Unit-III**

5. Emotional development – Definition, characteristics of childhood, emotions, common emotional pattern, factors influencing emotional development.


**Unit-IV**

7. Speech development – Meaning; pre-speech forms of communication, major tasks in learning to speak; common speech disorders: factors influencing speech development.

8. Childhood interest- Importance of interest, types of childhood interest like interest in human body; interest in the appearance, interest in clothes, interest in names.

**Unit – V**

9. Play – Definition, value characteristics and types of play.
10. Selection of suitable play materials and equipments for various age groups and their importance.

Time – 3 hours  Paper – III (Practical)  Full marks – 50

NUTRITION AND TAILORING

UNIT-I

1. Preparation of different dishes using different methods of cooking.
2. Two types of desserts.

UNIT-II

3. Planning and preparation of balanced diets for normal man and woman of different work habit.
4. Planning and preparation of balanced diets for adolescent (boys and girls) and for pre-school children.

UNIT-III

5. Prepare any sample using various fancy stitches (at least 4).
6. Different types of sleeves (Puff, Raglan, Plain and Flair)
7. Drafting, cutting and stitching of blouse and petticoat.

Time – 3 hours  Paper-IV (Third Year)  Full Marks – 75

HOME MANAGEMENT AND FAMILY STUDIES.

UNIT-I

2. Qualities of a good homemaker, Resources – classification, characteristics.

Unit-II

Management of specific resources:

3. Time Management – making time plan, factors affecting time plan, leisure time activities.
4. Energy management – work simplification process reducing fatigue, Mundel’s classes of change.
5. Money management – Types of income, budget making, account keeping, savings, forms of savings, supplementing family income.

Unit-III

6. Selection of site – factors to consider at the time of selection of site.
   Interior decoration – Objectives.
   Elements of beauty and design- line, space, pattern, light colour, texture.
7. Principles of design – Harmony, proportion, balance, rhythm, emphasis.
   Colour – Colour when and different colour combinations.
   Flower arrangement – Principles and types.

Unit – IV

8. Family – Definition, functions, characteristics and types of family; Nuclear, joint family – advantages and disadvantages.
9. Changes in the family systems- causes and factors contributing to changing family system.
Unit-V

10. Marriage – Definition and functions.
   Types of marriage – marriage system among different community and their significance.

11. Contemporary family problems: unemployment, poverty, chronic illness, alcoholism, drug addition, dowry and divorce.

Time – 3 hours  PAPER – V  Full Marks – 75

EXTENSION EDUCATION AND TEXTILE AND LAUNDRY

UNIT-I

Extension Education:

1. Meaning, philosophy, objectives and principles of extension education.

2. Qualities of a good extension worker.

Unit-II

3. Extension teaching methods – Individual, group and mass-lecture, demonstration, field trip, seminars, workshop, survey, conferences.

4. Use of audiovisual aids – Home visits, posters, charts, bulletin, board, flip charts, puppets.

Unit-III

Textile and Laundry:

5. Study of textile fibbers – cotton, silk, wool and their manufacturing process and physical and chemical properties.
6. Various types of yarn.

Unit-IV

7. Finishes – Objectives, types – primary and special finishes applied to cotton, silk and wool.


Unit – V

9. Dry cleaning – methods, advantages and disadvantages,

10. Washing and finishing as cotton, wool, silk fabrics, stiffening agent and their preparation (rice, Maida and arrowroot).

Stain removal – Removal as following stain tea, coffee, grease, blood, print, ink, rail polish, curry.

Time – 3 hours Paper – VI (Practical) Full Marks-50

Textile, home management and extension Education.

Unit-I

1. Identification of cotton, silk and wool fibber by chemical, microscopic and burning test.

2. Preparation of different types of weaves on coloured paper-plain, twill, stain and sateen.

Unit-II

3. Washing and finishing of cotton, silk and wool garments.

4. Preparation of three types of stiffening agent and their application, (Rice, Maida and Arrowroot).
5. Stain removal – egg, blood, tea, coffee, grass, ink, grease, nail polish, paint and curry.

Unit- III

6. Flower arrangement- Traditional, oriental and modern.
7. Preparation of colour wheel – Fainting of different floral designs using different colour combinations.

Unit – IV


Record and class work – 10
Practical 40

HOME SCIENCE (HONOURS)

FIRST YEAR EXAMINATION

Paper – I Theory – Human Physiology 100 marks
Paper – II Theory – Child Development and Family Studies 100 marks
Total 300 marks
SECOND YEAR EXAMINATION

Paper – III Theory – Nutrition and dietetics 100 marks

Paper – IV Theory – Home Management and Economics 100 marks

Paper – V Practical, Cookery, dietetics and Home Management 100 marks

Total 300 marks

FINAL YEAR EXAMINATION

Paper – VI Theory – Extension Education & Communication 100 marks

Paper – VII Theory – Textile and Laundry 100 marks

Paper – VIII Practical – Extension Education

Network and Textile and Laundry 100 marks

Total 300 marks

Grand Total 200 + 300 + 300 = 800 marks.

Time – 3 hours

PAPER – I (THEORY) Full marks – 100

HUMAN PHYSIOLOGY

UNIT-I

1. Cell: its structure, functions and cell division.

2. Blood: Composition, structure and functions of erythrocytes, leucocytes, blood platelets, blood groups, Rh factor, factors of coagulation.
Unit-II
3. Heart: Structure and functions of heart, systemic, pulmonary coronary and portal circulation, structure of the arteries, veins and capillaries.

Unit-III
4. Respiratory system: Structure and functions of the respiratory organs, mechanism of respiration, external and internal respiration.
5. Kidneys: Structure and functions, blood supply to the kidney, formation of urine.

Unit-IV
6. The skin: Structure and function of the skin.
7. The digestive system – Structure of different parts of alimentary canal, digestion of carbohydrate, proteins and fats.

Unit-V
8. The Endocrine system – The location and functions of various endocrine glands – Pituitary, Thyroid, parathyroid, suprarenal, ovaries, testes, pineal and thymus.

Time – 3 hours                   PAPER – II (THEORY)                  Full Marks- 100

CHILD DEVELOPMENT AND FAMILY STUDIES

Unit – I
1. Meaning, definition and principles of Child development.
2. Prenatal development: conception, period of ovum, period of embryo and period of fetus.
3. Prenatal environmental influence: Maternal age, nutrition, drugs, irradiation, alcohol, smoking, maternal emotions, maternal health, Rh factor, diseases and birth hazard.

Unit-II

Development from birth up to 2 years of age.

4. Physical Development: Physical growth cycle, body size, body proportions, bones, muscles and fat, teeth, development of nervous system.


6. Speech development – Meaning and speech, pre-speech forms of communication, essentials in learning to speak, major tasks in learning to speak, speech disorders.

Unit-III

7. Emotional development – Definition, characteristics of children’s emotions, conditions responsible for emotional development common emotional patterns.

8. Social Development: Meaning, process and importance of early social experience, factors influencing socialisation.

9. Play: Definition, value and importance of play, characteristics and types of play. Selection of suitable play equipments for various age groups and their importance on growth and development.
Unit-IV

10. Family: Definition, characteristics, functions and types of family.

11. Change in family systems: Causes, features and factors contributing to change.


Unit-V


14. Types of marriage in India: Arranged or traditional and free choice marriage, their merits and demerits.

15. Customs and ceremonies of marriages among different religious groups in India – Hindu, Christian and Muslim marriages.

Time – 3 hours           PAPER – III (THEORY)           FULL MARKS-100

NUTRITION AND DIETETICS

UNIT-I

1. Introduction to nutrition science: Definition of nutrition, health, nutrients, nutritional status and malnutrition.
2. Nutrients: Classification, sources, functions, requirements and deficiency of the following nutrients: proteins, fats and carbohydrates.

3. Minerals such as calcium, Phosphorus, sodium, potassium, iron and iodine.

Unit-II


5. Functions and requirements of water and roughages in diet.

6. Study of food groups and their nutritional value and importance in the diet:
   a) Cereals, Pulses, vegetable and fruits.
   b) Fleshy foods – Meat, fish, poultry, eggs.
   c) Milk and milk products (Human, cows, buffalo)
   d) Fats and oil, sugar and jiggery, spices and condiments.

Unit-III

7. Food groups – Basic Four, Basic Five and Basic Seven.

8. Balanced diet: Definition, importance and factors influencing balanced diet.

9. Study of recommended dietary allowances by ICMR for references man and woman of different work habits, adolescent boys and girls, Children from 1 to 12 years.

10. Nutritional requirements and diet during pregnancy, lactation and old age.

Unit – IV
11. Methods of cooking – Objectives, classification, advantages and disadvantages of different cooking methods.
12. Meal planning: Objectives, principles and factors affecting meal planning.

UNIT-V

14. Food Spoilage – causes of food spoilage or agents responsible for food spoilage, such as micro-organism like yeasts, moulds, bacteria, moisture, enzymes, insects etc.
15. Food poisoning – Types, causes, symptoms, hazards and prevention.

Time – 3 hours  Paper – IV (Theory)  Full Marks – 100

HOME MANAGEMENT AND ECONOMICS

Unit-I

1. Concept of home management: Definition and meaning, management process – planning, organising, implementing, controlling and evaluation.
2. Decision – making: Importance and steps of decision – making, types of decision.
3. Family resources: Definition, classification and characteristics of resources.

Unit-II
Management of specific family resources:

4. Management of time: Time plan, steps in making time plan, controlling and evaluation of time, peak-load periods, rest periods and leisure time.

5. Management of energy: Importance, types of fatigue and its reduction, Definition and techniques of work simplification, Mundel’s classes of change.

Unit-III

6. Management of money: Family income-definition and types of income. Various ways of supplementing or improving the family income.

7. Family Expenditure: Budget – definition and importance, steps in making family budget, factors affecting the budget, Engel’s law of consumption.


9. Savings: Meaning, objectives and need to save, types of savings, various savings deposit schemes and institutions, functioning of commercial banks, L. I. C., Post Office and other insurances.

Unit-IV

10. Human wants: Types and characteristics of human wants, law of diminishing marginal utility and law of substitutions.

11. Money: Definition and functions of money, value of money.
12. Inflation: Meaning and definition, types causes and consequences of effects of inflation.

13. Definition: Definition, causes and consequences of effects of deflation.

Unit-V

14. Selection of site: Factors to be taken into consideration for selection of a site for construction of a house. Planning of different types of kitchen (U. L two wall and one wall).

15. Interior decoration: Definition and objectives of interior decoration.

Elements of art-line, form texture, space, colour, light, pattern etc, principles of design – proportion, balance, rhythm, harmony and emphasis.


17. Different types of flower arrangement.

Time – 6 hours Paper – V (Practical) Full Marks 100

COOKERY, DIETETICS & HOME MANAGEMENT

Part – I (Cookery & Dietetics) (50 marks)

Unit-I
1. Preparation of dishes using different methods of cooking.

2. Two types of cakes with decoration

3. Preparation of three types of deserts.

Unit-II

4. Planning and preparation of balanced diet and calculation of nutritive value of various nutrients for the following groups – man and woman of different work habits, adolescent boys, and girls, pregnancy and lactation (vegetarian and non-vegetarian).

5. Lay out of dining table according to Indian and Western style.

Practical – 40 marks        Class work – 10

Part – II (Home Management) (50 marks)

Unit-III

1. Planning of various types of kitchen “U” shape “L” shape one wall and corridor type.

2. Preparation of soft toy.

3. Pottery decoration

4. Flower arrangements.

Unit-IV

5. Prepare a money purse using fancy materials like mirror, beats etc.

6. Embroider on chair back or tablecloth of pillowcase using at least six types of fancy stitches.

Practical – 4-        Class work – 10
Time – 3 hours  

Paper – VI  

Full Marks – 100

Extension education and communication

Unit-I

1. Meaning, philosophy, objectives and principles of extension education.

2. Role and qualities of an extension worker.

Unit-II

3. Extension teaching Methods: Individual, group and mass teaching methods: Lecture, workshops, seminar, conference, survey, field trips, practical demonstrations, group discussion, training.

4. Use of audio and visual aids: Graphs, charts, posters, film, stories, puppet show, drama, bulletin board, flash card, overhead projects etc. Their use in extension education, advantages and limitations.

Unit-III

5. Communication: Definition, importance, type of communication, formal and informal communications, barriers to communication.

Unit-IV

6. Techniques of extension programme planning, Meaning objectives, principles or steps of programme planning, evaluation of programme.

Unit-V

Time – 3 hours PAPER – VII Full Marks – 100

TEXTILE AND LAUNDRY

Unit-I

1. Study of textile fibbers-cotton, silk, wool, polyester and rayon their sources, manufacturing process, physical and chemical properties.
2. Various types yarns.
3. Weaving: Classifications, basic weaves – plain, twill, satin and their variations.

Unit-II

4. Finishes: Objectives of finishes and types-primary finishes given to fabrics and fibbers. Special finishes applied to silk, wool and cotton.
5. Dry cleaning: Methods of dry cleaning, chemical used advantages and disadvantages of dry cleaning.

Unit-III

6. Dyeing: Classification of dyes – basic, acid, direct, mordant, vat dyes.

Unit- IV


Unit-V

11. Washing and finishing of cotton, silk, woollen fabrics.

12. Stiffening agents – objects, types and methods of preparation of stiffening agents, Use of gum Arabic, arrowroot, rice, Maida to make stiffening by cold and boiling methods.

13. Stain removal – Methods of removing egg, Blood, tea, coffee, grass, ink, ball-point-ink, nail polish, curry and paint from clothing.

Time – 3 hours

PAPER-VIII (PRACTICAL) FULL Marks -100

EXTENSION EDUCATION

NEEDLE WORK , TEXTILE AND LAUNDRY

Part-I (Extension Education)

1. Preparation of posters on different branches of home science education (At least 4 posters).

2. Preparation of two low-cost play equipments for a preschool child.

3. Making of dolls using waste materials, including clay.

Part-II (Needle work, textile and Laundry)

4. Identification of wool, cotton, silk by visual, microscopic burning tests.

5. Washing and finishing of cotton, silk and wool
7. Preparation of different weaves on colour paper – plain, twill, basket, rib, satin, honeycomb, weaves.
8. Drafting, cutting and stitching of a child’s frock for a 4 years old child frock and romper, saree blouse Placket opening continuous, seal placket and zipper placket.
9. Prepare facing and piping, Bias Binding, fitted facing, Basic ribbings of 4 types.

Class work and record – 20 Practical – 80 marks

REFERENCE BOOKS FOR HOMESCIENCE

PASS, HONOURS AND ELECTIVE COURSES

Food Nutrition and Dietetics:
1. Introductory food. : Bennion, M. And Hughes.
2. Preservation of fruits and vegetables – Giridharilal, Siddappa, G. S. And Tendon G. L.
3. Nutritive value of India foods – Toplan C, Ramasastri P. N and Balasubramanian
4. Food Science – Helen Charley.
5. Experimental Cookery – Lowe, B
7. Foundation and food preparation – Packham G. C
8. Food Science and experimental foods – Swam Inathan M
9. Clinical Nutrition and Dietetics – Anita F. P.
10. Nutrition – Chaney M. S. And Poss
11. Human Nutrition – Davidson S. Passmare
18. Dietetics – B. Srilakshmi
19. Food, facts and principles – N.S. Manay & Shadaksharaswamy
20. Fundamentals of food and nutrition – Mudambi & Rajgopal
22. Nutrition and Dietetics – Shabhangini A. Joshi
23. Nutritive value of Indian Food – Gapaolan, Sastri and Balasubramanian.
24. Food and Nutrition – Arya Publication , Education planning Group.,

**Human Physiology and Health Science**

25. A Text book in Human Physiology – Dr. Sharada
26. Introduction to Human Physiology – M. Grijith
28. Sovial Preventive Medicine – J. E. Park and Park
29. Elementary Human Physiology – John Willey and Sons.
30. Public Health and Medicine – J. Bedi
32. Anatomy and Physiology Nurses – E. Pearce.
34. Anatomy and Physiology for Nurses – Sears.

CHILD DEVELOPMENT:

36. Development Psychology – Hurlock E. B.
38. Elements of Child Development – Dr. Panda K. C.
40. Child Behaviour and Development – Kappu Swamy B.
42. Child Welfare – Choudhury D. P
43. Profile of the child in India – New Delhi, Ministry of Social Welfare.
44. Preschool Education: Care Development and Education – A. Choudhury and R. Choudhury.
45. Feeding Practices and Nutritional Authoropometry of Pre-school children – Dr. Sumita Mishra.
46. Child Development and Relationships – Smart and Smart
47. Development of Children – Cole and Cole.
49. The First five years.- Swaminathan, M.
52. Child Development – Sroufe, Copper, Dehart and Marshal.
55. Text Book of Child Development: Devadas and Jays.

**MARRIAGE AND FAMILY RELATIONSHIP;**

57. Changing Status of Women: Chandranhala A. Hate.
58. Personality Adjustment Marriage and Family Living – Landia F. F. And Landias.
59. Family Living – Duvall, E. M
60. Family Development: Duvall E. M
61. The Family – Goode W. J
62. India Social Problems – Madan G. R
63. Sociology – Vidya Bhusan.
64. Society in India – Mandelbrarem D,
65. A. Modern Introduction to the Family: N. W. And Vogel.
66. The Family – Burgess E. W and Locke H. J
67. Fundamentals of Sociology – Gisberi P
69. Creative Marriage – Hunt R. A. And Rylman.
70. An introduction to Sociology – Vidya Bhusan and Sachadeva
72. Marriage and Family in India – Kapadia.

**HOME MANAGEMENT:**

73. Management in Family living: - Nickell P. And Dorsey
74. Home Furnishing – Rutt A. M
75. Modern Ideal Homes for India – Deshpande R. S
77. The House and its plan and plan – Agan J.
78. Home Management of Modern Indian Families – M. K. Man
80. Management for modern families – E. W. And Knoll

**EXTENSION EDUCATION:**

87. Introduction to Home Science: R. P. Devadas
88. Extension in Rural Communities – A. H. Sowle.
89. Proceedings of Home Science Associatia in India.
91. Hand Book of audio visual aid – B. B. Mohanty Kitab Mahal
96. An introduction to Extension Education – Supe.
97. Extension Education and communication – Dabama & Bhatnagar.

TEXTILE AND CLOTHING

100. Household Textile – Durga Denlkar.
     1966.
102. Fundamentals of Household Textile – S. Dhantyagi
103. Textile – Norms, Holled and Sadder.
104. Fiber to fabrics: - Corbman,
105. Introduction to Textile and Laundry work – Durga Deulkar.

JOURNALS

1. Femina
2. Eve’s weekly
3. Women’s Era
4. Indian Housewife
5. Women and home
BERHAMPUR UNIVERSITY

... 

+3 BACHELOR OF ARTS
POLITICAL SCIENCE (GENERAL)

FIRST YEAR EXAMINATION: 2014
SECOND YEAR EXAMINATION: 2015
FINAL YEAR EXAMINATION: 2016

... 

POLITICAL SCIENCE

The Pass Course in Political Science shall comprise four papers. Each paper shall carry 100 marks and shall be of three hours duration.

SECOND YEAR EXAMINATION

Paper – I  Political Theory and Isms
Paper – II  Major Governments

FINAL YEAR EXAMINATION

Paper – III  Indian Government and Politics
Paper – IV  Indian Political Tradition

DETAILED SYLLABUS

PAPER – I

POLITICAL THEORY AND ISMS

Unit-I
3. Nature of the State : Its Origin and Development
4. End of the State: Sphere of State Action.

Unit-II

Unit-III
7. Problems of Federalism.
8. Theories of Democracy: Liberal and Marxist.

Unit-IV
10. Political Parties.

Unit-V
11. Anarchism, Socialism, Communism.

Reading List:
1. Ashirvatham, E, Political Theory ( 1957)

PAPER – II
MAJOR GOVERNMENTS

Unit – I United Kingdom:
1. Nature and Elements of Constitution
2. Crown
3. Cabinet
4. Parliament

Unit-II United Kingdom
5. Civil Service
7. Political Parties
Unit-III  U.S.A
1. Nature of the Constitution
2. Congress
3. President

Unit-IV  U. S.A
4. Supreme Court and Judicial Review
5. Political parties.

Unit-V  Switzerland:
1. Nature of the Constitution
2. Federal Council
3. Federal Assembly
4. Federal Tribunal
5. Direct Democracy

Reading List:
1. Bhagawan, Vishnoo, World Constructions
5. Wheare, K. C. Modern Constitutions.

PAPER-III
INDIAN GOVERNMENT AND POLITICS

Unit-I: 1) Freedom Movement in India: Role of Moderates and Extremists.
       Role of Mahatma Gandhi: Quit India Movement.
2) The Constitution of India – Preamble and Salient Features
3) Fundamental Rights.
4) Directive Principles of State Policy.

Unit-II: **Union Government**:
5) President
6) Council of Ministers
7) Parliament
8) Supreme Court

Unit-III  **State Government**

9) Governor
10) Council of Ministers
11) State Legislative Assembly
12) High Court

Unit – IV: 13) Federalism in India – Legislative, Financial and Administrative Relations between the Union and the States.

Unit – V: 14) Politics Defections
15) Politics of Regionalism.

**Reading List.**


**PAPER – IV**

**INDIAN POLITICAL TRADITION**

Unit-I : 1) Manu – Views on Law, Government and State
2) Kautilya – Statecraft, Social Order.

Unit-II : 3) G. K. Gokhale – Political Goal, Political Techniques
4) B. G. Tilak – Political Goal, Political Techniques

Unit-III : 5) Mahatma Gandhi – Property, Non-violence.
   Satyagarha, Swaraj, Swadeshi.
   6) Jawaharlal Nehru – Democracy, Socialism, Secularism, Planning, and Non-alignment.

          10) Madhu Sudan Das – Nationalism, Economic Ideas.
          11) Gopabandhu Das – Nationalism and New Social Order.

Reading List.

6. Mohanty, D: *Indian Political Tradition*.
8. Verma, V. P. *Modern Indian Political Thought*.

**POLITICAL SCIENCE (HONOURS)**

The *Honours Course* in Political Science shall comprise eight papers. Each paper shall carry 100 marks and shall be of three hours duration. The papers are as follows:

**FIRST YEAR EXAMINATION (2014)**

Paper – I Political Ideologies
Paper – II Public Administration

**SECOND YEAR EXAMINATION (2015)**

Paper – III Major Governments and Politics
Paper – IV International Politics
Paper – V Indian Government and Politics

**FINAL YEAR EXAMINATION (2016)**

Paper – VI Indian Political Thought
DETAILED SYLLABUS

PAPER – I

POLITICAL IDEOLOGIES

Unit – I:
1. Political Ideologies: Meaning and Content
2. Liberalism

Unit – II:
3. Communism
4. Democratic Socialism

Unit – III:
5. Fascism and National Socialism
6. Anarchism

Unit – IV
7. Nationalism
8. Internationalism

Unit – V
9. Feminism
10. Environmentalism

Reading List:

1. Ashirvatham, E, Political Theory (1957)
7. Evans, Judith, et al., Feminism and Political Theory (Sage, 1986).

PAPER – II

PUBLIC ADMINISTRATION

Unit – I:
1. Meaning, Nature and Scope of Public Administration
2. New Public Administration

Unit – II:
Hierarchy, Span of Control, Unity of Command
4. Centralisation – Decentralisation, Headquarters – Field Relations; 
Public Corporations in India.

Unit – III:
5. Bureaucracy and Budgeting
6. UPSC – Leadership, Decision-making, Accountability.

Unit – IV
7. Public Administration in the Age of Globalisation and Liberalisation.
8. Corruption: The Malady and the Remedy

Unit – V
9. Legislative Control and Administration
10. Judicial Control and Administration

Reading List:
4. Maheswari, S.R., Public Administration in India (Macmillan India Ltd., Delhi)
7. Sachdeva, P., Urban Local Government and Administration in India (Kitab Mahal, 
Allahabad).
8. Sapru, R.K., Civil Service Administration in India (Deep and Deep Publications, New 
Delhi).
10. Singh, S.N., Political Ideas and Institutions under the Mauryas (Janaki Prakashan, Patna).

PAPER – III
MAJOR GOVERNMENTS AND POLITICS
(UK, USA and Switzerland)

Unit-I: United Kingdom
1. Nature of the Constitution: Conventions and Rule of Law
2. Crown
3. Cabinet
4. Parliament
Unit-II:
5. Civil Service
6. Judicial Review
7. Political Parties

Unit – III: USA
1. Nature and Basic Features of the Constitution
2. Congress
3. President

Unit-IV:
4. Supreme Court and Judicial Review
5. Federalism
6. Party System

Unit – V: Switzerland:
1. Direct Democracy, Referendum and Recall
2. Federal Council
3. Federal Assembly
4. Federal Tribunal

Reading List:
1. Bhagawan, Vishnoo, World Constructions
5. Wheare, K. C. Modern Constitutions.

PAPER – IV
INTERNATIONAL POLITICS

Unit – I:
1. Theories of International Relations: Idealism, Realism and Systems Theory
2. Balance of Power and Balance of Terror

Unit – II:
3. Cold War and Post-Cold War World Order

Unit – III:
5. Arms Race and Disarmament
6. International Terrorism, Human Rights

Unit – IV
7. U.N.: Security Council, General Assembly, Reforms of UN
8. Regional Organisations: SAARC, ASEAN, APEC.

Unit – V
9. India’s Foreign Policy: (a) Features of India’s Foreign Policy; (b) Making of India’s Foreign Policy.
10. India and Its Neighbours: Pakistan, Bangladesh, Sri Lanka; India and Big Powers: US, China and Russia.

Reading List:

**PAPER – V**

**INDIAN GOVERNMENT AND POLITICS**

Unit – I:
1. Making of India’s Constitution and its Sources
2. Preamble, Fundamental Rights and Directive Principles of State Policy

Unit – II:
3. Union Government: President, Parliament, Cabinet and Prime Minister
4. Supreme Court, Judicial Review and Judicial Activism

Unit – III:
5. State Government: Governor and Council of Minister
6. State Legislative Assembly, Chief Minister, High Court.

Unit – IV
7. Centre-State Relations
8. Party System
Unit – V
9. Election Commission and Electoral Reforms

Reading List:

PAPER – VI
INDIAN POLITICAL THOUGHT

Unit – I:
1. Kautilya
2. Dayananda Saraswati

Unit – II:
3. Tilak
4. Gokhale

Unit – III:
5. M.N. Roy
6. Mahatma Gandhi

Unit – IV
7. B.R. Ambedkar
8. Jawaharlal Nehru

Unit – V
9. S.C. Bose
10. J.P. Narayan

Reading List.
5. Mehta, V.R., Foundations of Indian Political Thought, New Delhi, Manohar, 1992.
6. Mohanty, D: Indian Political Tradition.
7. Padhy, K. S., Indian Political Thought, Prentice Hall of India, New Delhi.
8. Verma, V. P. Modern Indian Political Thought.

PAPER – VII
WESTERN POLITICAL THOUGHT

Unit – I:
1. Plato
2. Aristotle

Unit – II:
3. Machiavelli
4. Hobbes

Unit – III:
5. Locke
6. Rousseau

Unit – IV
7. Bentham
8. J.S. Mill

Unit – V
9. Hegel
10. Karl Marx

Reading List
1. Barker, Earnest, Greek Political Theory: Plato and His Predecessors.
4. Ebenstein, W., Great Political Thinkers.
PAPER – VIII
POLITICAL SOCIOLOGY

Unit – I:
1. Political Sociology: Nature and Scope
2. Approaches to the Study of Political Sociology: Behavioural and Systems Approach

Unit – II:
3. Theories of Political Power
4. Elite Theories

Unit – III:
5. Authority
6. Legitimacy

Unit – IV
7. Social Stratification
8. Political Socialisation

Unit – V
9. Political Culture
10. Political Participation
11. Political Modernisation
12. Social Change

Reading List:
2. Baral, J.K. and Baral, Sailabala, Political Sociology, Vidyapuri, Cuttack.
7. Rathore, L.S., Political Sociology.

PHILOSOPHY (HONOURS)

FIRST EXAMINATION (HONOURS)

PAPER-I
LOGIC (INDIAN AND WESTERN)

Unit-I

Introductory topics – sentence, Proposition, argument, truth and validity Aristotelian classification of proposition.

Unit-II

Immediate Inference – Conversion obversion and inversion Mediate Inferences – Syllosism, Figure Mood, Rules, Reduction.

Unit-III

Symbolic Logic, use of Symbols, Truth function of negation, Conjunction, disjunction, implication and Equivalence Tautology of Truth tables.

Unit-IV

Decision procedure – Truth cable using table for validity of argument

Unit-V

a) Theories of inference in Naya
b) Theories inference iun Budism (Process and types paksata, paramarsa, vyaptingra, hopyahatavara)

SUGGESTED READINGS

1. M. Copy: Introduction to Logic
2. S. Chatterjee: Nyaya Theory of Knowledge:
3. S. S. Bardingava: A Modern Introduction to Indian Logic
4. C. Bhattacharya : Elements of Indian Logic and epistemology
6. Critical Survey of Indian Philosophy – C. D. Sharma

PAPER – II (Major) Honours
Ethics (Indian and Western)

Unit-I
Definition of Ethics, Nature of Ethics – its relation to philosophy, Politics and sociology.

Unit-II
Voluntary and non-voluntary Action, Distinction between actual and moral judgement.

Unit-III
Hedonism and its different kinds.

Unit-IV
Perfectionism (self – realisation, be a person, Die to live and Station of Duty). Theories of Punishment.

Unit-V
“Purushartha, Dharma and Kama, Niskam Karma, Artha Moksa”

SUGGESTED READINGS:
I. C. Sharma: Ethical Philosophies of India
S. K. Maitra: The Ethics of the Hindus
M. Hariyana: The Indian conception of values
W. Lillie: An Introduction to Ethics
J. Hosiers: Human conduct
Aristotle: Nicomè – Cheam Ethics
J. N. Sinha: Introduction to Ethics
P. B. Chatterjee: Introduction to Ethics

SECOND YEAR EXAMINATION

PAPER – III (Major ) Honours

EPISTEMOLOGY AND METAPHYSICS

(INDIAN AND WESTERN)

UNIT-I

Nyaya Praman Pratyaksa: A general account of Anumana, Sabda Pramana, Upamana.

Unit-II

Pradarthas ( Vaisesika)

Unit-III

Scepticism and Sources of Knowledge, nationalism empiricism, Kant theory.

Unit-IV

Nature of Metaphysics ( Plato & Aristotle).
Unit-V

Substance and Universals.

SUGGESTED READINGS

1. S. C. Chatterjee: The Nyaya Theory of Knowledge
2. Johan Hospers: An introduction to Philosophical analysis
3. B. Russel: The problem of Philosophy
4. M. Hiniyanna: Out lines of Indian Philosophy
5. S. C. Chatterjee: An Introduction to Indian Philosophy
6. D. M. Datta: Contemporary Philosophy
7. A. C. Ewing: Problems of Philosophy
8. W. T. Stace: Greek Philosophy

PAPER – IV (Major ) Honours

SOCIAL AND POLITICAL PHILOSOPHY

UNIT-I

Bhagabat Gita: Karma, Yoga.

Unit-II

Nature and Scope of social and Political Philosophy Relation to psychology and Politics.
Unit-III

Individual society, State and Nation.

Unit-IV

Social institutions, Family, Marriage. Property, Education and religion.

Unit-V

Political Ideologies, Democracy, Socialism, Communism, and Sarvodaya.

SUGGESTED READINGS

N. V. Joshi : Social and Political Philosophy
A. K. Sinha : Outlines of social Philosophy
K. G. Mashruwalla : Gandhi and Marx
G. R. Madan : Theoretical Sociology
Sukhbir Singh : Political Thought.

PAPER – V

INDIAN PHILOSOPHY

UNIT-I

Common Characteristics of Indian Philosophy, Basic concepts of the Vedas and the Upanishads.

Unit-II
Carvaka Epistemology and metaphysics – Jainism – Anekentavada and Syadvada.

**Unit-III**

Buddhism – Four noble truths dependent origination Doctrine of momentariness concept of Nirvana.

**Unit-IV**

Nyaya – Theories of pramanas

Samkhya – Prakruti and purusa

**Unit-V**


**BOOKS RECOMMENDED**

1. A. Critical Survey of Indian Philosophy: C. D. Sharma
2. An Introduction to Indian Philosophy – Chatterjee & Dutta
3. Outlines of Indian Philosophy – M.Hiriyana
4. Indian Philosophy – S. Radhakrishnan.

**THIRD YEAR EXAMINATION**

**PAPER – VI**
HISTORY OF WESTERN PHILOSOPHY

UNIT-I

Descartes – Method of doubt. Cogito, ergo sum, Mind – Body
(Substance)

Spinoza – Substance, Attribute and Mode Pantheism.

Unit-II

Leibnitz – Monadology, doctrine of pre-established harmony.
Locke – Refutation of innate Ideas Theory of Knowledge.

Unit-III

Berkeley – Distinction on primary and secondary qualities essest percepie.

Unit-IV

Hume – Proofs for the external world scepticism.

Kant – Conception of critical Philosophy Rationalism and compiricism.

Unit-V

Kant – Classification of Judgements, Analytic and Synthetic, s Priori, a posteriori categories phenomena and Noumena.

BOOKS RECOMMENDED

1. A. History of Western Philosophy – F. Thiely
2. A. Critical History of modern Philosophy – Y. Mashi
3. A. History of Philosophy – F. Copleston
4. Kant – S. Karner
5. History of Modern Philosophy – R. Pati

PAPER – VII

GENERAL PHILOSOPHY

Unit-I : Word – meaning Definition
Unit-II : Sentence Meaning concept
Unit-III : Sources of Knowledge what is Knowledge.
Unit-IV : Analytic Truth Logical Possibilities the Al Priori.
Unit-V : The Problem or Induction Mind and Body.

BOOKS RECOMENDED

1. An Introduction to Philosophical Analysis – J. Hospers
2. The problem or Knowledge: - A. J. Hyer

PAPER – VIII

CONTEMPORARY INDIAN PHILOSOPHY

Unit-I : Ravindra Nath Tagore – Religion Reality and Ethics
Unit-II : Swami Vivekananda – Religion, Reality and ethics
Unit-III : M. K. Gandhi – Religion Reality and ethics
Unit-IV : Sri Aurobindo – Reality and ethics
Unit-V: Dr. S. Radhakrishnan – Religion, reality and ethics.

**BOOKS RECOMMENDED**

1. Contemporary Indian Philosophy – B. K. Lal
2. Contemporary Indian Philosophy – T. M. P. Mohadevon and G. V. Saroj
3. Contemporary Indian Philosophy – R. N. Sharma.

**INDUSTRIAL RELATIONS PERSONNEL MANAGEMENT**

**B.A. GENERAL COURSE**

**SECOND YEAR EXAMINATION**

Paper – I: Labour Legislation – I 100 marks

Paper – II: Human Resources Management 100 marks

**THIRD YEAR EXAMINATION**

Paper – III: Industrial Relation 100 marks

Paper – V: Field Work (Practical) 100 marks

**B. A. HONOURS COURSE**

**FIRST YEAR EXAMINATION**

Paper – I: Labour Legislation – I 100 marks

Paper – II: Welfare of Industrial Labour 100 marks

**SECOND YEAR EXAMINATION**
Paper – III : Human Resources Management 100 marks
Paper – IV : Labour Legislation – II 100 marks
Paper – V : Industrial Relation 100 marks

FINAL YEAR EXAMINATION

Paper- VI : Labour Economics 100 marks
Paper – VII : Organisational Behaviour 100 marks
Paper – VIII : Field Work (Practical) 100 marks

PAPER – I (PASS)

LABOUR LEGISLATION - I

Unit-I

Objective of Labour Legislation, forces influencing the courses of Labour Legislation in India. Categories of Labour Legislation.

Unit-II

Important Provisions of the following Act.

a) Factories Act. - 1948

Unit-III

b) Mines Act - 1952

Unit-IV

c) Industrial employment (standing orders) Act. 1946)
d) Trade Union Act. 1926

Unit – V

BOOKS RECOMMENDED

1. Sinha and Sinha: Industrial Relations and Labour Legislation
2. M. L. Monga: Industrial Relations and Labour Law in India
3. K. M. Vaid: State Labour

PAPER – II

HUMAN RESOURCES MANAGEMENT

Unit-I


Unit-II


Unit-III

Procedure of recruitment and selection.
Manpower Development – Training and Development process and methods.

**Unit-IV**

Wage and salary Administration – Concept of wage and salary administration Job evaluation.

Wage incentives.

**Unit-V**

Motivation – Introduction, Types of Motivation

Employee Morale – Definition, Factors affecting Morale.

**BOOKS RECOMMENDED**

**HUMAN RESOURCES MANAGEMENT**

1. I. P. M. – Personnel Management in India
2. N. N. Chatterjee – Management of Personnel in Indian Enterprises
3. Sayaddin and Monappa – Personnel Management
4. K. K. Jacob – Personnel Management in India
5. Pigou and Myers – Personnel Administration

**PAPER –III**

**INDUSTRIAL RELATIONS**

**UNIT-I**
Industrial Relations: Definition and concept Dunlop’s model: Aspects of Industrial Relations – Co-operation and conflict.

Unit-II

Causes and consequences of Industrial disputes, methods of setting disputes collective bargaining, Conciliation and adjudication.

Unit-III

Labour Management Co-operation meaning and goals of Labour management Co-operation in India, Works committee J. M. Cs participative management.

Unit-IV


Unit-V

Trade Unionism Definition, Objectives and functions. Trade Unionism in India multiplicity and Rivalry, outside leadership and Political domination, weak organisational strength.

BOOKS RECOMMENDED

Sinha and Sinha : Industrial Relation and Labour Legislation
C. B. Memoria : Dynamics of Industrial Relations.

A. M. Sharma : Industrial Relations.

Punekar etal : Labour Welfare Trade Unionism and Industrial Relations


**Paper – IV**

**Field Work (Practical)**

**Marks – 100**

Field work Report 75 marks

Viva – voce 25 marks.

The students are required to undertake at least one field visits to industries/ Labour welfare centres under the supervision of a field work instructor.

Students are required to submit a detailed report on the basis of their visits.

Joint evaluation of the field work report and Viva-voce shall be conducted after the theory examination is over by internal and external examiners at the examination centre.

**HONOURS PAPER-I**

**LABOUR LEGISLATION - I**

Unit-I
Objective of Labour Legislation, forces influencing the courses of Labour Legislation in India. Categories of Labour Legislation.

Unit-II

Important Provisions of the following Act.
a) Factories Act - 1948

Unit-III

b) Mines Act - 1952

c) Industrial employment standing orders Act. 1946

d) Trade Union Act. 1926


BOOKS RECOMMENDED

1. Sinha and Sinha: Industrial Relations and Labour Legislation
2. M. L. Monga: Industrial Relations and Labour Law in India
3. K. M. Vaid: State Labour

PAPER – II

WELFARE OF INDUSTRIAL LABOUR

Unit – I
1. Labour Welfare:  
   (a) Meaning and definition  
   (b) Concept of Labour Welfare  
   (c) Scope of Labour Welfare  
   (d) Principles of Labour Welfare.


   Unit-II


   Unit-III

4. Industrial Safety  
   (a) Causes of Accident  
   (b) Prevention of Accident  
   (c) Statutory Safety Provisions.

   Industrial Hygiene: Occupational Health Hazards, Diseases and services.

   Unit-IV

   Statutory provision of welfare in India, Non-statutory labour welfare: Housing, Co-operations, workers Education.

   Unit-V

   Labour Administration in India and in the State of Orissa at the centre.
BOOKS FOR REFERENCE

3. Labour Welfare Trade Unionism Industrial Relations – Punekar Sankarsan & Deodhar.

PAPER – III

HUMAN RESOURCES MANAGEMENT

Unit-I


Unit-II


Unit-III
Procedure of recruitment and selection.

Manpower Development – Training and Development process and methods.

**Unit-IV**

Wage and salary Administration – Concept of wage and salary administration Job evaluation.

Wage incentives.

**Unit-V**

Motivation – Introduction, Types of Motivation

Employee Morale – Definition, Factors affecting Morale.

**BOOKS RECOMMENDED**

**HUMAN RESOURCES MANAGEMENT**

1. I. P. M. – Personnel Management in India
2. N. N. Chatterjee – Management of Personnel in Indian Enterprises
3. Sayaddin and Monappa – Personnel Management
4. K. K. Jacob – Personnel Management in India
5. Pigou and Myers – Personnel Administration

**PAPER – IV**

**LABOUR LEGISLATION**
Important provisions of the following Acts.

**Unit-I**

Minimum Wages Acts : 1948
Payment of Wage Act. 1936.

**Unit-II**

Payment of Bonus Act. 1965
Maturity benefit Act 1961,

**Unit-III**

Workmen’s Compensation Act. 1913

**Unit-IV**

Employees State Insurance Act, 1948

**Unit-V**

Inter State Migrant Workmen Act. 1979.

**BOOKS RECOMMENDED**

1. Sinha and Sinha : Industrial Relation and Labour Legislation
2. M. L. Manga : Industrial Relation and Labour Legislation India

**PAPER –V**

**INDUSTRIAL RELATIONS**
UNIT-I

Industrial Relations: Definition and concept Dunlop’s model: Aspects of Industrial Relations – Co-operation and conflict.

Unit-II

Causes and consequences of Industrial disputes, methods of settling disputes collective bargaining, Conciliation and adjudication.

Unit-III

Labour Management Co-operation meaning and goals of Labour management Co-operation in India, Works committee J. M. Cs participative management.

Unit-IV


Unit-V

Trade Unionism Definition, Objectives and functions. Trade Unionism in India multiplicity and Rivalry, outside leadership and Political domination, weak organisational strength.

BOOKS RECOMMENDED
PAPER –VI

LABOUR ECONOMICS

UNIT-I

Definition, nature and scope of Labour Economics.

Unit-II

Capitalism and Socialism.

Mixed Economic System in India, New economic policy.

Unit-III

Labour Market:
  a) Concept of Labour Market
  b) Classification of Labour Market
  c) Characteristics of Labour Market.

Unit-IV

Wage of Industrial Workers:
  a) Definition
b) Real and Nominal wage

c) Wage Concept.

i) Minimum, fair and Living Wages

d) Wage Differentials

e) Wage Policy in India.

Unit-V

UNEMPLOYMENT: a) Definition and meaning

b) Types of unemployment

c) Causes effects and remedies of unemployment

d) Problems of unemployment in India.

1. Labour Economics and Industrial Relation: T. N. Bhogoliwada

2. Labour Economics and Industrial Relation: B. P. Tyagi

3. Labour Problems and social Welfare – R. Saxena


PAPER – VII

FUNDAMENTALS OF ORGANIZATIONAL BEHAVIOUR

Unit-I

b. Components of O. B. System: Inputs Objectives and Resources: Through Put-Formal Organization System (FOS), Indivisual system (IS) and Social System (SS), out-put Organisational Effectiveness.

Unit-II


Unit-III

Individual System: Perception, Personality , Attitude and values.

Unit-IV

a) Social Systems: Informal Groups and organization, Group Dynamics.

b) Strategies for managing Social System : Quality circle , Team Building, Small Group Activities.

Unit-V

Organizational Development; Concepts and Methods.

BOOKS

Organisational Behaviour by Fred Luthans
Organisational Behaviour by Stephen Robins.
Organisational Behaviour by Aswathappa (Himalaya)
Grade: SANSKRIT (GENERAL)
SECOND YEAR EXAMINATION
PAPER - I

ACCOMPLISHING SANSKRIT LANGUAGE – SANSKRIT BHASA NAIPUNYA

1. Sanskrit Conversation (sanskrita – Vak – Vyavahara ) 25 marks
2. Grammar 25 marks
3. Meghadutam (1st part) 20 marks
4. Kiratarjuniyam (Canto – i) 20 marks
5. Translation into Sanskrit 10 marks

Unit-I

1. Sanskrit conversation to be examined by both internal and External Examiners, appointed by the University. 25 marks
2. Grammar (A) Laghu Sidhanta Kaumudi, Samjna, Pratyahara only, (One long question 10 marks and one short question 5 marks) – 15 marks
   (b) Sabdarupa and Dhatu rupa 10 marks
   Rama, Kavi, Bhanu, Pitr, Lata, Mati, Nadi, Dhenu, Vadhu, Matr, Phala, Vari, Marut, Dandin, Vac, Tad, Etad, Yad, Asmed, Yusmad, Dhatu Rupa for five Lakaras – Path, Pac, Bhu, Kr, As, Ad, ban, ju, d tan, tud, rudh, kri , cur, ser.
3. Meghadutam (1st Part) 20 marks
One long question (10 marks) Short question or/ and explanation or/and translation of verses (10 marks) (Long answers should be within three hundreds words).

4. Kiratarjuniyam (1st Canto) 20 marks

One long question (10 marks) Short questions like explanation, translation etc. (10 marks)

5. Translation from Oriya / English into Sanskrit. 10 marks

BOOKS RECOMMENDED


PAPER – II

LITERATURE HISTORY (KAVYA, ITIHASA)

1. History of Sanskrit Literature 50 marks
2. Bhajagovindam 25 marks
3. Sanskrit Essay 25 marks

1. History of Sanskrit Literature:
   a) Ramayana and Mohabharat (One long question) 20 marks
   b) Mahakavya and Gadya Kavya (One long question) 15 marks
c) Three short question on Mohakavya and Gadyakavya 15 marks

2. Bhajagovindam 25 marks

   One long question (10 marks)

   Explanation, Short question or/and translation (05 marks)

3. One Essay in Sanskrit 25 marks

BOOKS RECOMMENDED

1. Bhajagovindam com. By S. W. Chinmayananda

2. History of Sanskrit Literature Ed. By H. K. Satapathy


THIRD YEAR EXAMINATION

PAPER – III

APPLIED SANSKRIT

(VYAVAHARIKA SANSKRIT)

1. Sasi Bhusan Charitam (Cento – 4) 25 marks

2. Sruta Bodha 20 marks

3. Sandhi 20 marks

4. Gita (Fifteen Chapter) 25 marks

5. Retranslation 10 marks

1. One Long question from Shashi Bhusana Charitam Canto-4 10 marks
Translation Explanation and /or Three short question) 15 marks

2. Sruta Bodha – Four Meters 5 x 4 20 marks

Arya, Anustubah, Vamsastha, Indravarja, Upendravajra, Upajati, sardula-Vikridita, Vasantatilaka, Mandakranta, Sragdhara.

3. Savra, Hai Visarga (Five in total)

4. Gita (15th Chapter) One long question 10 marks

Retranslation from Sanskrit in to Oriya/ Hindi/English

Translation Explanation and /or short question)

BOOKS RECOMMENDED:

2. Sruta Bodha – By Dr. H. K. Satapathy

PAPER – IV

DRAMA AND ALANKARA

1. Abhijanana Sakuntalam 50 marks
2. Alankara (Without division) 20 marks
3. Vacya Parivaratanam - 20 marks

I. Abhijan Sakuntalam, Act one to three - 30 marks

   Act one to three – One long question (15) one explanation (10 one translation or short question (05)

II. Sakuntalam from Act Four to seven. - 30 marks

   Division of marks is as per unit one

III. Alankara Upama, Utprekaa, Rupaka, Arthanturanyasa, Slesa, Kavyalinga, Vibhabana, Somasokti, Nidarsana, Viesesokti, Anuprasa and Jamak. 20 marks.

IV. Five Sentences to change the voice in Sanskrit 20 marks.

BOOKS RECOMMENDED


2. -do- Ed. by H. K. Satapathy

3. Anuveda Chandrika


SANSKRIT HONOURS

PAPER – I (FIRST YEAR)

ACCOMPLISHING SANSKRIT LITERATURE
(Sanskrit Sahitya – Naipunya)

1. Sisupala Badha - 20 marks
2. Dasakumara Charitam Purvapithika - 25 marks
3. Katha Upanishada - 30 marks
4. Comprehension (artha – avabodha) - 20 marks

1. Sisupala Badha (First Canto)
   One long question (10 marks) answer should be within the hundred words, one translation of Verse (5 marks). Explanation of two short questions (10 marks)

2. Dasakumar Charitam Purvapithika (1st Utchhasa)

3. Kathopanisadas (First three Vallies)
   One long question (15 marks) translation and/or explanation and/or short question (15 marks).

4. Comprehension (Artha – Avabodha)
   Five answer to give in Sanskrit Language only from questions asked on given passage, seen or unseen on the question paper.

BOOKS RECOMMENDED.

1. Dasakumara Charitam Ed. By Dr. G. Mohapatra
2. -do- Ed. By Dr. H. K. Satapathy
3. Kathaparisada, published by Ramakrishna Mision

4. Sisupala Badha, Ed. by H. K. Satapathy


PAPER – II (FIRST YEAR)

RELEVANT SANSKRT – UPAYOGI SANSKRT

1. Sukanesa Upadesa - 40

2. Abhidha, Laksana and Vyanjann - 20

3. Inscription - 40

1. Sukanas Upadesa from Kadambari

   a) One long question - 15
   b) Three short questions - 15
   c) Explanation or Translation - 10

2. Abhidha, Laksana and Vyanjana as per kavya Prakasa or Sahitya darpana
   one long question (10) Two short question (10)

3. Inscription.

   1. Girnal Rock Inscription of Rudra Damana

      (One long question of 10 marks and Explanation/Translation/or short questions of 10 marks)

   2. Allahabad Stone Pillar Inscription of Samudra Gupta
(One long question of 10 marks and explanation/translation/ short question of 10 marks.

**BOOKS RECOMMENDED**

1. Inscription Abhilekha Ed. By Dr. Sarojini Bhuyan.
2. Sakansa Upadesa – by H. K. Satapathy
3. Kavyaprakasa, Ed. By Odisha Sahitya Academic

**SECOND YEAR**

**PAPER – III**

**ACCOMPLISING SANSKRIT LANGUAGE – SANSKRIT-BHASA NAIPUNYA**

1. Sanskrit Conversation (Sanskrit – Vak – Vyawahara) 25 marks
2. Grammar 25 marks
3. Meghadutam (1\textsuperscript{st} part) 20 marks
4. Kiratarjuniyam (Canto – i) 20 marks
5. Translation in to Sanskrit 10 marks

1. Sanskrit conversation to be examined by both internal and external Examiners, appointed by the University. 25 marks
2. Grammar (A) Laghu Sidhanta Kumudi, Samjna Pratyahara onlyh. (One long question 10 marks and one short question 5 marks) 15 marks
B) Sabdarupa and Dhatu Rupa  

(Rama Kavi, Bhanu, Pitr, Lata, Mati, Nadi, Dhenu, Vari, Marut, Dandin, Vac, Tad, Etad, Yad, Asmad, Yusmad, dhatu rupa for five Lakaras – Path, Pac, Bhu, Kr, as, ad, han, hu, div, tan, ud, rudh, kri, cur, ser,)

3. Mohadutam (1st part)  

One long question (10 marks) Shot Question or/and explanation or/and translation of verses (10 marks) (Long answer should lbe within three hundred words.

4. Kiratarjuniyam (Canto – I)  

One long question (10 marks) Short questions like explanation translation etc. (10 marks)

5. Translation from Oriya/English in to Sanskrit.

BOOKS RECOMMENDED

2. Laghusiddhanta Kaumadi – Sarada Ranjan Ray
3. Kiratarjuniyam by Dr. G. M. Mahapatra
4. Meghadutam by Dr. H. K. Satapathy.

PAPER – IV (SECOND YEAR)

LITERATURE HISTORY (KAVYA, ITIHASA)

1. History of Sanskrit Literature  

50
1. **History of Sanskrit Literature**  
   a) Ramayana and Mohabharata (One long question)  
   b) Mahakavya and Gadya Kavya (One long question)  
   c) Three short question on Mahakavya and Gadyakavya  

2. **Bhajagovindam**  
   One long question (10 marks) explanation, short question or/and translation (10 marks).  

3. **One Essay on Sanskrit**  

**BOOKS RECOMMENDED**


**PAPER – V (SECOND YEAR)**

(GRAMMAR AND VEDA)

1. Siddhanta Kaumudi - 80
2. Veda - 20

1. Samjna Sutra 20
   One long question (10), two short question (10)

2. Paribhasa 20
   One long question (10), Two short question (10)

3. Karaka from Prathama to Chatuthi (60% kibg questions) 20

4. Karaka from panchami to Saptami (60% long questions) 20

5. Rgveda: Agnisukta, Indrasukta and Purusa Sukta 20
   One long question (15) one short question (5)

BOOKS RECOMMENDED

1. Sidhanta Kaumudi, Ed. By Miniti Mishra
3. Collections from Rgveda, by Mackdonnel

PAPER – VI (THIRD YEAR)

APPLIED SANSKRIT

(VYAVAHARIKA SANSKRIT)
1. Sasi Bhusan Charitam (Cento – 4) 25 marks
2. Sruta Bodha 20 marks
3. Sandhi 20 marks
4. Gita (Fifteen Chapter) 25 marks
5. Retranslation 10 marks

1. One Long question from Shashi Bhusana Charitam Canto-4 10 marks
   Translation Explanation and /or Three short question) 15 marks
2. Sruta Bodha – Four Meters 5 x 4 20 marks
   Arya, Anustubh, Vamsastha, Indravarja, Upendravajra, Upajati, sardula-Vikridita, Vasantatilaka, Mandakranta, Sragdhara.
3. Savra, Hai Visarga (Five in total)
4. Gita (15th Chapter) One long question 10 marks
   Translation Explanation and /or short question)

Pt. Bhagabat Prasad Dash, At/Po Suruda, Dist. Ganjam, Pin – 761108

2. Sruta Bodha – By Dr. H. K. Satapathy

PAPER – VII (THIRD YEAR)

DHARMA AND ALANKAR

1. Abhijanana Sakuntalam - 50 marks
2. Alankara (Without division) - 20 marks
3. Vacya Parivaratanam - 20 marks

I. Abhijan Sakuntalam, Act one to three - 30 marks
   Act one to three – One long question (15) one explanation (10 one translation or short question (05)

II. Sakuntalam from Act Four to seven. - 30 marks
   Division of marks is as per unit one

III. Alankara Upama, Utprekaa, Rupaka, Arthanturanyasa, Slesa, Kavyalinga, Vibhabana, Somasokti, Nidarsana, Viesesokti, Anuprasa and Jamak.
   - 20 marks.

IV. Five Sentences to change the voice in Sanskrit - 20 marks

BOOKS RECOMMENDED

2. -do- Ed. by H. K. Satapathy
3. Anuveda Chandrika

PAPER – VIII (FINAL YEAR)

PHILOSOPHY (DARSANA) IN SANSKRIT LITERATURE
1. Srimad Bhagabat Gita (Chapter – II) 60 marks
2. Manu Smruti (First 50 Verses of the Second Chapter) 40 marks

1.(i) Srimad Bhagabat Gita from 01 to 38 Verse
   a) One long Question 15 marks
   b) Three Short questions 15 marks
   30 marks

(ii) Srimad Bhagabata Gita from 39 to till end
   a) One long question 15 marks
   b) Three short questions 15 marks
   30 marks

2. Manu Smruti
   a) One long question 20 marks
   b) Four short questions 20 marks
   40 marks

BOOKS RECOMMENDED
1. Srimad Bhagabat Gita : Chapter –II by Sw. Chinmayananda

ECONOMICS B.A. (General and Honours) EXAMINATION
PASS
Paper – I  Micro Economics  100 marks
Paper – II Money, Banking, Public Finance and International Trade  100 marks
Paper – III  Macro Economics  100 marks
Paper – IV  Indian Economy  100 marks

HONOURS

FIRST YEAR EXAMINATION

Paper – I  Macro Economics  100 marks
Paper – II Money, Banking and Public Finance  100 marks

SECOND YEAR

Paper – III  Macro Economics  100 marks
Paper – IV  Indian Economy  100 marks
Paper – V  Quantitative Techniques  100 marks

THIRD YEAR EXAMINATION

Paper – VI  Development Environment economics  100 marks

Paper – VII and VIII Optional Honours Papers

A candidate has to take two optional papers selecting one from Group A and one from Group B which are to be treated as Paper –VIII & Paper-VIII respectively.

Group ‘A’
SECOND YEAR EXAMINATION

B.A. PASS PAPER – I

MICRO ECONOMICS

UNIT-I

a) Nature and scope of Economics

b) Consumer Behaviour

  Marshallian Utility Analysis – Concepts of demand and elasticities – Consumer Surplus and its rehabilitation.

c) Indifference preference analysis, properties, equilibrium, price and Income effects.

Unit-II

Production
Law of variable proportions and Returns to scale.

Nature of cost of and Revenue curves.

**Unit-III**

Value determination under perfect competition and simple monopoly.

**Unit-IV**

**Distribution**

Marginal Productivity Theory of Distribution and its application and usages.

Rent - Ricardian Theory of rent, Quasi-rent, Modern Theory of rent.

Wage: Supply and Demand Theory of Wages.

**Unit-V**

Interest – Savings and Investment theory. Loanable funds Theory Liquidity preference theory.

Profit – Risk and uncertainty bearing theories, Dynamic theory.

---

**PAPER – II (PASS)**

**MONEY, BANKING, PUBLIC FINANCE & INTERNATIONAL TRADE**

**Unit-I**

Evaluation of Money & role in modern economy.

Unit-II


Unit-III


Unit-IV


Unit-V


Public Debt-Meaning and classification.

THIRD YEAR EXAMINATION

PAPER – III

MACRO ECONOMICS

Unit-I


Unit-II

3. Concept of classical economics and the classical macro economic model Say’s law of markets and the classical theory of employment, Keynes Criticism of Say’s Law.

Unit - III


5. A comparison between Keynes and the Classical models of employment.

Unit-IV

5. Determinants of aggregate demands, consumption, savings and investment function, Multiplier and Accelerator.

Unit - V


PAPER – IV
INDIAN ECONOMY

UNIT-I
Basic features: Natural resources – Land, water and forest resources: Broad demographic features-population size and growth rates, sex composition, rural – urban Migration, occupational distribution; problems of Over-population; Population-policy: Infrastructure development: National Income.

Unit-II
Objectives: strategy; Broad achievements and failures; Current five year plan-objectives, allocation and targets; New economic reforms Liberalization. Privatization and globalization, Rationale behind economic reforms; Progress of Privatization and Globalization.

Unit-III
Nature, importance and trends in agricultural production and Productivity; Factors determining productivity; Land Reforms: New agricultural strategy and green revolution; Rural Credit; Agricultural marketing.

Unit-IV
Industrial development during the Plan period; Industrial policy of 1948, 1956. 1977 and 1991; Industrial Licensing, licensing policy – MRI Act. FERA & FEMA; Growth and problems of small scale industries; Role of Public sector enterprise in India’s industrialization.

Unit-V

FIRST YEAR EXAMINATION
PAPER – I (HONOURS)

MICRO ECONOMICS

Unit-I

Introduction:

Nature and Scope of economics; Methodology in economics; Choice as an economic problem; Demand & Supply; Meaning of Market equilibrium.

Unit-II

Consumer’s Behaviour

Utility Cardinal and Ordinal approaches: Indifference curve; Consumer’s equilibrium (Hicks & Slutaky) Geffen good ; compensated demand; Elasticity of Demand – price, Income and Cross; Consumer’s surplus, Engel curve.

Unit-III

Theory of Production and costs.

Production decision; Production function; Isoquant; Factor substitution; Law of variable proportions; returns to scale; economics of scale; Different concepts of cost and their Inter relation; Equilibrium of the firm; Expansion path.

Unit-IV

Market Structure:

Market forms – Perfect to Imperfect markets; Equilibrium of a firm-perfect competition, Monopoly & price discrimination Measure of monopoly power; Monopolistic composition ; Duopoly, Oligopoly.

Unit-V
Factor pricing & welfare Economy:

Marginal productivity theory of distribution; Theories of wage determination: Trade Union & wages; Rent-Scarcity read; Differential rent; Quasi rent, Transfer earning; Interest-classical and Keynesian theories ; Theories of Profit-Innovation Risk and Uncertainty theories.

PAPER-II

(MONEY, BANKING AND PUBLIC FINANCE)

Unit-I

Money & Inflation:

Money – meaning, function & classification, Gresham’s law; Role of money in a modern economy.

Uses and limitations of index numbers; Quantity theory of money case transaction and cash balance approaches; The Keynesian approach Inflation, deflation and relation –definition types, causes and effects of inflation on different selections of the economy; Demand-pull and cast-push inflation; measures to control inflation.

Unit-II

Commercial Banking:

Meaning and types; Functions of Commercial banks; The process of Credit creation-Purpose and Limitations; Liabilities & assets of banks; Evaluation of Commercial banking in India after independence; A critical appraisal of the
progress of commercial banking after nationalisation: Recent reforms in banking sector in India.

**Unit-III**

**Central Banking:**

Functions of a Central bank; Quantitative & qualitative methods of credit control – bank rate policy, Open market operations, variable reserve ratio & selective methods. Role & Functions of the Reserve Bank of India: Objective & limitations of monetary policy with special reference to India.

**Unit-IV**

a) **Nature & scope of Public Finance:**

Meaning and scope of public finance; Distinction between private and public finance; public goods. Vs. Private goods; The principle of maximum social advantage; market failure; role of the Government.

b) **Public expenditure;**

Meaning, classification & Principle of public expenditure; Canona & Effects & effects of public expenditure; Trends in public expenditure & causes of Growth of expenditure in India.

**Unit-V**

a) Taxation:
Sources of public revenue; Taxation-Meaning & Classification of taxes; Division of tax burden. The benefit and ability-to-pay approaches; Impact & incidence of taxes; Taxable capacity; Effects of taxation; Characteristics of a good tax system; major trends in tax revenue of the Central and State Governments in India.

b) Public Debt & Financial Administration:
Sources of Public borrowing; Effects of public debt; method of debt redemption; Growth of India’s public debt; The public budget-Economics & Functional Classification of a budget.

SECOND YEAR EXAMINATION

PAPER-III

MACRO ECONOMICS

UNIT-I

1. Macro Economics - its scope & Importance-its limitations; Circular flow of Income & its Expenditure – Total output and its components


Unit-II
3. Concepts of classical economics and the classical Macro economic model
Say’s law of markets and the classical theory of employment, Keyne’s
criticism of Say’s Law and the classical system of productive capacity

Unit-III

4. Keynesian system of total expenditure determining National Income-
Aggregate supply- Full employment, Saving & Investment. Saving &
Investment relationship.

5. A comparison between Keynes and the classical models of employment.

Unit –IV

6. Determinants of investment, marginal efficiency of capital & interest,
Applicability of Keynersian theory to under developed countries.

7. Nature & Characteristics of Trade cycle Howtrey’s Monetary theory;
Hayek’s over – Investment theory; Keynes’ view on trade cycle; the concept
of accelerator; Samuelson & Hicks multiplier-accelerator interaction model;
Control of trade cycle.

PAPER-IV

INDIAN ECONOMY

PAPER – IV

INDIAN ECONOMY

UNIT-I
a) Indian Economy at the time of Independence:

Colonial economy: Semi feudal economy; Backward economy; Stagnant economy; Other salient features; Planning exercise in India – National Planning Committee, Bombay Plan; People’s Plan; Gandhian Plan, The Planning Commission.

b) Structure of Indian Economy.

Basic features; Natural resources: Land, Water and Forest resources; Board demographic features – Population size and C. Growth rates, sex composition, rural urban migration, occupational distribution; problem of over-population; population policy; Infrastructure development; National Income.

Unit-II

Planning in India:

Objectives: Strategy, Board Achievements and failure Current Five Year Plan-objectives. Allocation & targets; New economic reforms Liberalization, Privatization and globalisation; Rationable behind economic reforms; Progress of privatization and globalisation.

Unit-III

Agriculture and Industry:

a) Agriculture:
Nature, importance and trends in agricultural production and Productivity; Factors determining productivity; Land Reforms: New agricultural strategy and green revolution; Rural Credit; Agricultural marketing.

b) **Industry:**

Industrial development during the Plan period; Industrial policy of 1948, 1956, 1977 and 1991; Industrial Licensing, licensing policy – MRI Act. FERA & FEMA; Growth and problems of small scale industries; Role of Public sector enterprise in India’s industrialization.

---

**Unit-IV**

**External Sector**

Role of Foreign trade; Trends in exports and imports; Composition and direction in India’s foreign trade; Balance of payments crisis and the New Economic reforms-exports promotion measures and the new trade policies, Foreign capita -FDI, aid; Multinational Corporations (MNCs)

**Unit-V**

**Areas of Concern of Orissa Economy:**
Characteristics of economic backwardness of Orissa poverty and unemployment in Orissa,

Structure of the Orissa Economy.

PAPER-V

QUANTITATIVE TECHNIQUES

Unit-I

Basic Concepts:

Variable, sets Functions, Equations, Identities, systems of equations: Applications of straight line system, scope of the line, Homogeneous function.

Calculus:

Differentiation of a function: Maxima & Minima, Elasticities, Equilibrium of a firm and consumer, Inter relationship among total, marginal and average cost & revenues; Integration of a function, Definite Integral Consumer’s Producer’s surplus.

Unit-II

Matrix and Determinants:

Various types of matrices, Determinants, Inverse of a matrix Cramer’s rule.

Unit-III

Introduction to Statistics:
Basic concepts: Population, sample, Parameter, Frequency Distribution, Cumulative Frequency, Graphic & diagrammatic, representation of data, Techniques of data collection; sampling Vs. Population, primary and secondary data.

**Central Tendencies and Dispersion:**

Measures of Central Tendency; Mean, Median Mode, Geometric mean & Harmonic mean, Measure of dispersion; Range, mean, Deviation. Standard deviation, Coefficient of variation, Quantile deviation.

**Unit-IV**

**Correlation and Regression:**

Correlation; Simple, Coefficient of Correlation- Kari Pearson and Rank Correlation, Partial & Multiple correlation Analysis, Regression analysis- Estimation of regression line in bivariate, distribution-Least squares method, interpretation of regression coefficient.

**Unit-V**

**Time Series and index Numbers:**

Time series analysis to concept components Determination or trend and seasonal indices, Index numbers- concept, price relative, quantity relative, value relative; Lesperryer’s, Passche’s & Construction and limitation of index numbers, Tests for ideal index number.

**THIRD YEAR EXAMINAION**

**PAPER – VI**
DEVELOPMENT ENVIRONMENT ECONOMICS

Unit-I

Development of Economic Growth:

Economic Growth and development – factors affecting economic growth -
Capital, labour & Technology:

Human Resource Development: Population Problem and growth pattern of

Unit-II

Theories of Economic Development:

Theories of Development-classical theory, theory of Kari Marx, State theories
of economic growth – Rostow.

Unit-III

Approaches to Economic Development:

Partial theories of growth and development-various circle of poverty, circular
causation, unlimited supply of labour, Theory of Big-Dush. Balanced growth
Vs. Unbalanced growth. Critical minimum effort thesis, low income equilibrium
trade.

Role of agriculture-in economic development – Importance of land reforms.
Rationales and patterns of industrialisation in developing countries. The choice
of techniques and appropriate technology and employment, efficient of small scale Vs Large scale production.

Unit-IV

Planning and Development:

Need for Planning, Democratic, decentralised and Indicative planning; Micro level planning, Role of monetary and Fiscal policy in developing countries, External resources, Foreign direct investment.

Unit-V

Environment & Ecology Development.

Environment, Economy Linkage, market failure for environmental goods, Property right and externalities, environmental awareness and Policies, Environmental Pollution and legislation in India.

Prevention, control and abetment of Pollution.

OPTIONAL (HONOURS) PAPERS VII & VIII

GROUP – B

HISTORY OF ECONOMIC THOUGHT

PAPER-VIII

Unit-I

Early period:
Mercantilism: main characteristics; Thomas Mun- Physiocracy: natural order, primary of agriculture, social classes. Tabecan, Economique, taxation, Turgot- Economic ideas of Petto, Locke & Home.

Unit-II

Classical period:


Unit-III

Marginalists:

The precursors of marginalism-Gossen. The marginalist revolution; Jevans. Walnas & Merger-Marshall as a great synthesizer; role of time, in price determination, economic methods, ideas on consumer’s surplus; elasticities, prime and supplementary costs, representative firm, external and internal economics, quasi-rent, Pigoy; Welfare, economics, Schumpeter: role of entrepreneur and innovations.

Unit-IV

Keynesian Ideas:
The aggregate economy; liquidity preference theory and liquidity trap, marginal Efficiency of capital and Marginal Efficiency of Investment, wage rigidities, under-employment equilibrium, role of fiscal policy; deficit spending and public works; multiplier principle, cyclical behaviour of the economy, uncertainty and role of expectations, Impetus to economic modelling.

Unit-V

Indian Economic thought:

Early economic ideas; Kautilya, Modern economic ideas; Naroji, Ranade; Economic ideas of Gandhi, Village Swadeshi, place of machine & Labour, cottage industries, trusteeship, Early approaches to planning (The national planning committee) Gadgil Co-operation as a way of life & strategy of development; J. K. Mehta Wantlessness.

GROUP – A

PAPER – VII

ELEMENTARY MATHEMATICAL ECONOMICS AND ECONOMETRICS;

A. Mathematical Economics:

Unit-I

Basic Concept:

Functions – Types of functions and their graphs, limit and continuity of functions, Matrix and determinants-solution of simultaneous equations; Elementary analytical geometry-straight lines, parabola, rectangular hyperbole
& circle. Simple differential equation, Constrained & unconstrained optimisation.

**Unit-II**

**The Theory of consumer & Producer’s Behaviour:**

Utility function-constrained optimization. Consumer’s equilibrium Slutsky equation. Derivation of demand curve, Elasticity of demand.

Production function-properties of production function, homogeneous & non-homogeneous production function Constrained optimisation and producer’s equilibrium. Elementary analysis of cob-Douglas and CES production function.

**Unit-III**

**Input-output Analysis and Linear Programming:**

Input-output Analysis-simple closed & Open model: Linear programming-Basic concepts, primal and dual graphical solution and the simplex method of solution.

B. **Econometric Methods:**

**Unit-IV**

**Basic Concepts:**

Definition and scope of econometrics: Theoretical probability distribution, Sampling distribution, Estimation, Testing of Hypothesis-Type I and Type – II error. Test based on Z.t F & $X^2$ (Chi square) Statistics, Desirable properties of good estimator-unbiased, efficiency Consistency and sufficiency.
Unit-V

Simple linear & Non-linear Regression Analysis:

Simple Regression Analysis – Concepts, Assumptions of Ordinary Least Squares (OLS) method, Gauss – Markov theorem, Co-efficient of determination Testing of regression coefficient Different functional forms of two variable non-linear relations Analysis of Variance (ANOVA) and Analysis of convariance (ANCOVA).

GROUP – A

INTERNATIONAL ECONOMICS

Unit-I

Importance of Trade & Trade Theories:

Importance of the study of international economics; Inter-regional and international trade; Theories of absolute advantage, comparative advantages and opportunity cost.

Unit-II

Gains from Trade:

Gains from Trade-Their measurement and distribution; Trade as an engine of economic growth concepts of terms of Trade and their importance in the theory of trade; Doctrine of reciprocal demand-its importance and limitations in the theory of trade.
Unit-III

Tariffs and Quotas:

Types of tariffs and quotas; their impact in partial equilibrium analysis: Free trade and policy of tariffs in relation to economic growth with special reference to India; Concept of optimum tariff.

Unit-IV

Balance of Trade and Balance of Payments:

Concepts and components of balance of trade and balance of payment: Equilibrium and disequilibrium in balance of payments; Consequences of disequilibrium in balance of payments: various measures to correct deficit in the balance of payments; Relative merits, demerits and limitations of devaluation; concept and implications of foreign trade multiplier, functions of IMF, World Bank and GATT/WTO.

Unit-V

Foreign Trade in India:

Recent changes in the composition and direction of foreign trade; causes and effects of persistent deficit in the balance of payments; Measures adopted by the government to correct the deficit before and after, 1991: Need for & rationale of trade reforms in India (including partial and full convertibility
in rupees): instrument of expert promotion & recent export and import policies of India: Role of multinational Corporations in India.

GROUP – A

PAPER – VII

AGRICULTURAL ECONOMICS

UNIT-I

Rural Economy of India.

Structure of the Indian Economy; place of agriculture in rural economy: Composition of the Indian rural economy; farm sector and non-farm sector. Diversification of agriculture; Agriculture and allied activities (Fisheries, horticulture, Floriculture); Forestry in India; Its Growth problem and state policies; Cattle wealth of India & Dairying; Rural Industrialisation; Food processing industries & agro-based industries, development of rural infrastructure.

Unit-II

Development of Agriculture:

Role of importance of agriculture in Economic Development: Linkage between the agricultural sector and the non-agricultural sector changing nature of linkage; Agricultural resources in India: Land utilisation and cropping pattern; Irrigation in India Command area development & flood control: Trends in
agricultural growth and agricultural productivity, patterns of agricultural development; regional variation.

Unit-III

Agrarian Relation & Land Reforms in India.

Agrarian Relations: historical evolution and Land reforms programme during 1950s and 1960s, Land reforms; programme & performance, during 1970s after.

Unit-IV

Technological Change in Agriculture:

Technology in agriculture: Traditional techniques and practices, HYV seeds-fertilizers, water technology(green revolution) Sustainable agriculture; Emerging trends in agricultural technology; Dry land farming, use of bio-technology techniques.

Unit-V

State and Agriculture:

Agriculture Finance in India: Importance, types of requirements; sources, non-institutional and institutional existing rural credit delivery system (multi agency approach), Agricultural marketing in India; Regulates markets and warehousing Role of cooperative in Agriculture.
Incentive in agriculture; Price and non-price incentive; input subsidies; Agricultural price policy (APP): Nature of demand and supply of Agricultural products; need for State intervention, Food security in India and Public distribution system.

Incentive in Agriculture, price and non-price incentive; input subsidies; Agricultural price policy (APP); Nature of demand and supply of Agricultural products; Need for state intervention; Food security in India and public distribution system.

Group –B

Paper-VIII

COMPUTER AND ITS APPLICATION

Theory – 60 marks

Unit-I

Basic of Computer:

Computer fundamentals – Basic components and organisation of a computer: History and generation of computer, Computer devices; Classification of Computers: Data representation, C. Representation, Computer software-Dist Operating System (MS-DOS) and application software, programming languages and packages.

Unit-II

Use of computer of Office Automation:
Text editor and word processor, Operative familiarisation of MS WORD
Concept & use of spread sheet, operation and use of MS – Excel Basic of
Database, table records and fields, Data entry operating principle of MS-
access; Document formation and presentation through MS-PowerPoint.

Unit-III

Data Analysis and Trend forecasting:
Basic statistical functions and analysis – mean, median, mode standard
deviation, correlation, regression methods & techniques, estimation Linear
trend and growth rate:

GROUP – B

PAPER – VIII

DEMOGRAPHY

UNIT-I

Introduction:
Meaning and scope of demography: Theories of population, Malthus, Optimal
type of population, and theory of demographic transition; Historical
evidence of population growth in developed and developing countries.

Unit-II

Migration and Urbanization:
Concept and type—Temporary, Internal and international migration: Factors affecting migration: Theories of migration related to internal migration: Urbanization – growth and distribution of rural and urban population in developed and developing countries.

**Unit-III**

**Techniques of Analysis:**

Crude birth and death rates-age specific birth and death rates, standardized birth and death rates; Study of Fertility-Total fertility rates, gross reproduction rate, and net reproduction rate: Study of martial status-life table: meaning of its columns and its uses; Reproductive and child health in India-temporal and spatial variation in sex ratio.

**Unit-IV**

**Population Policy:**

Salient features of population censuses of 1971, 1981, 1991 and 2001; Evolution of population policy in India: Shift in policy focus from population control to family welfare and to women empowerment; Demographic status and household behaviour-education, Women’s autonomy and fertility; Population, health poverty and environment linkages in India; The new Population Policy.

**Unit-V**

**Population Projection:**
Techniques of population projection-concept of stationary, stable and quasi-stationary population; Aging of population in India Changes in family structure and old age security.

Books Recommended:

Optional Paper-VIII: Demography

Practical – 40 marks

ECONOMICS

B.A. (PASS)

Paper – I Micro Economics:

4. Chopra, P. N. – Principles of Economics
5. Ahuja H. L. – Advanced Economic Theory

Paper – II Macro Economics:


Paper-III (Money Banking, Public Finance & International Trade).

4. Robertson, D. N. – Money
7. Growther, G – An outline of Money
8. Patnaik, K. M. – Monetary Economics.

**Paper – IV : Indian Economy.**

2. Dlutta, Rudder & K. P. M. Sundaram – Indian Economics
3. Agrawal, A. N. – Five Year Plans of India
4. Agrawal, A. N. – Indian Economy

**B.A. ECONOMICS (HONOURS)**

**Paper – I (Micro Economics)**

3. Dtonier & Hague – A Text Book of Economic Theory
4. Ahuja H. L – Advanced Economic Theory
5. Chopra, P. N.- Advanced Economic Theory

Paper – II Macro Economics:
7. Ahuja H. L – Microeconomics Theory and Policy

Paper – III (Money, Banking & Public Finance)
   Practice, McGraw Hill, Kogakusha, Tokyo.
   Delhi.
5. Growther, G. – An Outline of Money
7. Robertson, D. H. – Monetary
8. Gupta, S. E – Monetary Theory & International Trade.
9. Seth, M. L. Money Banking and International Trade

**Paper – IV (Indian Economy)**

   Experience, Himalaya Publishing House, Mumbai.
2. Dutta, Rudder & K. P. M. Sundaram – Indian Economics
3. Agrawal, A. N. – Five Year Plans of India
4. Agrawal, A. N. – Indian Economy
6. Government of India – Five year Plans

**Paper – V (Quantitative Techniques)**

   Chand & Sons, New Delhi.
2. Elhance, D. N. – Fundamental of Statistics.
4. Taro Yamane – Statistics
5. Alloen R. G. D – Mathematical Analysis for Economics
7. Taro Yamane – mathematics for Economists, Prentice Hall of India, New Delhi
8. Lewis, J. A. – An introduction to Mathematics for studies of Economics

Paper – VI (Development & Environment Economics)

OPTIONAL (HONOURS) FOR PAPER VII & VIII

Optional –I: History of Economic Thought:

Optional – II (Elementary Mathematical Economics & Econometrics)

Optional Paper –III (International Economics)


Optional Paper – IV (Agricultural Economics)


Optional Paper – V (Computer and its application)


**MASS COMMUNICATION**

**SECOND YEAR EXAMINATION**

There shall be two theoretical paper each of three hours duration carrying seventy five marks one practical papers of three hours carrying fifty marks.

Paper – I Introduction to Mass Communication 75 marks
Paper-II Reporting and editing 75 marks
Paper –III Practical 50 marks
FINAL YEAR EXAMINATION

There shall be two theoretical papers, each of three hours duration carrying seventy-five marks one practical papers of three hours carrying fifty marks.

Paper – IV  Audio – Visual media  75 marks
Paper – V  Advertising and Public Relations  75 marks
Paper – VI  Practical  50 marks

DETAILED SYLLABUS

PAPER-1

INTRODUCTION TO MASS COMMUNICATION

Unit-I

Journalism and Mass Communication – Nature-Scope-definition-process-function-Types of Communication

Unit-II

Newspapers types of newspaper-contents and characteristics, introduction to print media in India.

Unit-III

Folk Media in India ( in general) , Orissa in particular.

Unit-IV

Organisational structure of newspapers, functions of staff and different departments of a newspaper organisation.
Unit-V
Press Council of India, DAVP, ABC, PIB, Field Publicity, Photo Division, Film Division.

Paper – II
REPORTING AND EDITING
UNIT-I
Reporting: Definition of news, sources, determination of news value, news story structure, elements of news.

Unit-II
Reporting: Principles of reporting, functions and responsibilities of writing news, function of load, types of load.

Unit-III
Reporting: specialised reporting, crime, accident, obituary, speech, sports, natural calamity.

Unit-IV
Editing: Functions and role of a sub-editor and chief sub-editor, headlines-functions and techniques, principles of rewriting.

Unit-V
Editing: Editing and proof reading symbols and their significance; principles of newspaper make-up, dummy.

Paper – III
PRACTICAL
Candidate are to be asked to write reports on any event or cover speech to be given by the examiner. Information may also be supplied to the candidates in a jumbled manner. Candidates are to be asked to edit teleprinter copies.

**PAPER – IV**

*(75 MARKS)*

**AUDIO – VISUAL MEDIA**

**UNIT-I**

Radio: History of Radio in India, Radio as a medium of Mass Communication, characteristics of Radio Organisation, Structure of AIR.

**Unit-II**

Radio: Different formats of Radio Programs – News, features, interviews, commercial broadcasting and special audience programme (Children, Woman, farm broadcasting).

**Unit-III**

Television: History of Television of India, Television as Medium of mass Communication-characteristics of Television, organizational structure of Doordarsan.

**Unit-IV**
Television: Television programme formats, Television programme production process, special audience programmes (Youth, Rural, farm and Woman).

**Unit-V**


**PAPER – V**

**ADVERTISING AND PUBLIC RELATION**

**(75 MARKS)**

**UNIT-I**

Advertising: Definition, types advertising, Advertising in Newspapers, Magazines, Radio, Television, Outdoor.

**Unit-II**

Advertising: Advertising agency-structure and Functions-creativity, planning, Media selection, budgeting, client service, advertising campaign planning.

**Unit-III**

Advertising: Techniques of advertising, advertising copy preparation for print media and electronic media.

**Unit-IV**
Public relation: Definition, Growth of public relation in India, public relation as a communication function, public relation in private and public sectors, Government PR. Structure and function of PR Department.

Unit-V


PAPER-VI

PRACTICAL

(50 MARKS)

The candidates are to be asked to write News for Radio and Television and also they have to prepare advertising copy of a PR handout.

Practical class record: Shall contain the following:

1. Radio news writing -- 2
2. Television News Writing -- 2
3. Advertising Copy -- 2
4. PR handout -- 2
5. Media Study Tour

MASS COMMUNICATION

B.A. HONOURS

FIRST YEAR EXAMINATION
There shall be two theory papers each carrying 75 marks and each of three hours duration and one practical paper of three hours duration carrying 50 marks.

**FIRST YEAR**

Paper – I  Introduction to Mass Communication and Writing for mass media.  75 marks

Paper – II  Reporting and Editing –I  75 marks

Paper – III  Practical  50 marks

**SECOND YEAR**

Paper – IV  Audio – Visual Media  75 marks

Paper – V  Advertising and Public Relations  75 marks

Paper – VI  Reporting and Editing-II  75 marks

Paper – VII  Design and Graphics  75 marks

Paper – VIII  Practical  100 marks

**FINAL YEAR**

Paper – IX  Computer Application for Mass Media  75 marks

Paper – X  Traditional Media & Development Communication  75 marks

Paper – XI  Practical  50 marks

**DETAILED SYLLABUS FOR B.A. (HONOURS)**

**MASS COMMUNICATION**
FIRST YEAR EXAMINATION

PAPER-I

INTRODUCTION TO MASS COMMUNICATION MEDIA WRITING FOR MASS MEDIA

Unit-I

Journalism and Mass Communication—nature and scope, definition, process and function: mass media in modern society, mass media and democracy.

Unit-II

Early efforts of printing-Newspapers—types of newspapers—contents—characteristics, print media in India an overview.

Unit-III

First Indian newspaper, print media in 19th century, brief history of major English in language newspapers. Indian Press and Indian freedom movement.

Unit-IV

Different ownership of print media, organisational structure of newspaper—function of different departments of newspapers, patterns of newspaper ownership and management in India.
Unit-V

Elements of Language, principles and methods of effective writing, rules of grammar, sentence construction, narration translation techniques, writing features, articles, writing for special interest audience.

PAPER-II (75 MARKS)

REPORTING AND EDITING

UNIT-I

Definition Of news, determination of new value, principles of reporting, functions and responsibilities of writing news-lead-types of lead; body-techniques of re-writing news agency copy.

Unit-II

Qualities of reporter-news elements, sources, problems in reporting interpretative reporting.

Unit-III

Reporting for crime, accident, culture, politics sports, commercial and natural calamity.

Unit-IV

Nature and need for editing principles of editing, function of editorial desk, news agency copy, editing symbols, proof reading symbols and their significance.
Unit-V

Function and qualifications of a sub-editor and chief sub-editor, copy selection, copy testing, basic principles of translation.

PAPER-III

PRACTICAL (50 MARKS)

1. Candidate are to be asked to write reports on any event of cover speech to given by the examiner Information may be supplied to the candidates in a jumbled manner. 15 marks

2. Candidates are to be asked to edit one teleprinter copy 15 marks

3. Record 10 marks

4. Viva-voce 10 marks

SECOND YEAR EXAMINATION

PAPER-IV (75 MARKS)

AUDIO-VISUAL MEDIA

Unit-I

Radio: History of Radio in India, radio as a medium of mass communication, characteristics of radio organization, structure of AIR.

Unit-II

Radio: Different formats of radio programmes- news, features, interviews and commercial broadcasting, News bulletin, newsreel, special audience programmes (women, children, farm and youth).
Unit-III
Television History of television in India, television as medium of mass communication-characteristics, ownership, organisational structure of Doordarshan, satellite, cables TV and recent trends in TV broadcasting.

Unit-IV
Television: Television programmes formats, T. V. Programme production process, special audience programmes; Youth, Rural, farm and women, T. V. Interview and serials.

Unit-V

PAPER – V (75 MARKS)
ADVERTISING AND PUBLIC RELATION

Unit—I
Advertising: Definition, classification of advertising in newspaper, magazines, Radio, T. V. And outdoor advertising , consumer, corporate, social and economic benefits of advertising.

Unit—II
Advertising: Advertising agency-structure and function, advertising creativity planning and media selection, product advertising-target audience-brand image, advertising campaign.
Unit-III


Unit-IV

Public Relations: Definition, Growth of public relation in India, PR as a communication function. Public relation in private and public sectors, government PR, structure and function of PR department.

Unit-V


PAPER – VI (75 MARKS)

REPORTING AND EDITING – II

Unit-I

Civic Reporting: Reporting Function – social cultural, political, seminars, workshops and civic problems (such as sanitation, health, education, law and order, police hospital etc.).

Unit-II

Development reporting-Social issues Controversies, Development Programmes – implementation and impact, feedback and evaluation.

Unit-III
Rural reporting: Agricultural-practice, problems and policies caste community relation, rural urban relation.

Unit-IV

Structure and functions of newsroom of daily, weekly newspapers and periodicals.

Unit-V

Headlining – principles, types and techniques.

PAPER – VII

DESIGN AND GRAPHICS (75 MARKS)

Unit-I

Elements of design and graphics, visualization, convergence and divergence-conceptualization – functions and significance-fundamentals of creativity of art-logic–style-value-tool.

Unit-II

Basic elements of principles of graphics, design layout and production, typeface families – kinds – principles of good typography-spacing-measurement-point system.

Unit-III

Type composition-manual-mechanical-lino-mono-Ludlow, DTP, use of computer software.

Unit-IV
Printing method-letterpress, cylinder, rotary-screen, offset, plate making, types of papers, safety measures in printing press.

Unit-V

Principles of newspaper make-up, front page and editorial page make-up, dummy, photo cropping, captioning.

PAPER – VIII

PRACTICAL (75 MARKS)

The practical assignments for the students given below:

1. Radio script writing or T. V. Script writing 20 marks
2. Advertising Copy 20 marks
3. P. R. Handout 20 marks
4. Record 20 marks
5. Viva – voce 20 marks

PAPER – IX (75 MARKS)

COMPUTER APPLICATION FOR MASS MEDIA

UNIT-I
Introduction to computer-Brief history and generation of computers, types of computer hardware and software, Keyboard, VDU, MS Office and its application; MS word, excel, power point, working with text, page setup, printing, formatting techniques, graphics and drawing:

Unit-II

Coral-draw environment, working with objects; clipart and symbols, control of object outlines-coral show-cartoons, Multimedia-definition – CD-ROM and multimedia – business applications- educational applications.

Unit-III

Image, bitmaps, drawing, principles of animations use of video broadcast, NTSC-PAL-SECAM – HDTV.

Unit-IV

Web vs. Printing – a comparison, advertising content generation and research, design and contents, Internet basics – e – mail, browsing FAX, WWW concept.

Unit-V

Website element-visual design, background. Colours, sales promotion, service promotion in the website.

PAPER – X (75 MARKS)

TRADITIONAL MEDIA & DEVELOPMENT COMMUNICATION

Unit-I
Indigenous communication patterns-India and Orissa, relevance of folk, media for rural development, folk, media-yatra, daskathia, popettery, Ramleela, Pala and other traditional media.

**Unit-II**

The relevance of Tribal icons in Tribal societies, Tribal rituals, tribal festivals, role of weekly market and mela and its impact on tribal societies.

**Unit-III**

Development programmes by Government and NGOs Role of media for eradication problems of rural and tribal societies, governmental programmes on cultural integration ad national integration.

**Unit-IV**

Government’s media for development, local radio station (area specific), song and drama division, field publicity, PR department of State Government and other allied media organisation.

**Unit-V**

Interpersonal and small group communication for rural development, community news paper, wall news journal, integrated multimedia approach for development.

**PAPER – XI (50 MARKS)**

**PRACTICAL**

The assignments for the students are given below:
1. Modify the given text using different fonts and sizes in MS word.
2. Use MS-Excel to solve the problems related to business application
3. Develop a text page using different formats and column to present in a newspaper
4. Develop the given presentation using animation in MS-power Point.

**MARKS DISTRIBUTION:**

1. Assignment. -- 30 marks
2. Record. -- 10 marks
3. Viva-voce -- 10 marks

Total 50 marks

**B.A. / B.SC. GEOGRAPHY (PASS)**

**SECOND YEAR (THEORY) EXAMINATION**

**PAPER – I (75 MARKS)**

**Unit-I**

Nature and scope of Physical Geography (latest concepts)

**Unit-II**

Earth’s interior, Wegener’s theory of continental Drift; Earth movements, Isostasy earthquakes and volcanoes.

**Unit-III**

Rocks, formation of Regoliths and soil rocks & Relief.

**Unit-IV**
Geomorphic agent and processes, Erosion, Transportation and deposition, Evolution of landscape, Concept of cycle of erosion. Interruption in cycle of erosion. Interruption in cycles of erosion, Fluvial, arid, Glacial, Karst lands-cape.

Unit-V

Environment and Ecosystem (modern concepts, energy interrelationship, Environmental hazards).

SUGGESTED READINGS:

Dayal P – A Text Book of Geomorphology, Shukla Book depot. Patna


Singh, S – Geomorphology, Prayag Pustakalaya


PAPER – II (75 MARKS)

HUMAN & ECONOMIC GEOGRAPHY

UNIT-I
Nature and scope of Human Geography, Branches of Human Geography, Concepts of man & Environment relationship, Davison of mankind racial and ethnic groups early economic activities food gathering, hunting, fishing, vegetation, shifting cultivation.

**Unit-II**

Human adoption to the environment, Gold region, hot region, plateau, Mountain (Eskimo, Bushman, Bediun, Gonds, Mashi Gujjars, Nomads).

**Unit-III**

Definition, nature, scope and recent trends of economic geography, classification of economics primary secondary Tertar of Natural Resources, classification of resources conservation of resources.

**Unit-IV**

Agriculture-Physical, social cultural environment influencing crop production. Agricultural types of classification spatial distribution of major food crops and cash corps.

**Unit-V**

Minerals (ferrous & non-ferrous)


Trade & Transport: Geographical factors in their development.

**SUGGESTED READINGS:**

Singh, K. N. – People of India

Carr, M. – Patterns, Process and change in Human Geography.
SECOND YEAR EXAMINATION (PRACTICAL)

PAPER – III

Time – 3 hours

Full Marks – 50

i. Statistical concepts in mapping
   Histograms, Frequency curve, Ogive, Polygene.

ii. Cartograms and Thematic mapping (Relief, Soil, Vegetation).

iii. Classes of Phenomena (Positional, Linear & Areal and velocity data) and their measurements and representation on map.

iv. Drawing of climograph, hythergraph & Ergograph and their interpretation.

v. Representation of temperature, pressure and Rainfall data by lines and graphs.

SUGGESTED READINGS:


THIRD YEAR EXAMINATION (THEORY)

PAPER – IV (PASS) 75 MARKS
Atmosphere and Hydrosphere:

Unit-I

Elements and factors of climate composition and structure of the atmosphere.
Atmospheric temperature, Isolation, (Distribution and heat budget).

Unit-II

Atmospheric pressure wind and humidity.
Air masses and fronts concept, classification and properties Atmospheric disturbance.

Unit-III

Climatic classification (Koppen’s Thorthwalte’s) HYDROSPHERE

Unit-IV

Surface configuration of Ocean floor (Pacific, Atlantic and Indian)
Distribution of Temperature & Salinity of Oceans & Seas

Unit-V

Circulation of Ocean Water, waves, Tides & Currents, Currents of Indian, Atlantic and Pacific Oceans?

SUGGESTED READINGS:

Critehfield, H. – General Climatology
Stringer, E. T. – Foundation of climatology.


Sharma R. D. Vateri, M – Oceanography for geographer.

PAPER-V

TIME – 3 HOURS

FULL MARS - 75

(POPULATION, POLITICAL AND SETTLEMENT GEOGRAPHY)

UNIT-I


Unit-II

Composition, determinants & pattern, migration determinants and consequences, population & Resources Relationship.

Unit-III

Nature, scope and subject matter of political geography and geopolitics.

Factors for emergence of states, Boundaries frontiers, (Functions and classification) Global strategic views.

Unit-IV

Settlement concept, factors of growth of rural and urban settlements, Site, Structure, Internal morphology, external form pattern. Function, House types.

Unit-V
Hierarchy of settlements, emergence and characteristics and classification of urban settlement.

SUGGESTED READING;


Bose A - India’s Urbanisation.

Clout, R. D – Rural geography.

Money, D. C. – Patterns of Settlements

Mukherjee, R. K. – Man & his habitation.


Taylor, P. J. – Political Geography of 20th Century, A. Global analysis


**Time – 3 hours**

**Paper-VI**

**Full Marks-50**

**Unit-I**

1. Study of India Topographic Maps, Classification of sale.

2. Basic Principles of surveying: Prismatic campus, plane table-levelling.

4. Interpretation of Indian Weather Map.

5. Field work and field Report. (A report need to be submitted.) Identification of land forms, settlements land use features and identification of social characteristics.

SUGGESTED READINGS;

Singh, R. L._ Elements of Practical Geography, Kalyani Publisher.

Lawarence, GRP – Cartographic methods Methuen, London.


GEOGRAPHY (HONOURS)

FIRST YEAR EXAMINATION

There shall be two theory papers each carrying 100 marks and each of three hours duration.

FIRST YEAR EXAMINATION

PAPER-I

Time – 3 hours  PHYSICAL BASIS OF GEOGRAPHY  Full Marks-100

Unit-I
Lithosphere

1. A) i) Geological time scale.
   ii) Fundamentals concepts of geomorphology

   B) Interior of the earth- the earth – Seismological evidences and zones of the earth.

   C) Concepts of Isostasy – classical and Modern.

2. Diastrophism: i) Orogenesis (Kober, Holmes and Wilson)
   ii) Epirogenesis – Continental drift theory (Wegener), Plate Tectonic theory
   iii) Earthquakes and their World distribution with a mention of –plate tectonics.

3. Weathering and Erosion: a) Physical and Chemical weathering
   b) Mass Wasting
   c) Basic concepts of Cycle of erosion (Davis and Penk)

4. Evolution of Landforms (Reference to cyclic evolution):
   a) Different earth movements and structures (i) Faults (ii) Folds
   b) River action and fluvial land form
   c) Glacial action and glaciated land forms.
   d) Wave action and coastal topography
   e) Wind action and Arid topography
   f) Action of ground water and karst topography.
Unit-II

Atmosphere (Climatology)

1. Elements and Factors of Climate:
   a) Temperature:  i) Insolation variability  
                   ii) Heat budget.  
                   iii) Distribution of temperature.  
   b) Pressure and winds - Forces controlling atmospheric motion pressure belts, planetary and local winds, periodic winds and jet streams.  
   c) Humidity – Parameters, Evaporation, Condensation and Precipitation.  

2. Air Masses – Types, characteristics, Frontogenesis, Frontolysis, Cyclones and anticyclones.  

3. Classification of world climate:  
   i) Koppen, (ii) Thornthwaite (iii) Triwartha.  

Unit-III

Hydrosphere (Oceanography)

1. General Characteristics of the Ocean:  
   a) Salinity (causes and distribution)  
   b) Temperature distribution  
   c) T. S. Diagram  
   d) Ocean bottom relief (General and specific)  

2. Movement of Ocean Water:  
   a) Waves and Tides (Origin, characteristics and types)
b) Ocean Currents – Causes and distribution (Atlantic, pacific and Indian Ocean)

3. Coral reefs and Atolls, origin.

4. Ocean deposits, classification and types.

Unit-IV

Soil Geography:

1. Factors and processes of soil formation.

2. Soil profile and genesis


(HONOURS PAPER – II)

Time – 3 hours  HUMAN AND ECONOMIC GEOGRAPHY  Full Marks – 100

Unit-I

(Human Geography)

1. Meaning, nature and scope of Human Geography

2. Evolution of cultural landscape (geo-economic social and racial determinants), Major cultural realms of the world.

3. Influence of population distribution and population change

4. Human resource – Planning and development.

Unit-II

(Settlement Geography)

1. Concepts of settlement (Rural and Urban)
2. Origin and growth of settlements (Rural and Urban)
3. Types and patterns of settlements (Rural and Urban)
4. Spatial Organisation of settlements
   a) Concept of Control place – Central place Theory of charistaller
5. General and Functional classification of towns and cities

Unit-II

(Economic Geography)

2. a) Resources Types and classification
   b) Agricultural Resources – Spatial pattern of Agriculture: Von Thunen
      Theory of Agricultural location
   c) Mineral Resources – Mode of occurrence and distribution of major
      mineral resources of the world
      (i) Iron Ore (ii) Bauxite (iii) Manganese.
   d) Energy Resources – Mode of occurrence and distribution of energy
      resources of the world
      I) Goal (ii) Petroleum (iii) Hydel Power.
   e) Industries (World) – Locational factors and world distribution of major
      industries. (i) Iron and Steel (ii) Aluminium (iii) Textiles
   f) Theory of Industrial location of Weber.

BOOKS RECOMMENDED:
1. Physical Geography – E, Ahmad.
2. Geomorphology – B. Ahmad.
3. An introduction to Geomorphology – Thornbury
4. Physical Geography – S. Singh
5. Unstable Earth – J. A. Steers
7. An introduction to climatology – Chritchfield.
8. An Introduction to Climate – Triwartha
9. Oceanography for Geographies – Vital and Sharma
10. Human and Economic Geography – Leong and Morgan
11. Human Geography – Deblaj
12. Economic and social Geography made simple – Knowledge and Wareing.
13. Geography, A. Modern synthesis – Haggete

GEOGRAPHY (HONOURS)

SECOND YEAR EXAMINATION

There shall be two theory papers each carrying 100 marks and each of three hours duration and there shall be one practical paper of six hours duration carrying 100 marks.

<table>
<thead>
<tr>
<th>Time – 3 hours</th>
<th>HONOURS PAPER – III</th>
<th>Full marks-100</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>(Environment and ecosystem)</td>
<td></td>
</tr>
<tr>
<td>Unit-I</td>
<td>Environment:</td>
<td></td>
</tr>
</tbody>
</table>
i) Meaning and concepts of environment.

ii) Environmental contrasts
   a) Biotic and Abiotic
   b) Global, Continental and Local.

iii) Trends of environmental change:

iv) Environmental Controls:
   a) 1) Light
       2) Temperature
       3) Water
       4) Wind
       5) Topography
       6) Edaphic factor.
   b) Concept of tolerance.

v) Major environmental zones of the world, Patterson’s food index and Vahi-Humluni’s scheme of location and classification of environmental zones.

   a) Forested – Equatorial, Mid-latitude and Boreal.

   b) Intermediate – Savanns, Mediterranean and Mid-latitude grass lands.

   c) Barren – Arid, Tundra and Polar.

   Unit-II
Ecosystem:

1) Meaning and concepts of ecology and ecosystem
   i) Types and structure of ecosystems.
   ii) Man’s place in the ecosystem.

2) Energy in Ecosystem:
   a) Forms of energy and Balance of energy
   b) Energy conversion (Photosynthesis)
   c) Good chains and energy path ways.

II) The Natural Cycle.
   a) Carbon cycle
   b) Nitrogen cycle
   c) Water cycle
   d) Succession and climax

3) Human effect on and Man’s manipulation of ecosystems.

4) Wastes and pollutants:
   a) Classification and types
   b) Air Pollution
   c) Water Pollution

5) Global ecological imbalance and approaches for an ecological balance.
POLITICAL GEOGRAPHY AND GEOGRAPHICAL THOUGHT

Time – 3 hours  Unit-I  Full Marks-100

Political Geography:

i) Meaning, nature and scope of Political Geography

ii) Historical development of Political Geography- Contribution of Kant, Ritter and Ratzel, American and British contributions.

iii) Concepts of Heartland and Rimland, concepts of the State, development and classification of States.

iv) Nature and Function of international boundaries, Frontier situations and international tension, Morphological and genetic classification of international boundaries.

Unit-II

Geographic Thought:

i) Contributions of Ancient and Arabian Geographers to the development of geographical thought.

ii) Contributions of German School, French School, American School and British school to the development of Geographical thought.

iii) Dualism of physical and Human geography, Determinism and possibleism, systematic and Regional Geography (mention of dichotism vis-à-vis unity.
iv) Evolution of the Meaning of Geography and Geography as a study of real differentiation.

SUGGESTED READINGS:

2. Odum E. P – Fundamentals of Ecology
3. Bharadwaj – Political Geography
4. Hussain Mujid – Evolution of Geographical thought
5. Chandra R. C. – Elements of Population Geography
6. B. N. Ghosh – Population Geography

PAPER – V (PRACTICAL)

6 HOURS 100 MARKS

The candidates are required to maintain neat practical records and submit them regularly.

Unit-I

   a) Positional Data
   b) Linear data
   c) Areal data
   d) Volumetric data
2. Continuity and Smoothness.
3. Measurement of Phenomena
   a) Nominal
b) Original

c) Internal

d) Ratio

4. Derived quantities.
   a) Average    (b) Ratio    (c) Density.

**Unit-II**

**Basic Statistical concept.**

1. Central Tendency in spatial data.
   a) Statistical concepts of Central Tendency and the computational produces for both grouped and non-grouped data.
   b) Drawing of :
      i) Histogram and frequency curve showing, mean, median and mode.
      ii) Cumulative frequency curve (ogive) showing median and quantities.

2. Variability of spatial data.
   a) Statistical procedure and concepts of standard deviation mean deviation.
   b) Exercises on mean deviation and standard Deviation on both grouped and ungrouped data.

3. Scale of measurement and their appreciate statistics:
   a) Normal
   b) Ordinal
   c) Internal and Ratio-scales.

**SUGGESTED READINGS:**
1. C. J. Mankhouse – Maps & Diagrams
4. Mishra R. P. – Elements of Cartography,

3 hours  

PAPER – VI (HONOURS)  100 MARKS 

POPULATION GEOGRAPHY 

FINAL EXAMINATION 

UNIT-I


ii) Determinants of a) Population distribution

   b) Density Distribution’ 

   c) Demographic Transition theory

iii) Composition and structure of population (with emphasis on world pattern)

   a) Age structure 

   b) Sex composition 

   c) Literacy 

   d) Occupational structure.

Unit-II

Dynamic of population change (with emphasis on world pattern)

a) Fertility and its measures 

b) Mortality and its measures
c) Migration, types and determinants of migration Consequences of migration (Gravity Model, Intervening Opportunity model).

**Unit-III**

i) Problem of world population growth – Urbanisation process-

Theories of population (Malthces only).

Population explosion and carrying capacity –

Population growth and economic development.

ii) Population Politics (in developed and less developed countries with special reference to India.)

**FINAL YEAR EXAMINATION**

**PAPER – VII (HONOURS)**

*3 Hours Regional Geography of India and Orissa 100 marks*

**Unit-I**

i) Physical bases.

a) Relief, geology, drainage, soil and vegetation

b) Climate: Mechanism of Indian Monsoons, Rainfall and temperature distribution.

ii) Geo Economic bases: -

a) Agriculture

1) Agricultural regions of India

2) Problems and prospects of Indian Agriculture
b) Major Minerals.
   1) Iron Ore
   2) Bauxite
   3) Manganese
   4) Coal
   5) Petroleum

c) Irrigation and Power (types and Projects)

d) Industries
   1) Cotton textiles industries
   2) Sugar industries
   3) Iron and Steel Industries
   4) Aluminium industries.
   5) Problems of Indian industries and Policies

e) Transport (Problems and Policies)
   1) Railways
   2) Roadways
   3) Waterways.

iii) Population: Influences of distribution; Density variation, Composition, Growth and population policies and problems.

iv) Brief regional study of:
   a) Ganga Plan
b) Chhotanagpur region.

Unit - II (Orissa)

i) Physical bases
   a) Relief, Geology, climate, drainage
   b) Soil and Natural vegetation

ii) Geo-economic bases –
   a) Agriculture – production and distribution of Rice and Pulses and problems of agriculture in Orissa.
   b) Major Minerals:
      1) Iron Ore
      2) Bauxite
      3) Manganese
      4) Coal
   c) Irrigation and power (Types and projects)
   d) Industries
      1) Iron and Steel
      2) Aluminium

iii) Population – Geo-economic and social determinates of distribution.

iv) A brief regional study of:
   a) Orissa highland region
   b) Orissa costal plain.

BOOKS RECOMMENDED
1. India, A. Regional study – R. L. Singh
2. Geography of India (Resources and Regional Development) K. L. Joshi
3. India, A comprehensive Study – Khullar
5. Economic and Commercial Geography of India – Sharma and Countiho .
6. Geography of India – Pichhamuthu.
8. Progressive Geography – R. C. Chandra
9. A. Comprehensive Geography in India – KHULLAR

PAPER – VIII (PRACTICAL)

6 HOURS            FINAL YEAR EXAMINATION            100 MARKS

UNIT-I

(CARTOGRAM & THEMATIC MAPPING)

1. Point pattern Symbols:
   a) The traditional dot map.
   b) The proportionate symbols
   c) Divided circle
   d) Sphere diagram.
2. Spatial distribution
   Linear Isopleths
Areal choropleth map.

Unit-II

(Toposheet Weather Map, Map Projection)

1. Map Interpretation
   a) Indian toposhut
   b) Indian Daily Weather report.

2. Map projection (Graphical)
   Zenithal Group and Conical Group.

Unit-III

(Surveying / Enlargement & Reduction of Maps/Survey Report)

i) Field Survey Instruments;
   1) Plan Table (all methods)
   2) Phismatic Campus Survey.

ii) Enlargement and Reduction of Maps. (Methods of square and similar triangles)

iii) Geo-Economic Survey:

   The students are required to conduct a Geo-economic survey of a village and submit a report. Emphasis must be on field questionnaire and the report based on field data.

SUGGESTED BOOKS

   1. Singh R. L. – Elements of Practical Geography
   2. Karatkar : Surveying & Levelling:

LIBRARY & INFORMATION SCIENCE (PASS)

SECOND YEAR EXAMINATION

PAPER – I

LIBRARY CLASSIFICATION THEORY (75 MARKS)

Unit-I Library Classification: Definition, need, purpose and function.

Unit-II Knowledge classification & Book Classification, Features of book classification.

Unit-III Theory of classification: Fundamental categories and principles.

Unit-IV Notation: Structure and functions

Unit-V Introduction to major schemes of classification, DDC, UDC, CC.

BOOKS RECOMMENDED


4. Raju AAN : A. Comparative Study CC, DDC & UDC


7. Dewey, Melvil; Dewey Decimal classification 19th Ed.

**Paper-II (75 marks)**

**LIBRARY CATALOGUING THEORY**

Unit-I  Library Cataloguing: Definition, need purpose and function

Unit-II  Forms of Library catalogue: Outer and Inner

Unit-III  Kinds of entries and their features.

Unit-IV  Part of standard book and cataloguing information.

Unit-V  Introduction of AACR – 2 and CCC

**BOOKS RECOMMENDED**

1. Krishna Kumar & Girija Kumar, Theory of Cataloguing, Delhi, Vikas, 1912

**LIBRARY CLASSIFICATION AND CATALOGUING PRACTICE (50 MARKS)**

(I)  Classification Practice – 25 marks.

(II) Cataloguing Practice – 25 marks

(Classification of simple & compound titles using DDC 19th edition)
(Cataloguing of book of personal authors, pseudonyms using AACR-2)

NB: The practice paper shall be evaluated by both the External and Internal Examiners and marks shall be awarded in a joint sitting.

FINAL YEAR EXAMINATION

PAPER- III

LIBRARY ORGANISATION AND MANAGEMENT

Unit-I Management: Definition and function: POSDCORE

Unit-II Library committee library rules.

Unit-III Library personnel: Recruitment and training

Unit-IV Brief functions of library routine works: Acquisition, technical, circulation, maintenance, periodical reference etc.

Unit-V Library finance and budgeting:

BOOKS RECOMMENDED:

1. Mittal, R. L. – Library Administration

2. Parida, B: Principle of Library Management, Bhubaneswar Panchashela Pub.,

3. Krishna Kumar – Library Administration and Management


PAPER – IV
REFERENCE AND INFORMATION SOURCES

Unit-I  Reference; Need, scope and function reference works and reference services.

Unit-II  Reference services in different types of libraries, ready range and long range reference services.

Unit-III  Reference Tools: Their Study and criteria for evaluation: Encyclopaedias, Dictionaries, Directories, Year book.

Unit-IV  Sources of Information, Primary, secondary and tertiary and their bibliographical importance.

Unit-V  Organisation of Reference Section: School, College, and University Library.

BOOKS RECOMMENDED


REFERENCE AND INFORMATION SOURCES PRACTICE:

i) Record and Assignment – 25 marks
(The candidate has to submit the class records and assignments related to classification, cataloguing and evaluation of reference tools at the time of examination)

ii) Evaluation of reference sources – 25 marks

(The candidate has to sit in the examination and shall write the answers (evaluate) of two (2) reference tools).

**NB:** The practice paper shall be evaluated (Records and Assignment and reference tools) by both the External and Internal examiners and marks shall be awarded in a joint sitting.

**LIBRARY & INFORMATION SCIENCE (HONOURS)**

**FIRST YEAR EXAMINATION**

**PAPER-I**

**LIBRARY MANAGEMENT AND ADMINISTRATION**

**Unit-I**  Management; Definition, Function, POSDECORE & Principle of Scientific Management.

**Unit-II**  Library Authority and Committee, Library Rules.

**Unit-III**  Library personnel: Staff Pattern, recruitment and training.

**Unit-IV**  Functions of Library routine works: Acquisition, Technical, Circulation, Maintenance, Periodical, Reference etc.

**Unit-V**  Financial Management and Budgeting

**BOOKS RECOMMENDED:**
1. Mittal, R. L. – Library Administration

2. Parida, B: Principle of Library Management, Bhubaneswar Panchashela Pub.,

3. Krishna Kumar – Library Administration and Management


**PAPER-II (100 MARKS)**

**LIBRARY & INFORMATION ORGANISATION SYSTEMS AND PROGRAMMES**

**BOOKS RECOMMENDED**

Unit-I Information organisation as a system

Unit-II Characteristics and components of information system.

Unit-III Planning and Designing of Information system and centres.

Unit-IV National information policy

Unit-V Study of Information Systems Activities: NISSAT, UNESCO.

**BOOKS RECOMMENDED:**

1. Seetharmaa: Planning and Designing of Information Systems and Centres:

2. Gupta, B. M. Handbook of Library, archives and information centres in India Vol – 1-6, New Delhi, Information Industry publication.


SECOND YEAR EXAMINATION

PAPER – III (100 MARKS)

LIBRARY CLASSIFICATION THEORY

Unit-I Library Classification: Definition, need, purpose and function.

Unit-II Knowledge classification & Book Classification, Features of book classification.

Unit-III Theory of classification: Fundamental categories and principles.

Unit-IV Notation: Structure and functions

Unit-V Introduction to major schemes of classification, DDC, UDC, CC.

BOOKS RECOMMENDED


4. Raju AAN : A. Comparative Study CC, DDC & UDC

7. Dewey, Melvil; Dewey Decimal classification 19th Ed.

PAPER – IV

LIBRARY CATALOGUING THEORY (100 MARKS)

Unit-I Library Cataloguing: Definition need purpose and function
Unit-II Forms of Library catalogue: Outer and Inner
Unit-III Kinds of entries and their features.
Unit-IV Part of standard book and cataloguing information.
Unit-V Introduction of AACR – 2 and CCC

BOOKS RECOMMENDED

1. Krishna Kumar & Girija Kumar, Theory of Cataloguing, Delhi, Vikas, 1912

PAPER – V (100 MARKS)
LIBRARY CLASSIFICATION AND CATALOGUING PRACTICE

i) Classification Practice: - 50 marks
   (Classification of simple & Compound-complex titles using DDC 19th Edition)

ii) Cataloguing Practice – 50 marks
   (Cataloguing of book of personal authors, pseudonyms, corporate body using AACR-2)

NB: The practice paper shall be evaluated by both the External and Internal Examiners and marks will be awarded in a joint sitting.

FINAL YEAR EXAMINATION

PAPER – VI (100 MARKS)

DOCUMENTATION AND INFORMATION SERVICES

Unit-I Documentation: Definition, Scope and purpose; Documentation and information science.

Unit-II Facts of Documentation: Documentation Works and Documentation Services.

Unit-III Types of documents and their sources, Primary Secondary , Tertiary etc.

Unit-IV Abstracting and Indexing: Definition, types and usefulness

Unit-V Application of computers in library &Information Science: Basic features.
BOOKS RECOMMENDED

5. Prasher, R. G., Indexing
7. Rajan, T. N.: Indexing Technique, Calcutta IASLIC.

PAPER – VII (100 MARKS)

REFERENCE AND INFORMATION SOURCES

Unit-I Reference; Need, scope and function reference works and reference services.

Unit-II Reference services in different types of libraries, ready range and long range reference services.

Unit-III Reference Tools: Their Study and criteria for evaluation: Encyclopaedias, Dictionaries, Directories, Year book.

Unit-IV Sources of Information, Primary, secondary and tertiary and their bibliographical importance.
Unit-V  Organisation of Reference Section: School, College, and University Library.

BOOKS RECOMMENDED


PAPER – VIII (100 MARKS)

REFERENCE AND INFORMATION SOURCES PRACTICE:

1. Records and assignments:- 50 marks
   The candidate has to submit the class Records and Assignments related to classification, cataloguing and evaluation of reference tools at the time of examination.
2. Evaluation of Reference Sources:- 50 marks
   (The candidate has to sit in the examination and shall write the answer (evaluate) of three (3) reference tools)
NB: The practice shall be evaluated (Record and Assignment and reference tools by both the External and Internal examiners and marks shall be awarded in a joint sitting.

BACHELOR IN COMPUTER SCIENCE (PASS)

COURSE STRUCTURE

SECOND YEAR EXAMINATIN.

Paper – I  Fundamentals of Information Technology and Computer Organisation,  75 marks

Paper – II  C-Programming  75 marks

PRACTICAL

A. Operating System and PC Software  50 marks.

THIRD YEAR EXAMINATION

Paper – III  Data Structure  75 marks

Paper – IV  Logical Organisation of Computer Systems  75 marks

PRACTICAL


SECOND YEAR EXAMINATION

PAPER – I
UNIT-I

What is a computer and introduction, uses of computer in modern society, example, scientific and business application, Banking, Accounting Desk Top publishing, weather forecasting, speech recognition etc.

UNIT-II

Functional block diagram of digital computer, Functions of Central Unit and ALU in CPU, Concept of primary memory (RAM & ROM) and secondary memory-Magnetic Hard Disks Magnetic Tapes, Floppy disk, CD – ROM etc., Functions of I/O devices- Display unit, Keyboard, dot matrix printer, line printer, Laser printer, Ink-jet Printer.


UNIT-III

Binary numbers, octal numbers, Hexadecimal numbers, Radix decimal, octal, hexadecimal-conversion from one to another, Representation of decimal, octal hexadecimal numbers, fractional numbers and signed numbers I’s
compliment, 2’s compliment forms, Binary arithmetic-Addition, Subtraction, Multiplication, division.

Codes, Weighted and Non-weighted binary codes-errors detecting codes, error correcting codes, alphanumeric codes-ASCII, 8-bit EBCDIC.

**Unit-IV**

Boolean Algebra: Representation of values and complements, AND, OR, NOT operators, KARNOUGH MPA, De-Morgan’s theorem, combinational logic circuits for expression using NAND and NOR gates, Half Address, Full Add Half Substruct, Full Substruct.

**Unit-V**


**BOOKS:**

1. Fundamentals of Computer by V Rajarmman
3. Computers To-day by D. S. Sanders.

**PAPER – II**
C-PROGRAMMING

Unit-I

Steps in program development, problem identification, Task analysis, GIGO, Outputs and inputs. Algorithm as an imitation of programming analysis. Flowcharting as a road map of the algorithm program coding. Testing and Debugging etc.

Unit-II

Programming language classification, machine language, Assembly language, third generation language, fourth generation languages, Assemblers concepts, printers, characteristics of 3 GLS and 4 GLS.

Programming techniques, Top-down design, Bottom-up design, Modular design and structure programming.

Unit-III

C Language Programming:

An overview of C Language, History of C. Language, the structure of a C program, data types, variables and constants, Integer constants, character constants, Floating Constants, Logical constants, string constants, variables, integer variables, real variables, character variable. Floating variable, logical variable, string variables, declaration, Scope of variables, Local variables and Global variables.

Type of modification:

**Unit-IV**

Control statement If General forms, Nested ifs. The if-else-if ladder. The ? as an alternative to if, switch general form. Type conversion in assignments, variable initialisations, nested switch statement for while, do-while, break, continue, it ( ) function, go to and legal declarations, console I/O, unformatted console I/O, Print f ( ), Sprint f ( ), scan f ( ) Arrays, declaration, single dimensional arrays, Two dimensional arrays and Multi dimensional array.

**Unit-V**

**Function:**

General form, declaration and prototypes, Function arguments. The return statement, Returning values from a function, function call, call by reference, scope rules of functions, calling functions with array and Recursion.

Pointers the & and * Operators, pointer expressions, pointer assignments, pointer arithmetic, pointer comparison, The dynamic allocation functions malloc and alloc. Structure and Unions and User defined variable, Structures, Basic
structures, Declaring a structure, Referencing structure elements Array of structures, passing structures to functions.

Unions : Declaration, Uses, Enumerated data types and typed of the C. Processor.

The C processor # define, # include and C Standard Library and Header files.

1. Balguruswamy E: C. Programming Ch. 1,2,3,4,5,6,7,8,9,10,11.

REFERENCE BOOKS.

1. A. M. Tannenbaum and others: Data Structure using C-PHI, 1992

Practical

a) Operation System and P. C. Software (DOS, UNIX, MS, WINDOWS)

THIRD YEAR EXAMINATION

PAPER – III

DATA STRUCTURE

UNIT-I

Data type Data object-Abstract Data Type Data structure, Nation of an algorithm-Complexity measures: Rate of growth, Basic time analysis of an algorithm. Order nation-detailed; timing analysis space complexity.

Unit-II
Arrays, arrays and their representation—single and multidimensional arrays. Row major and ordering—Address calculation.

**Unit-III**

Linked Lists

Singly and Double linked lists—Insertion and Deletion Operation on lists—representation of sparse matrices and polynomials using lists, circular lists.

**Unit-IV**

Stacks and Queues:

Stacks and Queues—Representation and manipulation – Uses of stacks and Queues—Recursion Polish expression.

**Unit-V**

Trees—Binary—Representation of Trees—Tree traversal algorithms (Inorder, pre-order, and Post order)

**BOOKS**

1. S. Lipschutz: Introduction to Data Structures, MC, Graw Hill, Chapter-1,2,3,4,5,6,7

**REFERENCE BOOKS.**

2. Robert L, Kruse: Data Structure and Programme Design pertince Hall of India. 1987

**PAPER – IV**
LOGICAL ORGANIZATION OF COMPUTER SYSTEM

UNIT-I

Basic Computer Organisation:

Fetching a word from memory, storing a word in memory, Register transfers, performing arithmetic & Logic operations, Execution of a complete instruction, Hardwired control, CPU-Memory interaction Multiple-bus organisation.

Unit-II

Asthmatic logic Organisation.

Addition and substraction in I’s complement and 2’s complement form, Binary adder, Parallel adder, carry look ahead adder, Multiplication, Booth’s algorithm, Division, Floating point operations (Addition and subtraction).

Unit-III

CPU Organisation:

Instructions and Instruction sequencing, Instruction formats (zero, one and two address Instructions) Addressing modes (Register, Absolute, Immediate, Indirect, Indexed, Autoincrement and Auto decrement). Basic input-output operations, stack and queues, subroutines.

Unit-IV

Input-Output Organisation:

BOOKS:

1) Hamacher: Computer Organisation (McGraw Hill Int.)

PRACTICAL

B) Programming in C & all Units of Paper-3.

BACHELOR IN COMPUTER SCIENCE HONOURS

COURSE STRUCTURE

FIRST YEAR EXAMINATION

PAPER -I  Fundamentals of Information Technology and Computer organisation  100 marks.

Paper-II  C- Programming  100 marks

SECOND YEAR EXAMINATION

Paper – III  Data Structure  100 marks

Paper – IV  Logical Organisation of Computer Systems  100 marks

PRACTICAL

Paper –V  PC Software Programming in C. & Problems  100 marks

Implementation of Paper-3
FINAL YEAR EXAMINATION

Paper – VI  Operating System Concepts  100 marks

Paper – VII  File Organisation and Database Management Systems.  100 marks

PRACTICAL

Paper- VIII  Practical C++  50 marks

( A Project Report on Database Management System has to be submitted.  50 marks.

FIRST YEAR EXAMINATION

PAPER – I

FUNDAMENTALS OF INFORMATION TECHNOLOGY AND COMPUTER ORGANISATION.

UNIT-I

What is a computer and introduction, uses of computer in modern society, example, scientific and business application, Banking, Accounting Desk Top publishing, weather forecasting, speech recognition etc.

Unit-II

Functional block diagram of digital computer, Functions of Central Unit and ALU in CPU, Concept of primary memory (RAM & ROM) and secondary memory-Magnetic Hard Disks Magnetic Tapes, Floppy disk, CD – ROM etc., Functions of I/O
devices- Display unit, Keyboard, dot matrix printer, line printer, Laser printer, Ink-jet Printer.


**Unit-III**

Binary numbers, octal numbers, Hexadecimal numbers, Radix decimal, octal, hexadecimal-conversion from one to another, Representation of decimal, octal hexadecimal numbers, fractional numbers and signed numbers 1’s compliment, 2’s compliment forms, Binary arithmetic-Addition, Substraction, Multiplication, division.

Codes, Weighted and Non-weighted binary codes-errors detecting codes, error correcting codes, alphanumeric codes-ASCII, 8-bit EBCDIC.

**Unit-IV**

Boolean Algebra: Representation of values and complements, AND, OR, NOT operators, KARNOUGH MPA, De-Morgan’s theorem, combinational logic circuits for expression using NAND and NOR gates, Half Address, Full Add Half Substract, Full Substract.

**Unit-V**


BOOKS:
1. Fundamentals of Computer by V Rajarmman
3. Computers To-day by D. S. Sanders.

PAPER – II

C-PROGRAMMING

Unit-I

Steps in program development, problem identification, Task analysis, GIGO, Outputs and inputs. Algorithm as an imitation of programming analysis. Flowcharting as a road map of the algorithm program coding. Testing and Debugging etc.

Unit-II

Programming language classification, machine language, Assembly language, third generation language, fourth generation languages, Assemblers concepts, printers, characteristics of 3 GLS and 4 GLS.

Programming techniques, Top-down design, Bottom-up design, Modular design and structure programming.

Unit-III

C Language Programming:

An overview of C Language, History of C. Language, the structure of a C program, data types, variables and constants, Integer constants, character
constants, Floating Constants, Logical constants, string constants, variables, integer variables, real variables, character variable. Floating variable, logical variable, string variables, declaration, Scope of variables, Local variables and Global variables.

**Type of modification:**


**Unit-IV**

Control statement If General forms, Nested ifs. The if-else-if ladder. The ? as an alternative to if, switch general form. Type conversion in assignments, variable initialisations, nested switch statement for while, do-while, break, continue, it ( ) function, go to and legal declarations, console I/O, unformatted console I/O, Print f ( ), Sprintf f ( ), scanf f ( ) Arrays, declaration, single dimensional arrays, Two dimensional arrays and Multi dimensional array.
Unit-V

Function:

General form, declaration and prototypes, Function arguments. The return statement, Returning values from a function, function call, call by reference, scope rules of functions, calling functions with array and Recursion.

Pointers the & and * Operators, pointer expressions, pointer assignments, pointer arithmetic, pointer comparison, The dynamic allocation functions malloc and alloc. Structure and Unions and User defined variable, Structures, Basic structures, Declaring a structure, Referencing structure elements Array of structures, passing structures to functions.

Unions : Declaration, Uses, Enumerated data types and typed of the C. Processor.

The C processor # define, # include and C Standard Library and Header files.

1. Balguruswamy E: C. Programming Ch. 1,2,3,4,5,6,7,8,9,10,11.

REFERENCE BOOKS.

2. A. M. Tannenbaum and others: Data Structure using C-PHI, 1992
DATA STRUCTURE

UNIT-I

Data type Data object-Abstract Data Type Data structure, Nation of an algorithm-Complexity measures: Rate of growth, Basic time analysis of an algorithm. Order nation-detailed; timing analysis space complexity.

Unit-II

Arrays, arrays and their representation-single and multidimensional arrays. Row major and ordering-Address calculation.

Unit-III

Linked Lists

Singly and Double linked lists-Insertion and Deletion Operation on lists-representation of sparse matrices and polynomials using lists, circular lists.

Unit-IV

Stacks and Queues:

Stacks and Queues-Representation and manipulation – Uses of stacks and Queues- Recursion Polish expression.

Unit-V

Tress-Binary-Representation of Tress-tree braversal algorithms (Inorder, pre-order, and Post order)
BOOKS

1. S. Lipschutz : Introduction to Data Structures, MC, Graw Hill, Chapter-1,2,3,4,5,6,7

REFERENCE BOOKS.

4. Robert L, Kruse: Data Structure and programme Design pertince Hall of India. 1987

PAPER – IV

LOGICAL ORGANIZATION OF COMPUTER SYSTEM

UNIT-I

Basic Computer Organisation:

Fetching a word from memory, storing a word in memory, Register transfers, performing arithmetic & Logic operations, Execution of a complete instruction, Hardwired control, CPU-Memory interaction Multiple-bus organisation.

Unit-II

Arithmetic logic Organisation.

Addition and substraction in l’s complement and 2’s complement form, Binary adder, Parallel adder, carry look ahead adder, Multiplication, Booth’s algorithm, Division, Floating point operations (Addition and subtraction) .
Unit-III

**CPU Organisation:**

Instructions and Instruction sequencing, Instruction formats (zero, one and two address Instructions) Addressing modes (Register, Absolute, Immediate, Indirect, Indexed, Autoincrament and Auto decrement). Basic input-output operations, stack and queues, subroutines.

Unit-IV

**Input-Output Organisation:**


BOOKS:

1) Hamacher: Computer Organisation (McGraw Hill Int.)

PAPER – V (PRACTICAL)

P. C Software Programming in C & on all Units of Paper -3 (100)

FINAL YEAR EXAMINATION

PAPER - VI

OPERATING SYSTEM CONCEPTS

Unit-I

Review of operating system concepts, batch processing, simple monitor, and multiprogramming. Multiprocessing, time sharing, real-time system.
Operating System Services: The user View, the operating system, File Systems: Access methods, view allocation methods, directory systems, file protection.

**Unit-II**

CPU Scheduling, scheduling concepts, scheduling algorithms and their evaluation, memory management concepts, swapping, paging and segmentation.

**Unit-III**

Concept of Virtual memory, Overlay’s demand paging, page replacement techniques, page replacement and allocation algorithms.

Disk and drum scheduling: First come first service scheduling shortest seek-time first scheduling sector.

**Unit-IV**

Concept of deadlock, deadlock problems, deadlock characterization, deadlock prevention, dead lock avoidance, deal-lock detection, recovery from deadlock, concurrency.

**Unit-V**


**BOOKS RECOMMENDED**

THIRD YEAR EXAMINATION

PAPER- VIII

FILE ORGANISATION AND DATA BASE MANAGEMENT

Unit-I

Introduction to Database system, Characteristic of database. Database Administrators, Database designers, End-users, Uses of DBMS, Implications of database approach, Data Models, Schemes and Instances DBMS Architecture and Data Independence. Database Languages and interfaces. Classification of DBMS.

Unit-II

Introduction to E-R model, Conceptual data models for database design, E-R model concepts, E-R diagrams.

Unit-III


Unit-IV

Relational model concepts. Relational Model constraints, Operations on relations Defining relations, Relational algebra, Relational Operations, Queries in the relational algebra.
Unit-V

RDBMS Packages (ORACLE/FOXBASE/d BASE/SYBASE). Data organization files and fields, data access, indexing, sorting program development, modularity, use of procedures and passing parameters, to procedure, user friendliness and menu-driven program development; providing for error conditions, Data input; Custom build screens, data validation templates and functions of data input screen format files, Data Out-put: formatted output on screen and Printer, advantages of custom designed output, use of multiple files, simultaneously report generation using multiple files.

BOOKS

1) F. J. Masri & Navathe: Fundamentals of Database system (2/e) (Benjamin/Cummines Pub. Comp. Ins.)

PAPER – VIII (Practical)

Practical ((++. A project report on DBMS has to be submitted) (50 + 50 marks)

ELECTIVE PAPERS

INDIAN POLITY

PAPER – I (100 MARKS)

Unit-I

1. Freedom Movement in India 1919 – 1947
2. Marking of the Constitution, Preamble; Salient Features
3. Fundamental Rights
Unit-II

5. Union Executive: President, Vice-President, Council of Ministers
6. Union Legislature: Parliament:
7. Union Judiciary: Supreme Court and Judicial Review.

Unit-III

8. State Executive: Governor, Council of Minister
9. State Legislature
10. State Judiciary

Unit-IV

11. Federation in India
12. Union – State Relation
   i) Administrative
   ii) Legislative
   iv) Financial

PAPER – II

UNIT-I

a) Union Government
b) Speaker of the Lok Sabha
c) Attorney General
d) National Development Council
e) Planning Commission
f) Central Vigilance Commission
g) Election Commission
Unit-II

a) District Administration
b) Role of District Magistrate and Collector
c) Subordinate Judiciary.

Unit-III

(Local Government)

a) Urban – Municipalities, N A. C
b) Rural – Panchayati Raj Institution
c) Problems of Local Government.

Unit-IV

a) Communalism
b) Regionalism
c) Dalit Politics
d) Judicial Activism
e) Politics of Defection

INDIAN ECONOMY

PAPER-I

Unit-I

Economic scenario in the pre-British and British period Structure & Organisation of villages, towns, industries and handicrafts. Meaning of colonisation, British rule and the exploitation of India.
Unit-II

Indian Economy at the time of Independence, India’s under development at the time of independence. The theory of drains and its pros and cons. Stagnation of Indian industries, National income and poverty estimates at the time of independence.

Unit-III

Planning process in India:

Meaning of Economic Planning. Important feature of Indian Plans, Planning process before and after independence, objectives of economic planning basic approach of Indian Five Years plans, Targets and achievement of Indian plans, critical evaluation of Indian Plans.

Unit-IV

Demographic Features of the Indian Economy:

Meaning of population explosion, size and growth of Indian population, the problem of over population, population policy.

Unit-V

Poverty: Inequality and Unemployment:

PAPER – II

UNIT-I

Agriculture: Roles of agriculture in Indian Economy, Cropping pattern, trends of agricultural production, system of land tenure and tenancy reforms, consolidation of holdings, green revolution, Food problem and agriculture, agricultural labour and agricultural process.

Unit-II

Industries: Industrial development programmes under Five Years plans, Tends industrial production, Types of industries-small-scale, large-scale ad cottage industries, industrial policies, public sector vs. Private sector industries, Industrial sickness. Problems of industrial labour-labour welfare, social security and exit policy in India.

Unit-III

Transport, Communication and trade:

Growth and problems of development of Railways and Road Transport in Indian since, 1947 problems of Co-ordination between Railway and Road Transport postal communication and Tele communication, Foreign trade in India-Composition and direction India’s foreign trade, trend of exports and imports, Foreign capital in India.

Unit-IV

Banking and Finance:

The structure of financial system, Commercial Banks and non-banking financial institutions, Function of Reserve Bank in India.
Unit-V

Other Sectors of the Indian economy.

Importance of human resource development-education, health and nutrition, problems of environment, Environment regulations, Environment and development controversy.

INDIAN GEOGRAPHY

There shall be two theoretical papers each carrying 100 marks and each of three hours duration.

Paper-I General Geography of India 100 marks
Paper-II Human and Economic Geography of India 100 marks

PAPER-I

GENERAL GEOGRAPHY OF INDIA

UNIT-I

1. Locational Aspects:
   a) General Aspects
   b) Location.
   c) Boundaries.
   d) Shape, size and area
   e) States, Union territories and Islands.

2. Relief Features
   a) Evaluation
   b) Geological history
      i) The Peninsular Plateau
      ii) The Himalaya Mountain Range
iii) The great plains of Sutlej-Ganga-Brahmaputra

iv) Unifying Role of the geological processes.

c) Major Physiographic Division: Three fold physiographic division.

d) Drainage:
   i) Evaluation of the drainage system
   ii) The river regimes.

Unit-II

3. Climatic aspects:
   a) Climatic Diversities:
      i) Temperature variation
      ii) Rainfall variation
      iii) Monsoonal unity
      iv) Factors affecting climate of India.
      v) Seasons
      vi) Climatic Regions of India.

UNIT-III

4. India – Soils:
   a) Classification.
   b) Soil Erosion and soil conservation.

5. Natural Vegetation:
   a) Origin of the present vegetal cover.
   b) Role in the growth and development of Indian Economy
   c) Types of Natural vegetation.
Unit-IV

6. Natural Regions of India
   a) Concept of a natural region
   b) Methods of regional divisioning.
   c) Division of India into natural regions.

PAPER – II

HUMAN AND ECONOMIC GEOGRAPHY OF INDIA

Unit-I

1. Peopling of India and Ethnic Diversities:
   a) Distribution and bases of racial classification
   b) Distribution of population (factor), (a brief mention of Orissa)
   c) Density and growth of population
   d) Sex composition, Age structure and Regional patterns of work force.
   e) Trends and patterns of migration
   f) Problem of Indian Population

Unit-II

2. Problems of Indian Agriculture: (A brief mention of Orissa)
   a) The state of Indian Agriculture, post and present
   b) Wet and dry agricultural regions
   c) Intensity, concentration, diversification, rotations, combination and efficiency of cropping
d) Regional distribution of major groups – Rice, Wheat, Sugarcane, Cotton, Jute, Coffee and Tea.

3. Problem of Irrigation and water resources-Features of irrigation potential-Major, medium and major and minor irrigation projects and programmes Exploitation, levels of utilisation and conservation of water “resources”. Ecological development programmes and people’s participation (a mention of Orissa briefly)


**Unit-III**

7. Problems of environmental management in India and action plant for a healthy environment (Brief reference to natural calamities).

8. India – A symbol of unity in diversity (Geo-economic and Socio-cultural considerations and bottlenecks).
LAND MARKS IN INDIAN HISTORY

(From Proto-historic period to second Battle of Panipath)

Unit-I

Chapter-I

Makers of Urban Civilization-India’s First River Valley Civilization: Harappa culture.

a) Proto-historic Sites, Extent , people.
b) City-life, Town Planning
c) Socio Economic religious Life.

Chapter –II

Aryanization of India

a) Coming of the Aryans, Early Settlements, Pasic Characteristic Features.
b) Novelty and Impact of Aryan Culture, Sources, Rural Setting Social Milieu (Caste system, Position of Women & Family).
c) Religious and Philosophical outlook.

Unit-II

Chapter-I

India’s First National Empire:

i) Chandragupta Maurya – The First Empire-builder, Administration.
ii) Ashoka – The Great Kalinga War, Missionary Activities.

**Chapter-II**

Evolution of Indian Art and Architecture Buddhist and Jain:

Ashokan Pillars, Rock-cut Architecture.

**Chapter-III**

Kalinga under Kharvela

**Unit-III**

**Chapter-I**

a) Grepta Golden Age.

b) Revival of Buddhism under Harsha

**Chapter-II**

Splendour in Art:

a) Evolution of Indian Temple Architecture.

b) Gandhara and Mathura School of Art

**Unit-IV**

(Turko Afgan Dominance)

**Chapter-I**

Rise of Islamic Empire:

a) Expansion and Consolidation.
b) Era of Administrative and economic Reforms

Chapter – II

Cultural development in India: Religious Ideas and Beliefs:

a) Sifu Movement.
b) Bhakti Movement.

Unit-V

Regional Resurgence

Chapter-I

Age of the Sangams:

a) Cultural Contributions of South Indian Art and Literature
b) Religious Revival.

Chapter – II

Cultural Development in Orissa:

a) Jagannath Cult.
b) Mahima Cult.

PAPER-II

LANDMARKS INDIAN HISTORY (1556 TO 1947 AD)

Unit-I

(From Akbar to Aurangzeb)

Chapter-I
a) Akbar, the Great – Religious Policy. Rajput Policy.


Chapter – II

Twilight of the Mughal Empire:

a) Aurangzeb.

b) Rise of Maratha Power – Shivaji.

c) Decline of Mughal Empire – Causes.

Unit-II

(Period in Transition)

Chapter – I

Evolution of Indo-Islamic Art and Architecture – Paintings:

Chapter – II

Advent of Europeans:

a) Foundation of British Empire in India: Battle of Plassey, Battle of Buxar Subsidiary.

b) Alliance – Doctrine of Lapse, Growth of Western Education in India.
Unit-III

(New Awakening)

Chapter – I

The Great of Revolt of 1857 – Nature Causes Results.

Chapter – II

a) Growth of Nationalism in India
b) Birth of Indian National C congress

Unit-IV

Gandhian Era

Chapter – I

a) Emergence of Gandhi in Indian Politics
b) Non-cooperation Movement-Civil Disobedience Movement, Quite India Movement.

Unit-V

(Sunset of the British Empire)

Chapter – I

Partition of India – Communal Politics, Mountbatten Plan.

Chapter – II

The Unsung Indian Hero:

Role of Subas Chandra Bose in Indian Politics – I. N. A
SCIENCE & TECHNOLOGY

Paper – 1 Fundamentals of Computer & organisation 100 marks
Paper – 2 Programming 100 marks

Paper – I

FUNDAMENTALS OF COMPUTER ORGANISATION

UNIT-I

What is computer an introduction, uses of computers is modern society, example, scientific and business applications, Banking, Account, Desk Top Publishing etc.

Functional block diagram of digital computer, Functions of Central Unit and ALU in CPU, Concept of primary memory (RAM & ROM) and secondary memory- Magnetic Hard Disks Magnetic Tapes, Floppy disk, CD – ROM etc., Functions of I/O devices- Display unit, Keyboard, dot matrix printer, line printer, Laser printer, Ink-jet Printer.


Unit-III

Binary numbers, octal numbers, Hexadecimal numbers, Radix decimal, octal, hexadecimal-conversion from one to another, Representation of decimal,
octal hexadecimal numbers, fractional numbers and signed numbers I’s compliment, 2’s compliment forms, Binary arithmetic-Addition, Substraction, Multiplication, division.

Codes, Weighted and Non-weighted binary codes-errors detecting codes, error correcting codes, alphanumeric codes-ASCII, 8-bit EBCDIC.

**Unit-IV**

Boolean Algebra: Representation of values and complements, AND, OR, NOT operators, KARNOUGH MPA, De-Morgan’s theorem, combinational logic circuits for expression using NAND and NOR gates, Half Address, Full Add Half Substract, Full Substract.

**Unit-V**


1. Fundamentals of Computer by V Rajarmman
3. Computers To-day by D. S. Sanders.
PAPER – II

PROGRAMMING

Unit-I

Steps in program development, problem identification, Task analysis, GIGO, Outputs and inputs. Algorithm as an imitation of programming analysis. Flowcharting as a road map of the algorithm program coding. Testing and Debugging etc.

Unit-II

Programming language classification, machine language, Assembly language, third generation language, fourth generation languages, Assemblers concepts, printers, characteristics of 3 GLS and 4 GLS.

Programming techniques, Top-down design, Bottom-up design, Modular design and structure programming.

Unit-III

C Language Programming:

An overview of C Language, History of C. Language, the structure of a C program, data types, variables and constants, Integer constants, character constants, Floating Constants, Logical constants, string constants, variables, integer variables, real variables, character variable. Floating variable, logical variable, string variables, declaration, Scope of variables, Local variables and Global variables.
Type of modification:


Unit-IV

Control statement If General forms, Nested ifs. The if-else-if ladder. The ? as an alternative to if, switch general form. Type conversion in assignments, variable initialisations, nested switch statement for while, do-while, break, continue, it ( ) function, go to and legal declarations, console I/O, unformatted console I/O, Print f ( ), Sprint f ( ), scan f ( ) Arrays, declaration, single dimensional arrays, Two dimensional arrays and Multi dimensional array.

Unit-V

Function:

General form, declaration and prototypes, Function arguments. The return statement, Returning values from a function, function call, call by reference, scope rules of functions, calling functions with array and Recursion.

Pointers the & and * Operators, pointer expressions, pointer assignments, pointer arithmetic, pointer comparison, The dynamic allocation functions malloc
and alloc. Structure and Unions and User defined variable, Structures, Basic structures, Declaring a structure, Referencing structure elements Array of structures, passing structures to functions.

Unions : Declaration, Uses, Enumerated data types and typed of the C. Processor.

The C processor # define, # include and C Standard Library and Header files.

2. Balguruswamy E: C. Programming Ch. 1,2,3,4,5,6,7,8,9,10,11.

REFERENCE BOOKS.

3. A. M. Tannenbaum and others: Data Structure using C-PHI, 1992

(PSYCHOLOGY)

Psychology is included one of the elective subject in B. A/ B. Sc. TDC Course, which shall be carrying 200 marks equally distributed in two papers. Only the non-pass/non-honours Psychology students can choose Psychology as their elective subject. The marks distribution of the elective subject of B. A./B. Sc. TDC examination is as follow:

<table>
<thead>
<tr>
<th>Examination</th>
<th>Paper</th>
<th>Course subject</th>
<th>Marks</th>
<th>Examination duration</th>
</tr>
</thead>
<tbody>
<tr>
<td>First TDC</td>
<td>Paper-1</td>
<td>Psychology and Social Issues</td>
<td>100</td>
<td>3 hours</td>
</tr>
<tr>
<td>Second TDC</td>
<td>Paper-2</td>
<td>Psychology and Health</td>
<td>100-</td>
<td>3 hours</td>
</tr>
</tbody>
</table>
PAPER-I (100 MARKS)

PSYCHOLOGY AND SOCIAL ISSUES

1. Nature of Social issues:

2. Social inequality, poverty and deprivation.
   Social Psychological analysis of deprivation; Consequences of deprivation: Poverty: Theories of poverty; concomitants of poverty; Inequality sources of deprivation; Social Justification.

3. Antisocial Behaviour:
   a) Corruption
   b) Juvenile delinquency

4. Violence
   Nature and categories of violence; Violence in families and marriage, workplace violence.

5. a) Interpersonal Attraction: the basis of liking and disliking.
   b) Managing socio-cultural diversity and multiculturalism.

REFERENCE:


**PAPER – II**

**PSYCHOLOGY AND HEALTH**

1. Meaning of Health and Socio-Cultural contexts.
   

2. Models of Health:
   
   Bio-Psycho-Social and cultural models: Health Belief Models.

3. Health damaging and Health Promoting life styles/behaviour.
   
   Type A Behaviour pattern and cardiovascular diseases and role of CVD illness.
4. Stress and Health

Nature and types of stress causes ad consequences of stress, stress management, role of social support.

5. Health and well-being:

Role of behaviour in major health problem; short coming of the biomedical model: India’s health scenario.

REFERENCE:


MATHEMATICS

PAPER – I (100 MARKS)

MAJOR ELECTIVE (MATHEMATICS)

There shall be two theoretical Papers. The duration of theoretical papers is three hours. Paper –I in 1st year and Paper-II will be taught in second year.
PAPER-I (100 MARKS)

A. Differential Equation: 50 marks
B. Discrete mathematics 50 marks

Paper-II (100 marks)

a) Statistics and Probability 50 marks
b) Numerical Analysis 50 marks

FIRST YEAR EXAMINATION

(At the end of first year)

Paper –I (100 marks)

(A) DIFFERENTIAL EQUATION (50 MARKS)

UNIT-I

Introduction and basic concept of differential equations. Solution of Higher order Linear differential equations with constant co-efficients and equations with variable co-efficients.

Unit-II

Power series solutions about ordinary point, Legendre’s Equation and its simple properties.

Unit-III

Power Series solutions about singular points, Bassels Equation and Bessels Function.
BOOKS PRESCRIBED

1. Text Book of Differential Equations: N. M. Kapoor, Chapter-4,5,13,14,15

BOOKS FOR REFERENCE

1. Introductory Course in differential equation: D. A. Marry
2. Elements of Ordinary Differential Equations and special functions – A. Chakravarty, (New Age International)

(B) DISCRETE MATHEMATICS (50 MARKS)

Unit-IV

Mathematical Logic except (Predicade Calculus) Propositions and Logical operators, Construction of Truth Tables, Tautologies and contradictions, Equivalence and Implication, NAND and NOR. Functionally Complete sets, Two state Devices and Statement Logic, Normal Forms.

Unit-V

Matrix Algebra (except Diagonalisation of Matrix): Types of Matrices, Matrices Associated with a given Matrix, Sub Matrix, Equality of Matrices, Adition of Matrices with properties, Scalar Multiple of a Matrix, Matrix multiplication and its properties, Determinants and its properties, Singular and non-singular Matrices, Adjoint of a Matrix and properties, Inverse of a Matrix and its properties, Integral powers of Matrices, Orthogonal Matrix, Unitary Matrix, Rank of a Matrix, Consistency of a system of Algebraic Linear Equations, Eigen values and Eigen vectors, Cayley-Hamiltons Theorem.
Unit-VI

Algebraic System: Binary operations and general properties, Subgroups and Cyclic Groups, Permutation Groups, Cossets and Lagrange’s theorem, Normal subgroups and factor Groups, Simple idea about Homomorphism and Isomorphism.

BOOKS PRESCRIBED:


BOOKS FOR REFERENCE

Fundamentals Approach to Discrete mathematics D. P. Acharya & Sreekumar (New Age International)

SECOND YEAR EXAMINATION

AT THE END OF SECOND YEAR

PAPER-III

(A)STATISTICS AND PROBABILITY (50 MARKS)

Unit-I

Classification and Tabulation of Data, Measures of Central value, Measures of variation, Skewness, Moments, and Kurtosis.

Unit-II

Probability: Definition of probability (Classical, Relative frequency theory, Axiomatic approach) Addition theorem and multiplication theorem of probability,
condional probability , Bayes theorem, Theoretical distributions: Binomial
distribution and its properties, Poisson Distribution, Constants of binomial and
Poisson Distributions, Fitting of Binomial and Poisson Distributions.

**Unit-III**

Correlation Analysis, Different methods of finding out correlation,
Properties of the coefficient of correlation, Rank Correlation, Regression Analysis:
Linear regression, Regression lines and equations, regression, Coefficients and its
properties.

**BOOKS PRESCRIBED**

Statistical Methods: S. P. Gupta (Sultan Chand and Sons.) relevant chapter of
prescribed books.

**BOOKS REFERENCE**

Business Statistics: Shenoy, Srivastva and Sharma (New Age International)

**(B) NUMERICAL ANALYSIS (50 MARKS)**

**Unit-IV**

Numerical Analysis and errors, Interpolation.

**Unit-V**

Numerical Integration, solution of Algebraic and transcendental equation.

**Unit-VI**

Solution of system of linear equations, numerical solution of ordinary
differential equations. (Examinees are allowed to use pocket calculator)
BOOKS PRESCRIBED

Introductory Numerical Analysis – R. N. Jena and N. Dutta (Sridhar Prakashini)

Chapter – I, II ( 2.1 to 2.9 and 2.13 to 2.16)

III ( 3.7 to 3.14 and IV ( 4.1 to 4.7)

V (5.1 to 5.3 ) VI ( 6.1 to 6.3)

BOOKS FOR REFERENCE

1. Fundamentals of Numerical Analysis - Akshay Kumar Ojha (Multisoft Publication)


STATISTICS

There shall be two theoretical papers each carrying 100 marks and each of 3 hours duration.

STATISTICS – I (100 MARKS)

Elective – I

a) Probability Theory 20 marks

b) Statistical Methods 60 marks

c) Time Series 20 marks

Elective – II  STATISTICS – II

100 MARKS

a) Design and Analysis of Experiments 40 marks
DETAILED SYLLABUS

STATISTICS – I

(A) PROBABILITY THEORY

Unit-I

Definition of probability, classical and axiomatic approach, laws of addition and multiplication of probability, conditional probability, Independent events, pair wise independence.

Random variable, distribution function, Mathematical expectation, addition and multiplication theorem of expectation, moment generating functions.

Standard univariate distributions and properties.

Discrete: Binomial and Poisson distribution and their properties.

Continuous: Normal distribution and its properties.

BOOKS RECOMMENDED:

(B) STATISTICAL METHODS (60 MARKS)

Unit-II

Ideas of Population and sample, measures of central tendency. Mean, Median, Mode, partition values, measures of dispersion, moments, skewness and kurtosis.

Bivariate distribution, scatter diagram, regression lines, regression coefficients, fitting of curves by least square principle, (Polynomial Exponential and logarithmic).

Unit-III

Correlation coefficient, rank correlation, correlation ratio, infraclass correlation coefficient, partial and multiple correlations, Regression plane (three variables only) Theory of attributes: Consistency of data, interdependence of attributes, measures of association.

Unit-IV

Test of significance, Null and Alternative hypotheses, level of significance, Type-I error and Type – II error. Description of chi-square, t and F statistics, test of mean and variance of normal population, test of equality of two means and tests of equality of two variances of two normal populations, other uses of chi-square t and F. Statistics, large sample tests.

BOOKS RECOMMENDED:

(C) TIME SERIES ANALYSIS (20 MARKS)

UNIT-V


Methods of iterated averages, Approximation moving averages, Measurement of seasonal indices – Methods of simple average, Ratio to trend Ratio to moving Average and link relatives, methods of trend elimination by fitting mathematical curves, determination of cyclical component(without harmonic analysis).

BOOKS RECOMMENDED:


Elective –II Statistics – II Full Marks-100

(A) Design and Analysis of Experiments (40 marks)

Unit-I

Analysis of variance: one way and two-way classification for one observation per cell for fixed effect model. Basic principles of design of experiments.
Unit-II


(B) SAMPLING TECHNIQUES (40 MARKS)

Unit-III

Concepts of population and samples, need for sampling complete survey and sampling survey, Basic concepts of sampling, organisational aspects of survey, sampling, methods of sample selection, use of Random Number Tables, basic sampling, methods. Sampling and non-sampling errors.

Unit-IV

Simple random sampling, with and without replacement stratified random sampling, proportional and optional allocation systematic sampling; comparison of sampling methods; Estimation of population mean and population total with standard error.

(C) VITAL STATISTICS

Unit-V

BOOKS RECOMMENDED:

2. Design of Experiment: M. N. Das and N. C. Giri
5. Basic Demographic Techniques and application: K. Srinivasan

EDUCATION

PAPER-I

EDUCATION AND SOCIETY (100 MARKS.

COURSE OBJECTIVE:

To enable the students to understand:

1. General aims of education along with nature, types and scope of education.
4. The importance of play and activity oriented education and modern methods of teaching.
5. Specific aims of education as per the present day needs.
COURSE CONTENT

UNIT-I

• Nature and scope of education as a Science, Education as a Social process, factors of Education.
• Aims of Education – individual, social, vocational and democratic.
• Formal, informal and non-formal agencies of education, Relation between school and society.

Unit-II

• Meaning of philosophy and education, relation between philosophy and education, essential aspects of major philosophies of education with special reference to aims, process and curriculum – Idealism, naturalism and pragmatism.

Unit-III

Functions of Educations:
  a) Individual development
  b) Transmission of cultural heritage
  c) Acquisition of skills
  d) Acquisition and generation of human values and
  e) Social cohesion.

UNIT-IV

Factors influencing socio-cultural heritage

Education as an instrument of social change
Indian Society – Social Stratification and social Mobility. Role of Education in social mobility.

Unit-V

- Freedom and discipline, need of discipline in and out of school, discipline and order, free discipline.
- Value education: Meaning of human values, their development, some transactional strategies.
- Education for national integration, international understanding and education for human resource development education for leisure.

PAPER – II (100 marks)

EDUCATION AND HUMAN DEVELOPMENT

COURSE OBJECTIVE

To make the students understand about:-

1. The meaning, scope and uses of Psychology in education.
2. Human growth and development up to the stage of adolescence.
3. Meaning and purpose of learning and factors influencing learning:
4. The concept of intelligence, its meaning and measurement.
5. Heredity and environment and their roles in causing individual difference.
COURSE CONTENTS:

Unit-I

- Psychology – its meaning, nature and scope: Relationship between education and psychology, Distinction between psychology and education psychology.

Unit-II

- Stages of human development: Infancy, Childhood, lateach and adolescence their needs significance and problems. Human development and education, role of education psychology in understanding the individual.

Unit-III

- Learning : Learning and maturation Essential aspects of different theories and laws of learning, Motivation in learning, transfer of learning.
- Attention and Interest. Nature and conditions for attention their educational implications.
- Habits: meaning of habit and its role and implications in education.
- Emotions-their meaning, characteristics and place of emotions in education.

Unit-IV

- Intelligence – concept, definition and measurement.

Unit-V

- Heredity and environment and their implications for education.
- Individual differences-causes of individual differences, significance of individual difference and educational implication.
FIRST YEAR EXAMINATION

HOME SCIENCE

Time – 3 hours

Paper – I (Theory) Full Marks-100

NUTRITION, HOME MANAGEMENT AND TEXTILE

UNIT-I

1. Food: Definition, classification and functions.
   Nutrition – Definition of Nutrition, Malnutrition and health.

2. Basic food Groups – Nutritional importance and classification (Basic 4, Basic-5 and basic – 7)

3. Constituents of food – Classification, functions and sources and requirement of the following:
   a) Proteins, fats, carbohydrates
       b) Vitamins – A, D, E and K, Vitamin B1, B2, Niacin, B12 and Vitamin-C

4. Functions, sources and requirements of minerals – calcium, Sodium, iron and iodine.

   Unit-II

5. Different methods of cooking and their advantages and disadvantages.

6. Food preservation – Importance, principles and methods of food preservation. Dehydration, refrigeration, chemical preservation, Use of oil and spies and sterilization by cooking.

7. Meal planning: Principles and factors affecting meal planning.

Unit-III


10. Decision-making: Definition, importance and steps of decision making.

11. Family resources: Classification and characteristics of family resources.

Unit-IV

12. Management of specific family resources: Management of time: Time plan, steps in making time plan.


Unit-V

15. Study of textile fibbers: Classification, structure and properties of cotton, silk and wool.

16. Different types of soaps, detergents, stiffening agents (Rice, Maida, Arrowroot).

17. Stain removal: Classification and removal of blood, ink, curry grease, tea and coffee.

18. Washing and finishing of cotton, silk and wool.
SECOND YEAR EXAMINATION

Time – 3 hours

Paper – II

Full Marks – 100

CHILD DEVELOPMENT, FAMILY STUDIES AND EXTENSION EDUCATION

Unit-I

1. Prenatal development- Importance of conception – stages of prenatal development – Period of ovum, period of embryo and period of foetus,
Factors affecting prenatal development-maternal nutrition, maternal health, Rh, factor, drugs, x-ray and radium, alcohol, tobacco; parental age, maternal emotions.

2. Growth and development during the first two years-Physical developments (growth cycles, body sizes, body proration, bones, teeth, muscle).

Unit-III


4. Play-Values of play: (Physical, social cognitive, moral therapeutic, recreational and educational value) Types of play – Free and structured play, individual and group play, vigorous and quit, play of out door and in door play.

Unit-III

Family studies:

5. Family: Definition, functions and types of family-nuclear and joint family.

Unit-IV

7. Marriage: Definition, function and types of marriage in India. Significance of marriage ceremony among various communities, arranged and free choice marriage.


Unit-V

Extension Education:

9. Extension Education: Meaning, Philosophy, objectives and principles of extension education, Role of extension worker and qualities of good extension worker.


MASS COMMUNICATION

This Elective course is meant for B. A (Pass) Honours) of two theoretical papers i.e. Advertising and Public Relation ad Introduction to Mass Communication carrying 100 marks each of 3 hours duration.

**Paper – I** Advertising & Public Relation: 100 marks  
**Paper – II** Introduction to Mass Communication 100 marks
FIRST YEAR EXAMINATION

PAPER – I

ADVERTISING AND PUBLIC RELATION

(100 MARKS)

UNIT-I

Advertising: Definition, Definition, Classification of Advertising in Newspapers, Magazines, Radio, Television, Outdoor.

Unit-II

Advertising: Advertising agency-structure and Functions-creativity, planning, Media selection, budgeting, client service, advertising campaign planning.

Unit-III

Advertising: Techniques of advertising, advertising copy preparation for print media and electronic media.

Unit-IV

Public relation: Definition, Growth of public relation in India, public relation as a communication function, public relation in private and public sectors, Government PR. Structure and function of PR Department.
Unit-V


SECOND YEAR EXAMINATION

PAPER-II

INTRODUCTION TO MASS COMMUNICATION

Unit-I

Mass Communication – Nature-Scope-definition-process-function-
Types of Communication

Unit-II

Newspapers types of newspaper-contents Magazines and types Brief History of News paper in India.

Unit-III

Folk Media in Orissa and their relevance for rural development.

Unit-IV

History of Radio and T.V in India. Difference between Radio and TV communication.

Unit-V
FIRST YEAR EXAMINATION

Hindi Elective Paper – I

Time – 3 hours

ANCIENT LITERATURE

Full Marks – 100

Unit-I

Bhakti movement: Evolution, development and general trends. (20 marks)

Unit-II

Saint Poets and National Integration, Kabir, Jayasi (20 marks)

Unit-III

Tulasidas and Ramcharit Manas (20 marks)

Unit-IV

Rahim and Raskhan (20 marks)

Unit-V

1) Ballabha Sampradaya Aur Asta Chap Kavi (20 marks)

2) Srudas Aur Bhramarr Geet.

BOOKS FOR REFERENCE


5. Rama Kavya Aur Taulsi, Dr. Prem Shankar Indian Publishing House, Delhi

SECOND YEAR EXAMINATION

Time – 3 hours

Paper-II

MODERN LITERATURE

Unit-I (20 marks)
Evolution and development of Nationalistic trends in modern Hindi Literature.

Unit-II
National Poet Maithilisharan Gupta. (20 marks)

Unit-III
National Consciousness in the dramas of Jaishankar Prasad. (20 marks)

Unit-IV

Unit-V
Social Consciousness in Novels of Premchand. (20 marks)

BOOKS FOR REFERENCE
1. Hindi Sahitya Ka Itihasa: Dr. Nagendra Mayur Paper Works, Noida
3. Prasad Ke Aitihasik Natak – Jgadish Joshi

I. R. & P. M

INDIAN LABOUR STUDIES

PAPER – I (100 MARKS)

INDUSTRIAL RELATIONS

UNIT-I

a) Industrialisation in India – Growth and development of Modern industries in India.

b) Industrial Relations – Meaning and scope of Industrial Relations.

Unit-II

Trade Unionism in India:

a) Meaning

b) Objectives and Functions of Trade Unions.

c) Structure of Trade Unions in India

Unit-III

Industrial Disputes in India- Meaning, causes and consequences of Industrial disputes.

Methods of settlement of industrial disputes in India- Collective Bargaining, conciliation, adjudication and arbitration.

Unit-IV
Labour Management Cooperation in India –
Concept, Goals and forms of Labour-Management cooperation, Schemes of
Workers participation in Management in India.

Unit-V

Grievance – Handling – Meaning, causes of grievance, Types of Grievance
procedure.

Disciplinary Action – Meaning and importance of Discipline, positive Discipline
and Negative Discipline, causes of indiscipline, Disciplinary procedure.

I.R. & P.M

INDIAN LABOUR STUDIES
SECOND YEAR EXAMINATION
PAPER – II (100 MARKS)
LABOUR WELFARE

Unit-I

Labour Welfare:

a) Meaning, concept and scope of Labour Welfare.

b) Statutory and non-statutory Labour Welfare.

Unit-II

Social Security in India:

Meaning, aims and adjectives and scope of Social Security.

Genesis of social Security in India

Social Security measures for industrial workers in India.
Unit-III

Meaning and significance of Labour Problems

Migratory character of Labour, causes and effects of Migratory Labour in India.

Unit-IV

Labour Absenteeism.

a) Meaning Nature, causes and consequences of Absenteeism, Measures to reduce the labour absenteeism.

b) Labour Turn Over- Meaning, causes and consequences of Labour Turn over, Measures to reduce labour turnover in India.

Unit-V

Labour Problems in India:

a) Agriculture Labour

b) Women and Child Labour

c) Contract Labour.
FIRST YEAR EXAMINATION

SECOND YEAR EXAMINATION
PHILOSOPHY

INDIAN PHILOSOPHY

FIRST YEAR EXAMINATION

PAPER-I

UNIT-I

Common Characteristics of Indian Philosophy.
Charvak Philosophy – Epistemology and Metaphysics.

Unit-II

Jainism – Anekenta Veda and Syadevad

Unit-III

Budhism – The four Noble Truths, Theory of Causation.
Doctrine of Impermanences

Unit-IV

Nyaya Philosophy
Theory of Pramanas: (a) Perception   (b) Inference.

Unit-V

Nyaya Theory of Pramanas
a) Comparison
b) Verbal Testimony
c) Theory of causation
SECOND YEAR EXAMINATION

PAPER-II

Unit-I

Vaishesika Philosophy

The Categories

Unit-II

Samkhya Philosophy

a) Theory of Causation

b) Concepts of Prakrti and Purusa

Unit-III

Vedanta Philosophy:

Advita Vedanta of Samkara

a) Concept of Bhahman

b) Concept of Jiva

c) Concept of Maya.

Unit-IV

Visistadvaita Vedanta of Ramanuja

a) Concept of Brahman

b) Concept of Jiva

c) Theory of Liberation.

Unit-V

Bhagabat Gita – Niskarma Karma

M. K. Gandhi – Non Violence.
BOOKS RECOMMENDED

1. A Critical survey of Indian Philosophy: Prof. C. D. Sharma
2. An Introduction of Indian Philosophy: Prof. Chattarjee & Dutta
3. Indian Philosophy: Vol-II – Dr. S. Radhakrishnan
4. Outlines of Indian Philosophy – Prof Jadunath Sinha.
5. Indian Philosophy – Prof. R. N. Mishra.

LIBRARY & INFORMATION SCIENCE

PAPER – I

FIRST YEAR EXAMINATION

LIBRARY AND SOCIETY

Unit-I Library: Concept, need and Purpose; Its role in Society.
Unit-II Five Laws of Library Science: Their implication in the context of Library.
Unit-IV Library Growth and development: Library movement in India and Orissa
Unit-V Library Legislation: Concept and need and Purpose: Library legislation in India.

BOOKS RECOMMENDED:


SECOND YEAR EXAMINATION

PAPER-II

FUNDAMENTALS OF INFORMATION AND COMMUNICATION

Unit-I Information: Definition, nature and characteristics: its role in society.

Unit-II Information as a resources: Concept, scope and nature: Library as an information communication centre.

Unit-III Agencies of dissemination of information: Human Institution, Libraries etc.

Unit-IV Communication: Definition, modes, barriers to communication & its control.

Unit-V Information user community and its need; User education programme.

BOOKS RECOMMENDED


======