

# **COURSES OF STUDIES**

**FOR**

**THREE YEAR DEGREE COURSE**

**IN**

**ARTS HONOURS**

**ANTHROPOLOGY**

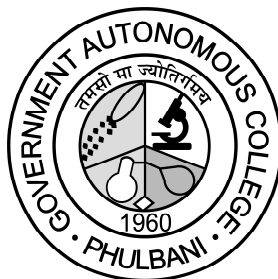
**STUDENT COPY**

**Choice Based Credit System(CBCS)**

First & Second Semester Examination – 2018-19

Third & Fourth Semester Examination – 2019-20

Fifth & Sixth Semester Examination – 2020-21



**GOVERNMENT AUTONOMOUS COLLEGE,  
PHULBANI, KANDHAMAL**

## SYLLABI FOR CBCS COURSE

Sem	CORE COURSE (14)	Ability Enhancement Compulsory Course (AECC) (2)	Skill based Enhancement Compulsory Course (SECC) (2)	Elective: Discipline Specific DSE (4)	Elective: Generic (GE) (4)
I	CORE-I	AECC-1			GE-1 (Minor-1)
	CORE-II				
II	CORE-III	AECC-2			GE-1 (Minor-2)
	CORE -IV				
III	CORE-V		SECC-1		GE-2 (Minor-1)
	CORE-VI				
	CORE-VII				
IV	CORE-VIII		SECC-2		GE-2 (Minor-2)
	CORE-IX				
	CORE-X				
V	CORE-XI			DSE-1	
	CORE-XII			DSE-2	
VI	CORE-XIII			DSE-3	
	CORE-XIV			DSE-4 (Project)	

SECC-1 : To be offered by English Department.

SECC-2 : To be offered by Mathematics Department.

GE : Minor-1 and Minor-2 is to be decided by the college Based on Subject.

### QUESTION PATTERN FOR MID SEM

Mid Semester Examination	Full Marks	No. of Short Answer type Questions (2 marks each) (Compulsory)	No. of Long Answer type Questions (8 marks each)	No. of Long Answer type Questions (12 marks each)
Practical Subject	20	6	1	*
Non-Practical Subject	20	4	*	1

### QUESTION PATTERN FOR END SEM

End Semester Examination	Full Marks	GROUP – A					GROUP - B									
		No. of Short Answer type Questions (2 marks each) (Compulsory)					No. of Long Answer type Questions (8 marks each)					No. of Long Answer type Questions (12 marks each)				
Units -->		I	II	III	IV	V	I	II	III	IV	V	I	II	III	IV	V
Non-Practical Subject	80	10					*	*	*	*	*	1	1	1	1	1
Practical Subject	50	5					1	1	1	1	1	*	*	*	*	*

- ❖ There is no alternative questions (choice) in Group-A questions (Short Answer type questions). All questions are compulsory.
- ❖ There is internal alternative questions (choice) in each number in Group-B questions (Long Answer type questions). Examinee has to answer one questions out of two alternative questions from each number.
- ❖ There is little deviation in question pattern of AECC (Eng Communication) & SECC-I & II. Details regarding question pattern of concerned subject is given at appropriate place.)
- ❖ The duration of Mid Sem exam of each paper is 1 hour irrespective of Full marks.
- ❖ The duration of End Sem exam of each paper is 3 hours for 80 marks/50 marks.

**YEAR & SEMESTER-WISE PAPERS & CREDITS AT A GLANCE**

Three-Year (6-Semester) CBCS Programme (B.Sc. Hons.) (Anthropology Hons.)				
Yr.	Sl.No.	Course Structure	Code	Credit Points
FIRST YEAR	SEMESTER-I			
	1	Introduction to Biological Anthropology	C-1.1	4+2
	2	Introduction to Socio-cultural Anthropology	C-1.2	4+2
	3	English(Academic Writing and Composition)/History(History of India-I)/ Political Science(Indian Polity-I)	GE-1.3	6
	4	MIL Communication – Odia / English Communication	AECC-1.4	6
	TOTAL -			24
	SEMESTER-II			
	5	Archaeological Anthropology	C-2.1	4+2
	6	Fundamentals of Human Origin & Evolution	C-2.2	4+2
	7	Economics(Indian Economy–I)/Geography(Industrial Geography/Other related discipline)/Odia(Odia-I)/Philosophy(Systems of Indian Philosophy)	GE-2.3	6
	8	Environmental Studies	AECC-2.4	6
	TOTAL -			24
SECOND YEAR	SEMESTER-III			
	9	Tribes and Peasants in India	C-3.1	4+2
	10	Human Ecology	C-3.2	4+2
	11	Biological Diversity in Human Populations	C-3.3	4+2
	12	English(Language, Literature and Culture)/History(History of India-II)/ Political Science(Indian Polity-II)	GE-3.4	6
	13	Communicative English	SECC-3.5	6
	TOTAL -			30
	SEMESTER-IV			
	14	Theories of Culture and Society	C-4.1	4+2
	15	Human Growth and Development	C-4.2	4+2
	16	Research Methods	C-4.3	4+2
	17	Economics(Indian Economy–II)/Geography(Disaster Management/ Other related discipline)/Odia(Odia-II)/Philosophy(Indian Ethics)	GE-4.4	6
	18	Quantitative and Logical Thinking	SECC-4.5	6
	TOTAL -			30
FINAL YEAR	SEMESTER-V			
	19	Prehistoric Archaeology of India	C-5.1	4+2
	20	Anthropology in Practice	C-5.2	4+2
	21	Human Genetics	DSE-5.3	4+2
	22	Anthropology of Religion, Politics and Economy	DSE-5.4	4+2
	TOTAL -			24
	SEMESTER-VI			
	23	Forensic Anthropology	C-6.1	4+2
	24	Anthropology of India	C-6.2	4+2
	25	Tribal Cultures of India	DSE-6.3	4+2
	26	Project Work	DSE-6.4	6
	TOTAL -			24
GRAND TOTAL -				156

**Notes:**

- C- Core Course
- GE- Generic Elective Course
- DSE- Discipline Specific Elective Course
- AECC- Ability Enhancement Compulsory Course
- SECC- Skill based Enhancement Compulsory Course
- For a 6 credit course, the total teaching hours are: Minimum- 50 Hours, Maximum-65 Hours

## SEMESTER-I

### C-1.1 : INTRODUCTION TO BIOLOGICAL ANTHROPOLOGY

Full Marks - 100  
Mid Sem – 20/1 hr  
End Sem Theory – 50/3 hrs

#### UNIT- I :

History and development of understanding human variation and evolutionary thought; Theories of evolution; Human variation and evolution in ancient times pre-19th and post-19th Century; Theories of evolution Lamarckism, Neo Lamarckism, Darwinism, Synthetic theory, Mutation and Neo-Mutation theory

#### UNIT- II :

History of Physical Anthropology and Development of Modern Biological Anthropology, Aim, scope and its relationship with allied disciplines; Difference in the approaches of modern and traditional Biological Anthropology, with emphasis on human evolution

#### UNIT- III :

Non human primates in relation to human evolution Classification and characteristics of living primates; Comparative anatomy and behavior of human and non-human primates; Significance of non-human primate study in Biological Anthropology.

#### UNIT- IV :

Structure and function of an animal cell; cell theory and cell division. Essentials of Genetics; Landmarks in the history of genetics.

#### UNIT- V :

Principles in human genetics Mendel's Laws of inheritance and its application to man; Concept of race & UNESCO Statement on Race; A comparative account of various races of the world.

### PRACTICAL

End Sem Practical – 30/3 hrs

#### Somatometry

- |                                |                                       |
|--------------------------------|---------------------------------------|
| 1. Maximum head length         | 9. Physiognomic facial height         |
| 2. Maximum head breadth        | 10. Morphological facial height       |
| 3. Minimum frontal breadth     | 11. Physiognomic upper facial height  |
| 4. Maximum bizygomatic breadth | 12. Morphological upper facial height |
| 5. Bigonial breadth            | 13. Head circumference                |
| 6. Nasal height                | 14. Stature                           |
| 7. Nasal length                | 15. Sitting height                    |
| 8. Nasal breadth               | 16. Body weight                       |

#### Somatoscropy

- |              |                |                |                |
|--------------|----------------|----------------|----------------|
| 1. Head form | 2. Hair form   | 3. Facial form | 4. Eye form    |
| 5. Nose form | 6. Hair colour | 7. Eye colour  | 8. Skin colour |

#### Suggested Readings :

1. Jurmain R., Kilgore L., Trevathan W., Ciochon R.L. (2012). Introduction to Physical Anthropology Wadsworth Publ., USA
2. Kroeber A. L. (1948). Anthropology. Oxford & IBH Publishing Co., New Delhi.
3. Stanford C., Allen J.S. and Anton S.C. (2010). Exploring Biological Anthropology. The Essentials. Prentice Hall Publ, USA.
4. Statement on Race: Annotated Elaboration and Exposition of the Four Statements on Race (1972). Issued by UNESCO. Oxford University Press.

### C-1.2 : INTRODUCTION TO SOCIO-CULTURAL ANTHROPOLOGY

Full Marks - 100  
Mid Sem – 20/1 hr  
End Sem Theory – 50/3 hrs

#### UNIT- I :

Anthropological perspective and orientation; Scope and relevance of Social Anthropology; Relationship of Social Anthropology with other disciplines

#### UNIT- II :

Concepts of society and culture; status and role; groups and institution,

**UNIT- III :**

Social organization, social stratification, civil society

**UNIT- IV :**

Social structure; social function; social system

**UNIT- V :**

Theory and practice of ethnographic fieldwork; survey method; comparative and historical Methods

**PRACTICAL**

**End Sem Practical – 30/3 hrs**

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

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

**Suggested Readings :**

1. Beattie J. (1964). *Other Cultures*. London: Cohen & West Limited.
2. Bernard H.R. (1940). *Research Methods in Cultural Anthropology*. Newbury Park: Sage Publications.
3. Davis K. (1981). *Human Society*. New Delhi: Surjeet Publications.
4. Delaney C. (2004). 'Orientation and disorientation' In *Investigating Culture: An Experiential Introduction to Anthropology*. Wiley-Blackwell.
5. Ember C. R. et al. (2011). *Anthropology*. New Delhi: Dorling Kindersley.
6. Ferraro G. and Andreatta S. (2008). In *Cultural Anthropology: An Applied Perspective*. Belmont: Wadsworth.
7. Haviland, Prins, Walrath, McBride (2007). *Introduction to Anthropology*. Cengage Learning India Pvt. Ltd., New Delhi
8. Haviland, Prins, Walrath, McBride (2008). *Cultural Anthropology*. Cengage Learning India Pvt. Ltd., New Delhi
9. Karen O'reilly. (2012). 'Practical Issues in Interviewing' *Ethnographic Methods*. Abingdon: Routledge
10. Lang G. (1956). 'Concept of Status and Role in Anthropology: Their Definitions and Use. *The American Catholic Sociological Review*. 17(3): 206-218

**GE-1.3 : ACADEMIC WRITING AND COMPOSITION**

**Full Marks - 100**

**Mid Sem – 20/1 hr**

**End Sem – 80/3hrs**

**UNIT-I : Instruments of Writing I**

- Vocabulary development : synonyms and antonyms; words used as different parts of speech; vocabulary typical to 'science' and 'commerce'
- Collocation ; effective use of vocabulary in context

**UNIT-II : Instruments of Writing II**

- Syntax : word order; subject-predicate; subject-verb agreement; simple complex, compound, compound-complex sentences; structure and uses of active and passive sentences
- Common errors in Indian writing

**UNIT-III : Academic Writing I**

- What is academic writing?
- The formal academic writing process : the 'what' and the 'how' or writing; use of cohesive and transitional devices in short and extended pieces of writing

**UNIT-IV : Academic Writing II**

- Paragraph writing : topic sentence, appropriate paragraph development ; expository, descriptive, narrative and argumentative paragraphs
- Extended pieces of writing : process development using comparison-contrast, cause and effect, argumentation and persuasion

**UNIT-V : Research writing : Writing research papers and projects**

- Mechanics of research writing; principles of citation; summarizing and paraphrasing

- Identifying a potential research topic; preparing a synopsis; literature review; data collection and analysis; deriving conclusions from analysis

**Pattern of Examination :**

**Mid-Semester Examination :**

Using texts (500-600 words), students will be tested for

- Vocabulary : synonyms, antonyms, words used as different parts of speech = 10 marks
- Word order ; subject-predicate; subject-verb agreement = 10 marks

**End-Semester Examination :**

Using texts (600-700 words), students will be tested for

- Use of vocabulary in context 2 marks X 5 bits = 10 marks
- Use of grammar in context
- Use of cohesive and transitional devices in one paragraph 2 marks X 10 bits = 20 marks
- Writing two paragraphs (expository/descriptive/narrative/Argumentative) using topic sentences 10 marks X 2 qns = 20 marks
- Correcting in-text citation from given input 2 marks X 5 bits = 10 marks
- Preparing a correct version of Works Cited page from given input 2 marks X 5 bits = 10 marks

**Suggested Readings:**

- K. Samantray, *Academic and Research Writing : A Course for Undergraduates*, Orient BlackSwan
- Leo Jones (1998) *Cambridge Advanced English : Student's Book*, New Delhi : CUP
- Stanley Fish (2011) *How to Write a Sentence*

**GE-1.3 : HISTORY OF INDIA-I**

**Full Marks - 100**  
**Mid Sem – 20/1 hr**  
**End Sem – 80/3 hrs**

**UNIT-I : Reconstructing Ancient Indian History**

- Meaning and relevance of History
- Sources for the reconstruction of Ancient Indian History

**UNIT-II : Pre-historic hunter-gatherers**

- Paleolithic cultures- sequence, distribution, technological developments
- Mesolithic cultures- distribution, new development in technology

**UNIT-III : Beginning of Agriculture**

- Neolithic and Chalcolithic Cultures;
- Regional and Chronological distribution, subsistence and pattern of exchange

**UNIT-IV : The Harappan civilization**

- Origin, Town planning, Social and Political organisation
- Religious beliefs and practices, Arts, Decline

**UNIT-V : Cultures in Transition**

- Early Vedic and Later Vedic Culture: Society, Economy, Political System, Religion and Philosophy
- Tamilakam – Sangam Age

**Suggested Readings :**

- R.S. Sharma, *India's Ancient Past*, New Delhi, OUP, 2007
- R.S. Sharma, *Material Culture and Social Formations in Ancient India*, 1983.
- D.P. Agrawal, *The Archaeology of India*, 1985.
- A.L. Basham, *The Wonder that Was India*, 1971.
- Upinder Singh, *A History of Ancient and Early Medieval India*, 2008.
- Romila Thapar, *Early India from the beginning to 1500*, 2002.

**GE-1.3 : INDIAN POLITY - I**

**Full Marks - 100**  
**Mid Sem – 20/1 hr**  
**End Sem – 80/3 hrs**

**UNIT-I: Landmarks of Freedom Movement Preamble & salient features**

**UNIT-II: Fundamental Rights, Directive principles of state policy**

**UNIT-III: Union Government**

President, Prime Minister, Council of Ministers, Union Parliament & Supreme Court of India

**UNIT-IV: State Government**

Governor, Chief Minister, Vidhan Sabha

**UNIT-V: Local Government**

Panchayati Raj & Urban local bodies

**Suggested Readings :**

1. Basu, D.D. (2012) *Introduction to the Constitution of India*, New Delhi: Lexis Nexis.
2. Kashyap, Subhash Chandra(2013) '*Our Political System*' New Delhi: National Book Trust
3. Laxmikanth, M (2015) '*Indian Polity*' New Delhi: Tata McGraw Hill
4. Raghunandan, J. R (2012) *Decentralization and local governments: The Indian Experience*, New Delhi: Orient Black Swan

**AECC-1.4 : ଯୋଗାଯୋଗମୂଳକ ମାତୃଭାଷା- ଓଡ଼ିଆ**

Full Marks - 100  
Mid Sem – 20/1 hr  
End Sem – 80/3hrs

ଯୁନିଟ୍-୧ : ବିଜ୍ଞାପନ କଳା ଓ ସାହିତ୍ୟ / ବିଜ୍ଞାପନର ଆବଶ୍ୟକତା ଓ ଉପକାରିତା

ଯୁନିଟ୍-୨ : ଗନ୍ଧ- କୃଷ୍ଣଚୂଡ଼ା- ସୁରେନ୍ଦ୍ର ମହାନ୍ତି  
ପାଟଦେଇ- ବୀଣାପାଣି ମହାନ୍ତି  
ବୁଢ଼ାଶଙ୍ଖାରୀ- ଲକ୍ଷ୍ମୀକାନ୍ତ ମହାପାତ୍ର

ଯୁନିଟ୍-୩ : କବିତା- ଶ୍ରୀରାଧା- ରମାକାନ୍ତ ରଥ  
ପ୍ରତିମା ନାୟକ- ସଚ୍ଚି ରାଉତରାୟ  
ଦୁର୍ଯ୍ୟୋଧନ- ସୀତାକାନ୍ତ ମହାପାତ୍ର

ଯୁନିଟ୍-୪ : ପ୍ରବନ୍ଧ- ଗାଡ଼ି ଛାଡ଼ିଦେଲା – ଚନ୍ଦ୍ରଶେଖର ରଥ  
ଆମେରିକାରେ ଲୋକଚରିତ୍ର – ଗୋଲୋକ ବିହାରୀ ଧଳ  
ସ୍ବାଧୀନ ଚିନ୍ତା – ବିଶ୍ବନାଥ କର

ଯୁନିଟ୍-୫ : କାରକ ଓ ବିଭକ୍ତି

**ପୁସ୍ତକ :**

୧. ଯୋଗାଯୋଗର ଭାଷା, ଫ୍ରେଣ୍ଡ୍‌ସ୍ ପ୍ରକାଶନ, କଟକ
୨. ଗନ୍ଧ, କବିତା ଓ ପ୍ରବନ୍ଧ – ସଂକଳିତ ପୁସ୍ତକ, କଲେଜ ଛକ, ଫୁଲବାଣୀ

**AEEC-1.4 : ENGLISH COMMUNICATION**

Full Marks - 100  
Mid Sem – 20/1 hr  
End Sem – 80/3hrs

**UNIT-I : Introduction**

1. What is communication?
2. Types of communication
  - Horizontal
  - Vertical
  - Interpersonal
  - Grapevine

**UNIT-II : Language of Communication**

1. Verbal : spoken and written
2. Non-verbal
  - Proxemics
  - Kinesics
  - Haptics
  - Chronemics



- Paralinguistics
- 3. Barriers to communication
- 4. Communicative English

**UNIT-III : Reading Comprehension (Prose & Poetry)**

- Locate and remember the most important points in the reading
- Interpret and evaluate events, ideas and information
- Read “between the lines” to understand underlying meanings
- Connect information to what they already know

**UNIT-IV : Writing**

- Expanding an Idea
  - Note Making
  - Information Transfer
  - Writing a Memo
  - Writing Formal Email
  - Writing a Business Letter
  - Letters to the Editor
  - CV & Resume Writing
  - Covering Letter
  - Report Writing
  - News Story
  - Interviewing for newspaper
- (The above mentioned writing activities are covered in the prescribed text book Vistas and Visions)

**UNIT-V : Language functions in listening and conversation**

1. Discussion on a given topic in pairs
2. Speaking on a given topic individually
3. Group Discussion
4. Interview
5. Dialogue

(Practice to be given using the set pieces from the prescribed textbook)

**Grammar and Usage :**

1. Phrasal verbs
2. Collocation
3. Using Modals
4. Use of Prepositions
5. Common Errors in English Usage

(The above mentioned grammar items are covered in the prescribed text book Vistas and Visions)

**Book Prescribed :**

1. *Vistas and Visions: An Anthology of Prose and Poetry*. (Ed.) Kalyani Samantray, Himansu S. Mohapatra, Jatindra K. Nayak, Gopa Ranjan Mishra, Arun Kumar Mohanty. OBS

**Texts to be studied**

**Prose**

1. Decoding Newspapers
2. The Gold Frame
3. Of Truth
4. Lifestyle English
5. A Cup of Tea

**Poetry**

1. Lines Composed a few miles above Tintern Abbey
2. Sonnet 46 (Shakespeare)
3. Pigeons
4. Miracles

All grammar and writing activities in the textbook *Vistas and Visions*

**Pattern of Examination :**

Each reading and writing question will invite a 200 words response.

**Mid-Semester Examination :**

Unit I : Preferably short questions on types of communication = 20 marks

**End-Semester Examination :**

Unit II : One long question with choice	1 mark X 10 qns = 10 marks
Two short notes with choice	2 marks X 5 qns = 10 marks
Unit III : Reading skills (2 qns from prose & 2 qns from poetry)	4 marks X 5 qns = 20 marks
Unit IV : Writing	2 marks X 10 qns = 20 marks
Unit V : Grammar & Usage	2 marks X 10 qns = 20 marks
Grammar questions must be set in contexts; not as isolated sentences as used for practice in the prescribed text book.	

**Suggested Readings:**

1. *Fluency in English – Part II*, OUP, 2006
2. *Business English*, Pearson, 2008
3. *Communicative English* -E. Suresh Kumar and P. Sreehari
4. *Break Free : Unlock the Powerful Communicator in You*. Rajesh, V. Rupa, 2015
5. *Soft Skills* Shalini Verma, 2009
6. *Language, Literature and Creativity*, Orient BlackSwan, 2013
7. *Language through Literature*. (forthcoming) ed. Gauri Mishra, Dr. Ranajan Kaul, Dr. Brati Biswas

## SEMESTER-II

### C-2.1 : ARCHAEOLOGICAL ANTHROPOLOGY

**Full Marks - 100**

**Mid Sem – 20/1 hr**

**End Sem Theory – 50/3 hrs**

**UNIT- I :**

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

**UNIT-II :**

Methods of Estimation of Time and Reconstruction of the Past; Absolute dating methods: Radiocarbon<sup>14</sup> dating (C<sup>14</sup>), Potassium-Argon, Fission Track Dating; Relative dating methods: Stratigraphy, Palaeontology, Palynology.

**UNIT-III :**

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

**UNIT-IV :**

Understanding Culture; Technique of tool manufacture and estimation of their relative efficiency; Classification of tools: primary and combination fabrication techniques.

**UNIT- V :**

Earliest evidence of culture in the world: Olduvai Gorge, Olorgesaille, Attirampakkam, Isampur, Kuliana.

## PRACTICAL

**End Sem Practical – 30/3 hrs**

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

- a. Core Tool Types
- b. Flake Tool Types
- c. Blade Tool Types
- d. Microlithic Tool Type
- e. Neolithic Tool Type

**Suggested Readings :**

1. Allchin and Allchin (1993). *The Rise of Civilization of India and Pakistan*. Cambridge University Press
2. Bhattacharya D.K. (1978). *Emergence of Culture in Europe*, Delhi, B.R. Publication.
3. Bhattacharya D.K. (1979). *Old Stone Age Tools and Techniques*. Calcutta, K.P. Bagchi Company
4. Bhattacharya D.K. (1996). *Palaeolithic Europe*. Netherlands, Humanities Press.
5. Champion et al. (1984). *Prehistoric Europe*. New York, Academic Press.

6. Fagan B.M. (1983). *People of Earth: An Introduction*. Boston, Little, Brown & Company.
7. Phillipson D. W. (2005). *African Archaeology*. Cambridge, Cambridge University Press.
8. Sankalia H.D. (1964). *Stone Age Tools*. Poona Deccan College

## C-2.2 : FUNDAMENTALS OF HUMAN ORIGIN & EVOLUTION

**Full Marks - 100**  
**Mid Sem – 20/1 hr**  
**End Sem Theory – 50/3 hrs**

### UNIT-I :

Primate origins and radiation with special reference to Miocene hominoids: Ramapithecus, distribution, features and their phylogenetic relationships.

### UNIT-II :

Australopithecines: distribution, features and their Phylogenetic relationships, Appearance of genus Homo (*Homo habilis*) and related finds.

### UNIT-III :

*Homo erectus* from Asia, Europe and Africa: Distribution, features and their Phylogenetic status.

### UNIT-IV :

The origin of *Homo sapiens*: Fossil evidences of Neanderthals and Archaic *Homo sapiens-sapiens*.

### UNIT- V :

Origin of modern humans (*Homo sapiens-sapiens*): Distribution and features; Multiregional and Out of Africa theory; Humanization process

## PRACTICAL

**End Sem Practical – 30/3 hrs**

1. Craniometry:
 

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

### **Suggested Readings :**

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

## GE-2.3: INDIAN ECONOMY - I

**Full Marks - 100**  
**Mid Sem – 20/1 hr**  
**End Sem – 80/3 hrs**

### UNIT-I : Introduction to Indian Economy

British Rule: exploitation and under development in India; features of Indian economy – natural resources, infrastructure, population

### UNIT-II : Population and Human Development

Demographic trends and issues; education; health and malnutrition

**UNIT-III : National Income in India**

National income: trends, sectoral composition;

**UNIT-IV : Economic Planning in India & Recent Changes**

Economic planning: Planning Commission and its functions, Planning exercises in India, Objectives, Strategies and achievements, NITI Aayog

**UNIT-V : Current Challenges**

Poverty: definition and estimate, poverty line, poverty alleviation programs; Inequality: income and regional inequality – causes and corrective measures; Unemployment: concepts, measurement, types, causes and remedies; Environmental challenges: Land, water and air

**Suggested Books:**

1. U. Kapila (2010): *Indian economy since Independence*. Academic Foundation, New Delhi
2. S. K. Misra and V. K. Puri (Latest Year): *Indian Economy — Its Development Experience*, Himalaya Publishing House, Mumbai
3. S. Chakraborty: *Development Planning: The Indian Experience*. Clarendon Press.
4. R. Dutt and K. P. M. Sundharam (Latest Year): *Indian Economy*, S. Chand & Company Ltd., New Delhi.
5. A. Panagariya (2008): *India: the Emerging Giant*, Oxford University Press, New York
6. S. Acharya and R. Mohan (Eds.) (2010): *India's Economy: Performance and Challenges*, Oxford University Press, New Delhi.
7. I. J. Ahluwalia and I. M. D. Little (Eds.) (1998): *India's Economic Reforms and Development: Essays for Manmohan Singh*, Oxford University Press, New Delhi.

**GE-2.3 : INDUSTRIAL GEOGRAPHY/OTHER RELATED DISCIPLINE**

**Full Marks - 100**

**Mid Sem – 20/1 hr**

**End Sem – 80/3 hrs**

**UNIT-I :**

Nature, Scope and Subject Matter of Industrial Geography

**UNIT-II :**

Types, Geographical Characteristics and Location of Industries: Small and Medium Enterprises, Coal and Iron, Tertiary Industries, Rural based Industries

**UNIT-III :**

Mega Industrial Complexes: National Capital Region, Mumbai-Pune Industrial Region, Bengaluru-Tamil Nadu Industrial Region and Chota Nagpur Industrial Region

**UNIT-IV :**

Impact of Industrialisation in India: Environmental; Social and Economic

**UNIT-V :**

Industrial Policy of India

**GE-2.3 : ଓଡ଼ିଆ (ପ୍ରଥମ ପଦ୍ଧତି)**

**Full Marks - 100**

**Mid Sem – 20/1 hr**

**End Sem – 80/3 hrs**

ୟୁନିଟ୍-୧ : କୃଷି, ଉଦ୍ଭିଦ, ସମୋଜାରିତ ଶିଳ୍ପ, ଏକପଦୀକରଣ

୧୭

ୟୁନିଟ୍-୨ : କବିତା- ସମୁଦ୍ର କନ୍ୟା- ଭାନୁଜୀରାଓ

କୁରୁଜା ପାଇଁ ଗୋଟିଏ ସଙ୍ଗୀତ- ସୀତାକାନ୍ତ ମହାପାତ୍ର

ଜହ୍ନରାତି- ଦେବଦାସ ଛୋଟରାୟ

୧୭

ୟୁନିଟ୍-୩ : ପ୍ରବନ୍ଧ- ପ୍ରତିବେଶୀ- ଚନ୍ଦ୍ରଶେଖର ରଥ

ଓଡ଼ିଆ ଓ ଓଡ଼ିଶା- ଚିତ୍ତରଂଜନ ଦାସ

ସମାଜର ରୀତି ନୀତି ପରିବର୍ତ୍ତନ- ଫକୀର ମୋହନ ସେନାପତି

୧୭

ଯୁନିଟ୍-୪ : ଗନ୍ଧର୍ବ- ଉପାଦାନ- ଅଭିନୟ ପଦ୍ଧତି

ଲକ୍ଷ୍ମୀର ଅଭିନୟ- ମନୋଜ ଦାସ

ମାଂସର ବିଳାପ- କାଳିନ୍ଦୀ ଚରଣ ପାଣିଗ୍ରାହୀ

୧୭

ଯୁନିଟ୍-୫ : ଅନୁବାଦର ସଂଜ୍ଞା, ସ୍ୱରୂପ ଓ ପ୍ରକାରଭେଦ

୧୭

**ପୁସ୍ତକ :**

୧. ସର୍ବସାର ବ୍ୟାକରଣ

୨. ବ୍ୟବହାରିକ ବ୍ୟାକରଣ

୩. ଗନ୍ଧର୍ବ, କବିତା ଓ ପ୍ରବନ୍ଧ - ସଂକଳିତ ପୁସ୍ତକ, କଲେଜ ଛକ, ପୁଲବାଣୀ

## GE-2.3 : SYSTEMS OF INDIAN PHILOSOPHY

Full Marks - 100

Mid Sem – 20/1 hr

End Sem – 80/3 hr

### UNIT-I:

Carvaka Materialism;

Jainism: *Syadvada*; and *Anekantavada*

### UNIT-II:

Buddhism: The Noble Truths; Doctrine of Dependent Origination; Doctrine of Momentariness

### UNIT-III:

Samkhya: *Purusa*; and *Prakriti*

Yoga: *Cittavrtti* and Its *Nirodha*; *Astangika Marga*

### UNIT-IV:

Nyaya: *Pramanas* (Perception and Inference)

Vaisesika: *Padarthas*

### UNIT-V:

Samkara and Ramanuja: Brahman, Atman, *Jagat* and *Maya*

### Basic Study Materials :

1. S.C. Chatterji and D.M. Datta, *An Introduction to Indian Philosophy*
2. C.D. Sharma, *A Critical Survey of Indian Philosophy*
3. M. Hiriyanna, *Outlines of Indian Philosophy*
4. R.K. Puligandla, *Fundamentals of Indian Philosophy*
5. S. Radhakrishnan, *Indian Philosophy*, Volumes I and II

## AECC-2.4 : ENVIRONMENTAL STUDIES

Full Marks –100

Mid Sem – 20/1 hr

End Sem– 80/3hrs

### UNIT-I :

**Concept of environment :** Ecology; Ecosystem; types and components of the ecosystem. Ecological adaptations of plants and animals

### UNIT-II :

**Functional aspects of ecosystem :** Trophic level, food chain, food web, energy flow in the ecosystem, ecological pyramids, Biogeochemical cycles: Water cycle and Nitrogen cycle

### UNIT-III :

**Environmental Pollution :** Source, causes and concept of air, water, noise, soil, pollution, Sewage & Sewage treatment, green house effect, Acid rain, Ozone layer depletion

### UNIT-IV :

**Conservation of Natural Resources :** Resources, renewable & non renewable resources; soil, soil erosion and its conservation; Forest, deforestation; afforestation, conservation of Forest

**UNIT-V :**

**Biodiversity and its Conservation :** Introduction, Definition : genetic species and ecosystem diversity, value of biodiversity; consumptive use, productive use, social, ethical and aesthetic values, Biodiversity at global, national and local level, conservation of Biodiversity:- In situ and Ex-situ conservation, Bio-Geographic classification of India

**Suggested Readings :**

1. Shukla, R.S and Chandel, P.S : Plant Ecology and soil science, S. Chand & Company Ltd, New Delhi
2. Sharma, P.D. : Ecology and Environment, Rastogi Publication, Meerut.
3. Singh, J.S. Singh, S.P and Gupta, R.S (2006). Environmental Science, Kalyani Publishers, New Delhi

## **SEMESTER-III**

### **C-3.1 : TRIBES AND PEASANTS IN INDIA**

**Full Marks - 100**

**Mid Sem – 20/1 hr**

**End Sem Theory – 50/3 hrs**

**UNIT- I :**

Definition and Concept of Tribe; Problems of nomenclature, distribution and classification; Features of tribes in India.

**UNIT- II :**

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

**UNIT- III :**

Concept of Indian Village; The concept of peasantry; Approaches to the study of peasants – economic, political and cultural.

**UNIT- IV :**

Characteristics of Indian village: social organization; economy and changes. Caste system and its changes in the Indian society

**UNIT- V :**

Ethnicity Issues: Tribal and peasant, movements; Identity issues

## **PRACTICAL**

**End Sem Practical – 30/3 hrs**

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

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

**List of Ethnographies:**

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

**Suggested Readings :**

1. Gupta D. (1991). *Social Stratification*. Oxford University Press: Delhi.

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

### C-3.2 : HUMAN ECOLOGY

**Full Marks - 100**  
**Mid Sem – 20/1 hr**  
**End Sem Theory – 50/3 hrs**

#### UNIT- I :

Concepts in Ecology: Definition, adaptation, acclimation, acclimatization, biotic and abiotic component

#### UNIT- II :

Methods of studying human ecology. Adaptation to various ecological stresses: heat, cold and high altitude;

#### UNIT- III :

Ecological rules and their applicability to human populations, Culture as a tool of adaptation;

#### UNIT- IV :

The Various modes of human adaptation in pre-state societies; (i) Hunting and food gathering (ii) Pastoralism and (iii) Shifting cultivation and Agriculture and peasantry

#### UNIT- V :

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

### PRACTICAL

**End Sem Practical – 30/3 hrs**

#### Biological Dimensions

##### *Size and Shape Measurements*

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

##### *Size and Shape Indices (Any two)*

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

#### Cultural Dimensions

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

#### **Suggested Readings :**

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

### C-3.3 : BIOLOGICAL DIVERSITY IN HUMAN POPULATIONS

Full Marks - 100

Mid Sem – 20/1 hr

End Sem Theory – 50/3 hrs

#### UNIT- I :

Concept of Biological Variability; Race, Hardy-Weinberg Law; Sources of Genetic Variation; Structuring Genetic Variation; Genetic Polymorphism (Serological, Biochemical and DNA Markers)

#### UNIT- II :

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

#### UNIT- III :

Demographic Perspective Demographic Anthropology; Sources of Demographic Data, Demographic Processes, Demographic profile of Indian populations and its growth structure

#### UNIT- IV :

Inbreeding and Consanguinity – Biological consequences of inbreeding,

#### UNIT- V :

Genetic diversity among Indian Population, A critical appraisal of contribution of Risley, Guha, Rickstett and Sarkar towards understanding ethnic elements in the Indian populations

### PRACTICAL

End Sem Practical – 30/3 hrs

#### Any Two

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

#### Suggested readings:

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



### GE-3.4 : LANGUAGE, LITERATURE AND CULTURE

**Full Marks - 100**  
**Mid Sem – 20/1 hr**  
**End Sem – 80/3hrs**

#### UNIT-I : Language

##### Nature of language

Functions of language : transactional, informative, interactional  
(use these terms under each category above : Instrumental language, Regulatory Language, Interactional Language, Personal Language, imaginative Language, Heuristic Language, Informative Language)

#### UNIT-II : Language and Literature I

##### Literature and its language

Literary terms, Figures of speech used in literature : simile, metaphor, metonymy, irony, paradox, synecdoche, oxymoron

#### UNIT-III : Language and Literature II

##### Language used in poetry, fiction and non-fiction

Text analysis

#### UNIT-IV : Language and culture I

##### Culture, its implications and interpretations

Transmission of culture through language : Culture and society

#### UNIT-V : Language and Culture II

##### Intercultural and cross-cultural communications

Analysis and applications

##### **Suggested Readings:**

1. Kalyani Samantray, *Progmatics* (E-Pathsala)
2. Bibhudendra Narayan Patnaik & Kalyani Samantray, *Cross-Cultural and Inter-cultural Communications* (E-Pathsala)
3. Brown, G & Yule, G. *Discourse Analysis*. CUP
4. Scaglia, B (ed.) *Language, Understood : Examining and Linguistics of Discourse Analysis and Studies*. Webster's Digital Service.
5. Culture and language
6. Companion to Literary Forms by Padmaja Ashok, Orient BlackSwan. 2015
7. *Literature and Language* (ed.) Loveleen Mohan, Randep Rana, Jaibir S. Hood. Orient BlackSwann.

##### **Pattern of Examination :**

##### **Mid-Semester Examination :**

Unit I : 10 marks X 2 qns = 20 marks

##### **End-Semester Examination :**

Unit II : 1 long answer question + 1 short note/analysis (14+6) = 20 marks  
Unit III : 1 long answer question + 1 short note/analysis (14+6) = 20 marks  
Unit IV : 1 long answer question + 1 short note/analysis (14+6) = 20 marks  
Unit V : 1 long answer question + 1 short note/analysis (14+6) = 20 marks

### GE-3.4 : HISTORY OF INDIA-II

**Full Marks - 100**  
**Mid Sem – 20/1 hr**  
**End Sem – 80/3 hrs**

#### UNIT-I : Economy and Society (300 BC to 300 AD) :

- (a) Urban growth: North India, Central India and the Deccan
- (b) Trade and Trade Routes, Coinage

#### UNIT-II : Changing Political Formations :

- (a) The Mauryan Empire – Expansion and administration
- (b) Kushanas – Kanishka I - achievements
- (c) Satavahanas – Gautamiputra Satakarni

#### UNIT-III : Towards Early Medieval India (4th century to 750AD) :

- (a) Decline of Trade, Currency, Urban Settlement
- (b) Pattern of Administration – Gupta and Vardhanas.

**UNIT-IV : Religion, Philosophy (300 BC – 750 AD) :**

- (a) Brahmanical tradition: Dharma, Varnashrama, Purushartha, Sanskara
- (b) Mahayana Buddhism.
- (c) Tantricism

**UNIT-V : Cultural Developments :**

- (a) A brief survey of literature – Sanskrit, Tamil Literature, Scientific and technical treatises
- (b) Art and Architecture : Mauryan – Stupa, Ashokan Pillar, Post Mouryan, Gandhara School of Art, Guptas – Evolution of temple Architecture

**Suggested Readings :**

- 1. B. D. Chattopadhyaya, The Making of Early Medieval India, 1994.
- 2. D. D. Kosambi, An Introduction to the Study of Indian History, 1975.
- 3. R.S. Sharma, Urban Decay in India, C300-C1000, Delhi, Munshiram Manohar Lal, 1987.
- 4. Romila Thapar, Asoka and the Decline of the Mauryas, 1997.
- 5. Susan Huntington, The Art of Ancient India : Buddhist, Hindu and Jain

**GE-3.4 : INDIAN POLITY - II**

**Full Marks - 100**  
**Mid Sem – 20/1 hr**  
**End Sem – 80/3 hrs**

**UNIT-I:**

Union – State Relationship, Legislative, Administrative & Financial, Recent trends in Indian federation

**UNIT-II: Constitutional Agencies**

Election Commission, Electoral Reforms, Finance Commission

**UNIT-III: National Integration**

Problems & Prospects

**UNIT-IV: Challenges to Democracy**

Caste, Religion, Women empowerment

**UNIT-V:**

Political parties & Party system in India (National & Regional)

**Suggested Readings :**

- 1. Basu, D.D. (2012) *Introduction to the Constitution of India*, New Delhi: Lexis Nexis.
- 2. Laxmikanth, M (2015) '*Indian Polity*' New Delhi: Tata McGraw Hill
- 3. Paul R. Brass (1999) *The Politics of India Since Independence*, Cambridge University Press
- 4. Fadia, B.L. (2017) *Indian Government and Politics*, Sahitya Bhawan Publication

**SECC-3.5 : COMMUNICATIVE ENGLISH**

(Enriching Linguistic Knowledge & Communication Proficiency)

**Full Marks - 100**  
**Mid Sem – 20/1 hr**  
**End Sem – 80/3hrs**

**UNIT-I : BUSINESS COMMUNICATION AND GRAMMAR**

Why English Communication is Essential and How to Improve the Skill?

Introduction to Voice and Accent, Why do we have such different accents?, Accent Training- Consequences, Voice and accent in the Enterprise Industry, Globally Comprehensible Accent, Introduction to Phonetics, International Phonetic Alphabet

Consonant Sounds

Vowels

Diphthongs

A Few Phonic Rules

Word Stress: Syllables

Intonation : Intonation and Stress

Pacing and Chunking : Common Patterns of Pacing, Importance of Chunking

Fluency

Indianisms : Errors relating to Grammar, Vocabulary

**UNIT-II : GRAMMAR**

English: Spoken Versus Written Communication

Nouns : Kinds of Nouns, Activity 3: Noun Ping-pong, Nouns-Number, Noun-Gender, Countable and Uncountable Nouns

Pronouns : Reflexive Pronouns, Relative Pronouns, Demonstrative Pronouns, Interrogative Pronouns, Indefinite pronouns, Activity 4: Sentence Auction

Adjectives : Activity 5 : Picture perfect, Positioning of adjectives, Comparative Degrees of Adjectives, Order of Adjectives

Adverbs : Kinds of Adverb, Degree of Comparison, Word Order with Adverbs, Activity 6: Relay Race

Prepositions : Activity 7: Treasure Hunt, Activity 8: Route Map, Prepositions with Adjectives, Nouns and Verbs

Conjunctions : Coordinating conjunctions, Subordinating Conjunctions, Correlative Conjunctions, Connecting Adverbs, Activity 9: The Socks Story

Verbs : Verb Classification, List of irregular verbs, Activity 10: Word Search

Subject and verb agreement, Activity 11: Tossed Word Salad, Activity 12: The Sentence Pageant

Determiners and Modifiers : Kinds of determiners, The Definite and the Indefinite Article, Definite Article: The, Activity 13: Proof Reading

Tenses : Reference Table, Present Tense, Activity 14: Instruction Manual, Activity 15: Commentary, Past Tense, Activity 16: The Chain List, Activity 17: Transcription, Future Tense, Activity 18: This Week for You, Activity 19: Verb Grand Prix

Punctuation : Forms of Punctuation

### **UNIT-III : READING COMPREHENSION**

Reading – A 7 Step Process, Techniques to enhance students' reading skills, Types of reading skills, Skimming, Scanning, Extensive reading, Intensive reading, Three levels of Reading, Improving your reading speed, Reading Comprehension Practice Exercises

## **SEMESTER-IV**

### **C-4.1 : THEORIES OF CULTURE AND SOCIETY**

**Full Marks - 100**

**Mid Sem – 20/1 hr**

**End Sem Theory – 50/3 hrs**

#### **UNIT- I :**

Emergence of Anthropology: Interface with evolutionary theory and colonialism,

#### **UNIT- II :**

Evolutionism, Diffusionism and Culture area theories.

#### **UNIT- III :**

Emergence of Fieldwork tradition; Historical Particularism, American Cultural Tradition

#### **UNIT- IV :**

Durkheim and Social integration; Functionalism and Structural-functionalism and British Social Anthropology

#### **UNIT- V :**

Structuralism : Claude Levi-Strauss and Edmund Leach; Symbolism and Interpretative approach

### **PRACTICAL**

**End Sem Practical – 30/3 hrs**

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

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

**Suggested Readings :**

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

**C-4.2 : HUMAN GROWTH AND DEVELOPMENT**

**Full Marks - 100**

**Mid Sem – 20/1 hr**

**End Sem Theory – 50/3 hrs**

**UNIT- I :**

Concept of human growth, development, differentiation and maturation; Evolutionary perspective on human growth (including living primates and fossil human ancestors)

**UNIT- II :**

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

**UNIT- III :**

Bio-cultural factors (genetic, social, and ecological factors) influencing patterns of growth and variation, methods and techniques to study growth, significance/ applicability of growth studies

**UNIT- IV :**

Nutritional epidemiology-concept of balanced diet, impact of malnutrition (over and under) with special reference to obesity, Kwashiorkor and Marasmus. Assessment of nutritional status

**UNIT- V :**

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

**PRACTICAL**

**End Sem Practical – 30/3 hrs**

**Any two**

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

**Suggested Readings :**

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

### **C-4.3 : RESEARCH METHODS**

**Full Marks - 100**  
**Mid Sem – 20/1 hr**  
**End Sem Theory – 50/3 hrs**

#### **UNIT- I :**

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

#### **UNIT- II :**

Research Design; Review of literature, conceptual framework, formulation of research problem, formulation of hypothesis, sampling, tools and techniques of data collection: Survey method, Observation, Questionnaire, Schedule, Interview, Case study, Life history and Genealogy; data analysis and report writing- Chapterization, preparing a text for submission and publication, concepts of preface, glossary, appendix, bibliography(annotated) and references cited.

#### **UNIT- III :**

Ethics and Politics of Research Identify, define, and analyze ethical issues in the context of human subject research; Ethical importance of consent, privacy and confidentiality in research; Issues of academic fraud and plagiarism, conflicts of interest, authorship and publication

#### **UNIT- IV :**

Bio-Statistics; Guiding ideals and critical evaluation of major approaches in research methods, basic tenets of qualitative research and its relationship with quantitative research; Types of variables, presentation and summarization of data (tabulation and illustration).

#### **UNIT- V :**

Descriptive statistics- Measurers of Central Tendency, Measure of Variation, Variance and standard deviation, Tests of Inference- Variance ratio test, Student's 't' tests, Chi-square test

### **PRACTICAL**

**End Sem Practical – 30/3 hrs**

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

#### ***Suggested Readings :***

1. Garrard E and Dawson A. What is the role of the research ethics committee? Paternalism, inducements, and harm in research ethics. *Journal of Medical Ethics* 2005; 31: 419-23.
2. Bernard H.R. *Research Methods in Anthropology, Qualitative and Quantitative Approaches*. Jaipur: Rawat Publications. 2006.
3. Madrigal L. *Statistics for Anthropology*. Cambridge: Cambridge University Press. 2012.
4. Zar JH. *Biostatistical Analysis*. Prentice Hall. 2010.
5. Michael A. *The Professional Stranger*. Emerald Publishing. 1996.
6. Bernard R. *Research Methods in Anthropology: Qualitative and Quantitative Approaches*. AltaMira Press. 2011.
7. Emerson RM, Fretz RI and Shaw L. *Writing Ethnographic Fieldnotes*. Chicago, University of Chicago Press. 1995.
8. Lawrence NW. *Social Research Methods, Qualitative and Quantitative Approaches*. Boston: Allyn and Bacon. 2000.
9. O'reilly K. *Ethnographic Methods*. London and New York: Routledge. 2005.
10. Patnaik S.M. *Culture, Identity and Development: An Account of Team Ethnography among the Bhil of Jhabua*. Jaipur: Rawat Publications. 2011.
11. Pelto PJ and Pelto GH. *Anthropological Research, The Structure of Inquiry*. Cambridge: Cambridge University Press. 1978.
12. Sarantakos S. *Social Research*. London: Macmillan Press. 1998.

## GE-4.4: INDIAN ECONOMY - II

Full Marks - 100  
Mid Sem – 20/1 hr  
End Sem – 80/3 hrs

### UNIT-I : Agricultural Development in India

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

### UNIT-II : Industrial Development in India

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

### UNIT-III : Tertiary Sector and HRD

Tertiary Sector: growth and contribution of service sector to GDP of India, share of services in employment; Human development – concept, evolution, measurement; HRD: indication, importance, education in India, Indian educational policy; Health and Nutrition.

### UNIT-IV : Foreign Trade

Foreign Trade: role, composition and direction of India's foreign trade, trends of export and import in India, export promotion verses import substitution; Balance of Payments of India; India's Trade Policies;

### UNIT-V : Capital Flows

Foreign Capital inflow & outflow-foreign assistance, foreign aid, international borrowing, foreign investment-FPI & FDI, MNCs

#### **Suggested Books:**

1. U. Kapila (2010): *Indian economy since Independence*. Academic Foundation, New Delhi
2. S. K. Misra and V. K. Puri (Latest Year): *Indian Economy — Its Development Experience*, Himalaya Publishing House, Mumbai
3. S. Chakraborty: *Development Planning: The Indian Experience*. Clarendon Press.
4. R. Dutt and K. P. M, Sundharam (Latest Year): *Indian Economy*, S. Chand & Company Ltd., New Delhi.
5. A. Panagariya (2008): *India: the Emerging Giant*, Oxford University Press, New York
6. S. Acharya and R. Mohan (Eds.) (2010): *India's Economy: Performance and Challenges*, Oxford University Press, New Delhi.
7. I. J. Ahluwalia and I. M. D. Little (Eds.) (1998): *India's Economic Reforms and Development: Essays for Manmohan Singh*, Oxford University Press, New Delhi.

## GE-4.4 : DISASTER MANAGEMENT/OTHER RELATED DISCIPLINE

Full Marks - 100  
Mid Sem – 20/1 hr  
End Sem – 80/3 hrs

### UNIT-I :

Disasters: Definition and Concepts: Hazards, Disasters; Risk and Vulnerability; Classification

### UNIT-II :

Disaster in India: (a) Flood: Causes, Impact, Distribution and Mapping; Landslide: Causes, Impact, Distribution and Mapping; Drought: Causes, Impact, Distribution and Mapping

### UNIT-III :

Disaster in India: (b) Earthquake and Tsunami: Causes, Impact, Distribution and Mapping; Cyclone: Causes, Impact, Distribution and Mapping; Manmade disasters: Causes, Impact, Distribution and Mapping

### UNIT-IV :

Response and Mitigation to Disasters: Mitigation and Preparedness, NDMA and NIDM; Indigenous Knowledge and Community-Based

### UNIT-V :

Disaster Management; Do's and Don'ts During Disasters.

#### **Suggested Readings :**

1. Frampton C., Hardwick and McNaught, 1999: *Causes, Consequences and Management of Disasters*, Hodder and Stoughton, London.
2. Frank W. L., 1986: *The Violent Earth*, Croom Helm, London.

3. Goel S. L., 2001: *Encyclopaedia of Disaster Management*, Vol. 1, 2 and 3, Deep and Deep Publications, New Delhi.
4. Kapur A., 2010: *Vulnerable India: A Geographical Study of Disasters*, Sage Publication, New Delhi.
5. Keith S., 2002: *Environmental Hazards: Assessing Risk and Reducing Disaster*, Routledge, London.
6. Keller E. A. and Blodgett R. H., 2006: *Natural Hazards: Earth's Processes as Hazards, Disasters and Catastrophe*, Prentice Hall, New Jersey.
7. Singh R. B. (ed.), 2006: *Natural Hazards and Disaster Management: Vulnerability and Mitigation*, Rawat Publications, New Delhi.
8. UN and WMO, 2002: *Living with Risk: A Global Review of Disaster Reduction Initiatives, International Strategy for Disaster Reduction*, (ISDR), WMO and UN Publication.
9. Wisner B., Blaike P., Cannon T. et al., 1994: *At Risk: Natural Hazards, People's Vulnerability and Disasters*, Routledge, London.

#### GE-4.4 : ଓଡ଼ିଆ (ଦ୍ଵିତୀୟ ପତ୍ର)

Full Marks - 100  
Mid Sem – 20/1 hr  
End Sem – 80/3 hrs

- ଯୁନିଟ୍-୧ : ପ୍ରବନ୍ଧ: ସୌନ୍ଦର୍ଯ୍ୟ ଓ ପ୍ରେମ- ଶିଶୁଭୂଷଣ ରାୟ  
ଅଶ୍ରୁ- ନିତ୍ୟାନନ୍ଦ ମହାପାତ୍ର ୧୭
- ଯୁନିଟ୍-୨ : କବିତା: ମୌସୁମୀ- ରାଧାମୋହନ ଗଡ଼ନାୟକ  
ସମ୍ଭାବନା- ସୀତାକାନ୍ତ ମହାପାତ୍ର ୧୭
- ଯୁନିଟ୍-୩ : ଗଳ୍ପ: ଶିକାର- ଭଗବତୀଚରଣ ପାଣିଗ୍ରାହୀ  
ଅନ୍ଧରାତିର ସୂର୍ଯ୍ୟ- ମହାପାତ୍ର ନୀଳମଣି ସାହୁ ୧୭
- ଯୁନିଟ୍-୪ : ବ୍ୟାକରଣ: ସମୋଚ୍ଚାରିତ ଭିନ୍ନାର୍ଥବୋଧକ ଶବ୍ଦ  
ବିପରୀତବୋଧକ ଶବ୍ଦ ୧୭
- ଯୁନିଟ୍-୫ : ବ୍ୟାକରଣ: ପ୍ରତିଶବ୍ଦ ଓ ଉପସର୍ଗ ୧୭

#### ପୂର୍ଣ୍ଣକ :

୧. ଗଳ୍ପ, କବିତା ଓ ପ୍ରବନ୍ଧ - ସଂକଳିତ ପୁସ୍ତକ, କଲେଜ ଛକ, ଫୁଲବାଣୀ
୨. ସର୍ବସାର ବ୍ୟାକରଣ
୩. ବ୍ୟବହାରିକ ବ୍ୟାକରଣ

#### GE-4.4 : INDIAN ETHICS

Full Marks - 100  
Mid Sem – 20/1 hr  
End Sem – 80/3 hr

##### UNIT-I:

Ethics: Meaning and Objective, Purusarthas (Dharma, Artha, Kama, Moksa)

##### UNIT-II:

Moral Foundation of Hindu Social Organisation: The doctrine of karma, Varna dharma, Asrama dharma, Sva dharma

##### UNIT-III:

Ethics of Buddhism: Four Noble Truth, Eight Fold Path

Ethics of Jainism: Triratna, Five Vows

##### UNIT-IV:

Ethics of Bhagvadgita: Niskama karma, Loksamgraha and Swadharma

##### UNIT-V:

Gandhian Ethics: Non-violence, Satyagraha, Sarvodaya and End & Means

**Basic Study Materials :**

1. I.C. Sharma, Indian Ethics.
2. B.K. Dash, A Manual of Indian Ethics.
3. A.K. Mohanty, Dharma.
4. K.Om Narayan Rao and Hrudananda Behera, An Introduction to Ethics.

**GE-4.5: QUANTITATIVE AND LOGICAL THINKING**

**Full Marks – 100**  
**Mid Sem – 20/1 hr**  
**End Sem – 80/3 hrs**

**I. QUANTITATIVE APTITUDE & DATA INTERPRETATION**

**UNIT – I :**

Whole numbers, Integers, Rational and irrational numbers, Fractions, Square roots and Cube roots, Surds and Indices, Problems on Numbers, Divisibility  
Steps of Long Division Method for Finding Square Roots:

**UNIT – II :**

Basic concepts, Different formulae of Percentage, Profit and Loss, Discount, Simple interest, Ratio and Proportion, Mixture

**UNIT – III :**

Time and Work, Pipes and Cisterns, Basic concepts of Time, Distance and Speed; relationship among them

**UNIT – IV :**

Concept of Angles, Different Polygons like triangles, rectangle, square, right angled triangle, Pythagorean Theorem, Perimeter and Area of Triangles, Rectangles, Circles

**UNIT – V :**

Raw and Grouped Data, Bar Graphs, Pie charts, Mean, Median and Mode, Events and Sample Space, Probability

**II. LOGICAL REASONING**

**UNIT – I :**

Analogy basing on kinds of relationships, Simple Analogy; Pattern and Series of Numbers, Letters, Figures. Coding-Decoding of Numbers, Letters, Symbols (Figures), Blood relations

**UNIT – II :**

Logical Statements– Two premise argument, More than two premise argument using connectives

**UNIT – III :**

Venn Diagrams, Mirror Images, Problems on Cubes and Dices

**SEMESTER-V**

**C-5.1 : PREHISTORIC ARCHAEOLOGY OF INDIA**

**Full Marks - 100**  
**Mid Sem – 20/1 hr**  
**End Sem Theory – 50/3 hrs**

**UNIT- I : Pleistocene chronology of India; Palaeolithic cultures in India**

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

**UNIT- II : Mesolithic cultures in India**

Mesolithic cultures in India (characteristic features, major type tools, important regions and sites, chronology with stratigraphic evidences (some important sites of Odisha may be discussed on above cultural period)



**UNIT- III : Neolithic cultures in India**

Neolithic culture in India (characteristic features, major type tools, important regions and sites, chronology with stratigraphic evidences (some important sites of Odisha may be discussed on above cultural period)

**UNIT- IV : Chalcolithic cultures in India**

Chalcolithic culture in India (characteristic features, important regions and sites, chronology with stratigraphic evidences (some important sites of Odisha may be discussed on above cultural period).

**UNIT- V : Rock art of India**

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

**PRACTICAL**

**End Sem Practical – 30/3 hrs**

1. Identification of tools:

- |  |                       |
|--|-----------------------|
| (a) Hand axe varieties, chopper/chopping tools | (b) Cleaver varieties |
| (c) Side scraper varieties                     | (d) Knives            |
| (e) Burins                                     | (f) End scrapers      |
| (g) Borer                                      | (h) Microlithic tools |
| (i) Bone tools                                 |                       |

2. Identification of lithic technology.

**Suggested Readings :**

1. Agarwal, D. P.1984, *Archaeology of India*. New Delhi: Select Book Services Syndicate.
2. Allchin, Briget. and Raymond Allchin,1982. *The Rise of Civilization in India and Pakistan*. Cambridge: Cambridge University Press.
3. Allchin, B. and R. Allchin, 1997. *Origins of Civilization: The Prehistory and Early Archaeology of South Asia*. New Delhi. Viking by Penguin Books India (P) Ltd.
4. Bhattacharya, D. K.1990, *An Introduction to Prehistoric Archaeology*. Delhi; Hindustan Publishing Corporation
5. Bhattacharya, D. K.2001. *AnOutline of Indian Prehistory*. Delhi: PalakaPrakashan.
6. Chakrabarti, D.K. 2001. *India: An Archaeological History: Palaeolithic Beginning to Early Historic Foundation*. New Delhi: Oxford University press.
7. Jain, V.K.2009, *Prehistory and Protohistory of India*. New Delhi: D.K. Printworld (P) Ltd.
8. Paddayya, K. (Ed.), 2002, *Recent Studies in Indian Archaeology*. New Delhi.
9. Pappu R. S.2001, *Aheulian Culture in Peninsular India-- An Ecological Perspective*, New Delhi: D.K. Printworld (P) Ltd.
10. Rammi Reddy, V.1987, *Elements of Prehistory*. New Delhi: Mittal Publications.
11. Rammi Reddy, V.1989, *Palaeolithic and Mesolithic Cultures*. New Delhi: Mittal Publications.
12. Rammi Reddy, V.1991, *Neolithic and Post-Neolithic Cultures*. New Delhi: Mittal Publications.
13. Sankalia, H.D.1974. *Prehistory and Protohistory of India and Pakistan*. Pune: Deccan College.
14. Sankalia (1982) *Stone Tool Type and Technology*. Delhi, B.R.Publication.
15. Settar, S. and R. Korisettar (Ed), 2001, *Indian Archaeology in Retrospect*, Vol.1: PREHISTORY Archaeology of South Asia. New Delhi: Manohar in association with Indian Council of Historical Research.

**C-5.2 : ANTHROPOLOGY IN PRACTICE**

**Full Marks - 100**

**Mid Sem – 20/1 hr**

**End Sem Theory – 50/3 hrs**

**UNIT- I :**

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

**UNIT- II :**

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

**UNIT- III :**

Future Dynamics in Anthropology; Trends in Anthropology: Anthropology of Tourism, Anthropology In Census, Visual Anthropology.

**UNIT- IV :**

Biosocial anthropology in practice; Bio-social elements of human development at national and international level, Social and economic sustainability, application of conceptual framework of Forensic Anthropology in judicial settings both criminal and civil.

**UNIT- V :**

Population Dynamics and relationship between population growth and various aspects of culture such as means of subsistence, kinship, social complexity, social stratification and political organization, Biological theory of population; Theory of demographic transition. Bio-social counselling of an individual.

**PRACTICAL**

**End Sem Practical – 30/3 hrs**

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

**Suggested Readings:**

1. Arya A and Kapoor AK. (2012). Gender and Health Management in Afro-Indians. Global Vision Publishing House, New Delhi.
2. Kertzer DI and Fricke T. (1997). Anthropological Demography. University of Chicago Press.
3. Basu, A. and P. Aaby (1998). The Methods and the Uses of Anthropological Demography. 329 pp. Oxford, Clarendon Press
4. Carter A. (1998). Cultural Models and Demographic Behavior. In The Methods and the Uses of Anthropological Demography edited by Basu A and Aaby P. Oxford: Clarendon Press. pp 246-268.
5. Census of India (2001, 2011) and National Family Health Survey (2006,2010).
6. Ervic, Alexander M., (2000). Applied Anthropology: Tools and Perspectives for Contemporary Practise, Boston, MA: Allyn and Bacon.
7. Erwin A. (2004). Applied Anthropology Tools and Practice, Allyn and Bacon.
8. Gupta S and Kapoor AK. (2009). Human Rights among Indian Populations: Knowledge, Awareness and Practice. Gyan Publishing House, New Delhi.
9. Willen SS. (2012). Anthropology and Human Rights: Theoretical Reconsiderations and Phenomenological Explorations. Journal of Human Rights. 11:150–159.
10. Goodale M. (2009). Human Rights: An Anthropological Reader. Wiley Blackwell.
11. Gupta S and Kapoor AK. (2007). Human Rights, Development and Tribe. In : Genes, Environment and Health – Anthropological Perspectives. K. Sharma, R.K. Pathak, S. Mehra and Talwar I (eds.). Serials Publications, New Delhi.
12. Margaret AG. (2003). Applied Anthropology: A Career-Oriented Approach, Boston, MA: Allyn and Bacon.
13. Halbar BG and Khan CGH. (1991). Relevance of Anthropology – The Indian Scenario. Rawat Publications, Jaipur.
14. Kapoor AK (1998). Role of NGO's in Human Development : A Domain of Anthropology. J IndAnthropSoc; 33:283-300.
15. Kapoor AK and Singh D. (1997). Rural Development through NGO's. Rawat Publications, Jaipur.
16. Klepinger LL (2006). Fundamentals of Forensic Anthropology. Wiley-Liss Publications
17. Kumar RK and Kapoor AK. (2009). Management of a Primitive Tribe: Role of Development Dynamics. Academic Excellence, Delhi.
18. Mehrotra N and Patnaik SM. (2008). Culture versus Coercion: The Other Side of Nirmal Gram Yojna, Economic and Political weekly. pp 25-27.
19. Mishra RC (2005). Human Rights in a Developing Society, Mittal Publications, Delhi.
20. Noaln RW. (2002). Anthropology in Practice: Building a Career outside the Academy. Publishing Lynne Reinner.
21. Patnaik SM (1996). Displacement, Rehabilitation & Social Change. Inter India Publications, New Delhi.
22. Patnaik SM (2007). Anthropology of Tourism: Insights from Nagaland. The Eastern Anthropologist. 60(3&4):455-470
23. Srivastav OS (1996). Demographic and Population Studies. Vikas Publishing House, India

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

### **DSE-5.3 : HUMAN GENETICS**

**Full Marks - 100**  
**Mid Sem – 20/1 hr**  
**End Sem Theory – 50/3 hrs**

#### **UNIT- I :**

Structure, Function and Inheritance of the human genome- gene, DNA structure and replication, DNA repair and recombination, gene expression, coding and non-coding region.

#### **UNIT- II :**

Expression of genetic information: from Transcription to Translation – the relationship between genes and protein, transcriptions; transcription and RNA processing, encoding genetic information, decoding the codons: the role of transfer RNAs.

#### **UNIT- III :**

Methods of Genetic Study in Human: Pedigree analysis and expressivity; Chromosomal Basis of Genetic Disorders (Karyotypes and identification of chromosome variation)

#### **UNIT- IV :**

Genetic mapping (Microsatellite and other DNA polymorphisms), sequencing strategies (PCR based Sanger sequencing to Exome sequencing), concept of non-mendelian inheritance and complex diseases.

#### **UNIT- V :**

Genomic Diversity & Human Evolution Genomic Variation: Genomic Polymorphisms (SNPs, VNTR, CNVs, etc); haplotypes and haplogroups; genotype-phenotype correlations, evolutionary genetics; Molecular evolution; DNA sequence variation and human origins.

### **PRACTICAL**

**End Sem Practical – 30/3 hrs**

#### **Any two**

1. Blood Collection, transportation and storage in field
2. DNA Extraction from whole blood
3. DNA Quantification, Aliquoting and sample preparation
4. PCR and electrophoresis
5. Gel Documentation

#### **Suggested Readings:**

1. Strachan T and Read AP. (2004). Human Molecular Genetics. Garland Science
2. Brown TA. (2007). Genomes. Garland Science.
3. Griffiths AJF. (2002). Modern Genetic Analysis: Integrating Genes and Genomes. WH Freeman Press.
4. Griffiths AJF, Wessler SR, Carroll SB, Doebley J. (2011). An Introduction to Genetic Analysis. Macmillan Higher Education.
5. Cavalli-sforza LL, Menozzi P, Piazza A (1994). History and Geography of Human Genes. Princeton University.
6. Cummings Michael R. (2009). Human Genetics. Cengage Learning India Pvt. Ltd, Delhi.
7. Cummings MR (2011). Human Heredity: Principles and Issues. Brooks/Cole, Cengage Learning
8. Giblett, ER. (1969). Genetic Markers in Human Blood. Blackwell Scietific, Oxford.
9. Jobling M, Hurls M and Tyler-Smith C. (2004). Human Evolutionary Genetics: Origins, Peoples & Disease. New York: Garland Science.
10. Lewis R. (2009). Human Genetics: Concepts and Application. The McGraw–Hill Companies, Inc.
11. Patch C. (2005). Applied Genetics in Healthcare. Taylor & Francis Group
12. Snustad .D.P. and Simmons M.J. (2006). Principles of Genetics, Fourth Edition, John Wiley & Sons USA
13. Verma, P.S. and V.K. Aggarwal (1974). Cell Biology, Genetic, Molecular Biology, Evolution and Ecology. S.Chand and Company Pvt. Ltd., New Delhi.
14. Vogel F. and Motulsky A.G. (1996). Human Genetics. Springer, 3rd revised edition.

## **DSE-5.4 : ANTHROPOLOGY OF RELIGION, POLITICS AND ECONOMY**

**Full Marks - 100**

**Mid Sem – 20/1 hr**

**End Sem Theory – 50/3 hrs**

### **UNIT- I :**

Anthropological approaches to understand religion- magic, Animism, Animatism, Totemism, Naturism; witchcraft and sorcery; Religious specialists: shaman, priests, mystics; Overview of Anthropological Theories of Religion; Religion as the sacrality of ecological adaptation and socialness

### **UNIT- II :**

Economic institutions: principles of production, distribution, and consumption in simple and complex societies; critical examination of relationship between economy and society through neo-classical, substantivist, and neo-marxist approaches, various forms of exchange: barter, trade and market; Forms of currencies; reciprocities: generalized, balanced and negative

### **UNIT- III :**

Political institutions: concepts of power and authority; types of authority; state and stateless societies; law and justice in simple and complex societies; the prospects for democracy and tolerance among and within the world's diverse civilizations

### **UNIT- IV :**

The meaning and sources of identity in complex contemporary societies; the origins of modern politics, its institutions, and cultures, both Western and non-Western

### **UNIT- V :**

Interrelationship between religion, politics and economy; religious conversion and movements, emergence of new religious sects in the global order.

## **PRACTICAL**

**End Sem Practical – 30/3 hrs**

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

### **Suggested Readings:**

1. Durkheim E. (1986). The elementary forms of the religious life, a study in religious sociology. New York:Macmillan.
2. Benedict A. (2006). Imagined Communities: Reflections on the Origin and Spread of Nationalism. Verso
3. Gledhill J. (2000). Power and Its Disguises: Anthropological Perspectives on Politics. 2nd ed. London: Pluto Press.
4. Ellis F. (2000). A framework for livelihood analysis. In Rural Livelihoods and Diversity in Developing Countries . Oxford: Oxford University Press.
5. Henrich J, Boyd R, Bowles S, Camerer C, Fehr E, Gintis H, McElreath R, Alvard M et al. (2005). 'Economic Man' in cross-cultural perspective: Behavioral experiments in 15 small-scale societies. Behavior and Brain Science. 28(6):795-815;
6. Henrich J. (2002). Decision-making, cultural transmission, and adaptation in economic anthropology. In: J. Ensminger (Ed.), Theory in Economic Anthropology (pp. 251-295). Walnut Creek, CA: Altamira Press.
7. Lambek. M. (2008) A Reader in the Anthropology of Religion.
8. Eller JD. (2007). Introducing Anthropology of Religion. New York: Routledge.
9. Glazier SD. (1997). Anthropology of Religion: A Handbook. Westport, CT: Greenwood Press.
10. Frick GD and Langer R. (2010). Transfer and Spaces. Harrassowitz (Germany).
11. Evans-Pritchard EE. (1937). Witchcraft, Oracles and Magic among the Azande, Oxford: Clarendon Press.
12. Frazer JG. (1978). The Illustrated Golden Bough, London: Macmillan.
13. Barbara M. (2011). Cultural Anthropology. New Jersey: Pearson Education.
14. Ember CR. (2011). Anthropology. New Delhi: Dorling Kinderslay.
15. Herskovits MJ. (1952). Economic Anthropology: A Study in Comparative Economics. New York: Alfred A Knopf Inc.
16. Malinowski B. (1922) Argonauts of the Western Pacific. London: Routledge.
17. Polanyi K. et al (1957), Trade and Market in the Early Empires. Chicago: Henry Regnery Company.
18. Balandier G. (1972). Political Anthropology. Middlesex: Penguin.

## **SEMESTER-VI**

### **C-6.1 : FORENSIC ANTHROPOLOGY**

**Full Marks - 100**  
**Mid Sem – 20/1 hr**  
**End Sem Theory – 50/3 hrs**

#### **UNIT- I :**

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

#### **UNIT- II :**

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

#### **UNIT- III :**

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

#### **UNIT- IV :**

Serology: Identification and Individualization of bloodstain, urine, semen and saliva. Patterns of Bloodstains; Individualization

#### **UNIT- V :**

Forensic Odontology-Tooth Structure and Growth, Bite Marks, DNA Profiling.

### **PRACTICAL**

**End Sem Practical – 30/3 hrs**

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

#### **Suggested Readings:**

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

### **C-6.2 : ANTHROPOLOGY OF INDIA**

**Full Marks - 100**  
**Mid Sem – 20/1 hr**  
**End Sem Theory – 50/3 hrs**

#### **UNIT- I :**

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

#### **UNIT- II :**

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

#### **UNIT- III :**

Developmental projects- tribal displacements and rehabilitation problem; Impact of culture-contact, urbanization and industrialization on tribal and rural Population, tribal movement and quest for identity.

**UNIT- IV :**

Basic concepts- Great tradition and little tradition, sacred complex, Universalization and parochialization, Sanskritization and Westernization, Dominant caste, Tribe-caste; continuum, Nature-Man-Spirit complex.

**UNIT- V :**

Problems of exploitation and deprivation of scheduled caste/ tribe and other Backward Classes. Constitutional Provisions for the Scheduled caste and scheduled tribes, Evaluation and Development of Indian Population;

**PRACTICAL**

**End Sem Practical – 30/3 hrs**

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

**Suggested Readings :**

1. Nicholas D. (2001). *Castes of Mind: Colonialism and the Making of Modern India*. Princeton University Press.
2. Bernard CS. (2000). *India: The Social Anthropology of Civilization*. Delhi: Oxford University Press.
3. Bhasin MK, Watter H and Danker-Hopfe H. (1994). *People of India – An Investigation of Biological variability in Ecological, Ethno-economic and Linguistic Groups*. Kamla Raj Enterprises, Delhi
4. Lopez DS. (1995). *Religions of India in Practice*. Princeton University Press
5. Gupta D. *Social Stratification*. Delhi: Oxford University Press.
6. Karve I. (1961). *Hindu Society: An Interpretation*. Poona : Deccan College
7. Guha BS. (1931). The racial attributes of people of India. In: *Census of India, 1931, vol I, Part III (BPO, Simla)*
8. Trautmann TR (2011). *India: Brief history of Civilization*. Oxford University Press : Delhi
9. Vidyarthi LP and Rai BK. (1976). *The tribal culture of India*. Concept Publishing Co, Delhi.
10. Haddon AC. (1929). *Races of man*. Cambridge University, London.
11. Kapoor A.K. (1992). *Genetic Diversity among Himalayan Human Populations*. M/S Vinod Publishers, Jammu
12. Majumdar DN. (1901). *Races and Culture of India*. Asia Publishing House, Bombay
13. Dube SC. (1992). *Indian Society*. National Book Trust, India : New Delhi.
14. Dumont L. (1980). *Homo Hierachicus*. University of Chicagon Press.
15. Guha B.S. (1931). The racial attributes of people of India. In : *Census of India, 1931, vol I, Part III (BPO, Simla)*
16. Malhotra K.C. (1978). *Morphological Composition of people of India*. J. Human Evolution.

**DSE-6.3 : TRIBAL CULTURES OF INDIA**

**Full Marks - 100**

**Mid Sem – 20/1 hr**

**End Sem Theory – 50/3 hrs**

**UNIT- I :**

Concept of tribes and its problematic nature, General and specific characteristics of tribes, Classification and distribution of tribes based on their economy, occupation and religion,

**UNIT-II :**

Racial elements among the tribes, Scheduled and non-scheduled categories of tribes, Particularly Vulnerable Tribal Groups (PVTGs).

**UNIT- III :**

Tribe- caste continuum, Gender and Tribe, Distribution of tribes in India.

**UNIT- IV :**

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

**UNIT- V :**

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

## **PRACTICAL**

**End Sem Practical – 30/3 hrs**

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

### ***Suggested Readings:***

1. Behera, D.K and Georg pfeffer. Contemporary Society Tribal Studies, Volume I to VII. New Delhi: Concept Publishing Company
2. Georg Pfeffer. Hunters, Tribes and Peasant: Cultural Crisis and Comparison. Bhubaneswar: Niswas.
3. Vidarthy, L.P. and Rai. Applied Anthropology in India.
4. Vidarrthy.L.P. and B.N. Sahay . Applied Anthropology and Development in India. New Delhi: National Publishing House

## **DSE-6.4 : PROJECT PAPER**

**Full Marks-100**

**End Sem Project – 100**

***Student will write dissertation on the basis of 20 days Field Work in the nearby locality on any branch of Anthropology in 6th Semester. She/ He will be supervised by one Teacher/ teachers.***

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