

# **COURSES OF STUDIES**

**FOR**

**THREE YEAR DEGREE COURSE**

**IN**

**ARTS HONOURS**

**ANTHROPOLOGY HONS.**

**Choice Based Credit System(CBCS)**

First & Second Semester Examination – 2019-20

Third & Fourth Semester Examination – 2020-21

Fifth & Sixth Semester Examination – 2021-22



**GOVERNMENT AUTONOMOUS COLLEGE,  
PHULBANI, KANDHAMAL**

Govt. Autonomous College, Phulbani

### SYLLABI FOR CBCS COURSE

Sem	CORE COURSE (14)	Ability Enhancement Compulsory Course (AECC) (2)	Ability Enhancement Elective Course (AEEC) (2) (Skill Based)	Elective: Discipline Specific DSE (4)	Elective: Generic (GE) (4)
I	CORE-I	AECC-I			GE-IA
	CORE-II				
II	CORE-III	AECC-II			GE-1B
	CORE -IV				
III	CORE-V		SEC-I		GE-2A
	CORE-VI				
	CORE-VII				
IV	CORE-VIII		SEC-II		GE-2B
	CORE-IX				
	CORE-X				
V	CORE-XI			DSE-I	
	CORE-XII			DSE-II	
VI	CORE-XIII			DSE-III	
	CORE-XIV			DSE-IV / Project	

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

<b>Three-Year (6-Semester) CBCS Programme (B.A. Hons) (Anthropology Hons.)</b>				
<b>Yr.</b>	<b>Sl.No.</b>	<b>Course Structure</b>	<b>Code</b>	<b>Credit Points</b>
<b>FIRST YEAR</b>	<b>SEMESTER-I</b>			
	1	Introduction to Biological Anthropology	C-1.1	4+2
	2	Introduction to Socio-cultural Anthropology	C-1.2	4+2
	3	English/History/Political Science	GE-1.3	6
	4	MIL Communication – Odia / MIL (AE)	AECC-1.4	6
	<b>SEMESTER-II</b>			
	5	Archaeological Anthropology	C-2.1	4+2
	6	Fundamentals of Human Origin & Evolution	C-2.2	4+2
	7	Economics/Geography/Odia/Philosophy	GE-2.3	6
	8	EVS	AECC-2.4	6
<b>SECOND YEAR</b>	<b>SEMESTER-III</b>			
	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/History/Political Science	GE-3.4	6
	13	Communicative English	SECC-I-3.5	6
	<b>SEMESTER-IV</b>			
	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
<b>FINAL YEAR</b>	<b>SEMESTER-V</b>			
	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
	<b>SEMESTER-VI</b>			
	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

**Notes:**

- C- Core Course
- GE- Generic Elective Course
- DSE- Discipline Specific Elective Course
- AECC- Ability Enhancement Compulsory Course
- SECC- Skill Enhancement Compulsory Course (Skill Based)
- 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 – 15/1hr

End Sem Theory – 60/3 hrs

End Sem Practical – 25/3 hrs

#### THEORY

##### UNIT - I :

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

##### UNIT - II :

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

##### UNIT - III :

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

##### UNIT - IV :

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

#### PRACTICAL

##### Osteology

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

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

##### Text book recommended :

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

##### Suggested Readings :

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

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

Full Marks – 100

Mid Sem – 15/1hr

End Sem Theory – 60/3 hrs

End Sem Practical – 25/3 hrs

#### THEORY

##### UNIT - I :

Anthropological perspective and orientation; Scope and relevance of Social Anthropology; Relationship of Social Anthropology with other disciplines. Its distinction from sociology

##### UNIT - II :

Concepts of society and culture; status and role; groups and institution, social stratification, and civil society

##### UNIT - III :

Social organization; social structure; social function; social system

**UNIT - IV :**

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

**PRACTICAL**

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

**Text book recommended :**

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

**Suggested Readings :**

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

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

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

**Introduction:**

This paper seeks to train the students in the basic writing skills required for writing competently in the academic context.

**UNIT - I:**

Introduction to the Writing Process: with a focus on Academic Writing

**UNIT - II:**

Writing in one's own words: Summarizing and Paraphrasing

**UNIT - III:**

Thinking: Synthesis, Analysis, And Evaluation

**UNIT - IV:**

Citing Resources: Editing, Book and Media Review

**Reference Books:**

- ❖ Liz Hamp-Lyons and Ben Heasley, *Study Writing: A Course in Writing Skills for Academic Purposes* (Cambridge UP, 2006)
- ❖ Ilona Leki, *Academic Writing: Exploring Processes and Strategies*. New York: CUP, 2nd edn, 1998
- ❖ Stanley Fish, *How to Write a Sentence and How to Read One*. Harpar Perennial. 2011.
- ❖ *Literature and the art of Communication*, Cambridge University Press
- ❖ Gerald Graff and Cathy Birkenstein, *They Say/I Say: The Moves That Matter in Academic Writing*. New York: Norton, 2009

### GE-1.3 : HISTORY OF INDIA – I (EARLY TIME TO 1750)

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

#### UNIT – I: Reconstructing Ancient Indian History

1. Sources of Historical Writings.
2. Vedic Age : Society, Polity and Culture
3. Buddhism and Jainism : Principles and Impact

#### UNIT – II: Polity and Administration

1. The Mauryan Empire : Conquest and Administration
2. Gupta Society : Land Grants, Peasantry and beginning of Feudal Society
3. Gupta Polity : Conquests and Administration
4. Harshavardhan : Achievements

#### UNIT – III: Early Medieval Society, Economy and Culture

1. Post Gupta Trade and Commerce
2. Delhi Sultanate : Conquests and Administration
3. Bhakti and Sufi Movements in India
4. Development of Regional Language and Literature

#### UNIT – IV: India on the Eve of the Advent of the Mughals

1. Sher Shah : Administration and Reforms
2. Mughal Administrative Institutions : Zabt, Mansab and Jagir
3. Religious Tolerance Sulh-i- Kul
4. Mughal Art and Architecture

#### Suggested Text Books:

1. Upinder Singh, History of Ancient & Early Medieval India.
2. Romila Thappar, The Early India

#### Reference Reading:

- ❖ Irfan Habib, Medieval India, NBT, New Delhi
- ❖ R.S. Sharma, India's Ancient Past
- ❖ S.A.A. Rizvi, Wonder that was India, Vol.II, Rupa
- ❖ Cultural Heritage of India, Bharatiya Vidyabhaban Series, Vol-1-IV
- ❖ A.L. Basheon (ed), Cultural History of India, OUP, New Delhi, 2011

### GE-1.3 : FEMINISM: THEORY AND PRACTICE

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

**Introduction:** The aim of the course is to introduce students to contemporary debates on feminism and the history of feminist struggles. The course begins with a discussion on construction of gender and an understanding of complexity of patriarchy and goes on to analyze theoretical debates within feminism. It offers a gendered analysis of Indian society, economy and polity with a view to understanding the structures of gender inequalities. And the last section aims to understand the issues with which contemporary Indian women's movements are engaged with.

#### UNIT-I: Understanding Feminism

- (i) Feminist theorizing of the sex/gender distinction; Public Man and Private Woman
- (ii) Understanding Patriarchy and Feminism

#### UNIT-II: Theories of Feminism

- (i) Liberal and Socialist,
- (ii) Radical feminism and Eco-feminism

#### UNIT-III: Feminist issues and women's participation: The Indian Experience

- (i) Women's participation in anti-colonial and national liberation movements with special focus on India
- (ii) Traditional Historiography and Feminist critiques; Social Reforms Movement and position of women in India, History of Women's struggle in Post- Independent India

#### UNIT-IV: Family in contemporary India and Understanding Woman's Work and Labour

- (i) Family in contemporary India - patrilineal and matrilineal practices. Gender Relations in the Family, Patterns of Consumption: Intra Household Divisions, entitlements and bargaining, Property Rights
- (ii) Understanding Woman's Work and Labour – Sexual Division of Labour, Productive and Reproductive labour, Visible - invisible work – Unpaid (reproductive and care), Underpaid and Paid work,- Methods of computing women's work , Female headed households

**Text Books :**

1. Bina Agarwal, (2013) 'Gender And Green Governance', Oxford University Press, Oxford,
2. Forbes, Geraldine (1998) 'Women in Modern India'. Cambridge, Cambridge University Press
3. Geetha, V. (2002) 'Gender'. Calcutta, Stree Publications.
4. Geetha, V. (2007) 'Patriarchy'. Calcutta, Stree Publications.
5. Jagger, Alison. (1983) 'Feminist Politics and Human Nature'. U.K, Harvester Press.
6. John, Mary(2008) 'Women studies in India: A Reader', Peguin, New Delhi
7. Lerner, Gerda. (1986) 'Creation of Patriarchy'. New York. Oxford University Press.

**Reference Books :**

- ❖ Banarjee, Sikata. (2007) 'Ghadiyally, Rehana. (ed.) 'Urban Women in Contemporary India: A Reader'. New Delhi, Sage.
- ❖ Chakravarti, Uma. (1988) 'Beyond the Altekarian Paradigm: Towards a New Understanding of Gender Relations in Early Indian History', Social Scientist, Volume 16, No. 8.
- ❖ Desai, Neera & Thakkar, Usha. (2001) 'Women in Indian Society'. New Delhi: National Book Trust.
- ❖ Gandhi, Nandita & Shah, Nandita. (1991) 'Contemporary Women's Movement in India'. Delhi, Zubaan.
- ❖ Gupta, A and Sinha Smita, (2005) 'Empowerment of women: Language and Other Facets', Mangal Deep, New Delhi.
- ❖ Jayawardene, Kumari. (1986) 'Feminism and Nationalism in the Third World'. London, Zed Books and Conclusion.
- ❖ Nayak, Smita (2016) (eds.) 'Combating Violence Against Women: A Reality in the Making', Kalpaz, Gyan Books Pvt, Ltd, New Delhi
- ❖ Nayak, Smita (2016) (eds.) 'Gender Dynamics: The Emerging Frontiers', Research India Publications, New Delhi.
- ❖ Nayak, Smita, (2016), 'Whither Women: A Shift from Endowment to Empowerment', Edupedia, New Delhi.
- ❖ Rege, Sharmila. (2003) (ed.) 'The Sociology of Gender: The Challenge of Feminist Sociological Knowledge'. New Delhi, Sage.
- ❖ Rowbotham, Shiela. (1993) 'Women in Movements', New York and London, Routledge.
- ❖ Sangari, Kumkum & Chakravarty, Uma. (1999) (eds.) 'From Myths to Markets: Essays on Gender'. Delhi, Manohar.
- ❖ Sarkar, Tanika & Butalia, Urvashi. (1995) (eds.) 'Women and the Hindu Right'. Delhi, Kali for Women.

**AECC – 1.4 : MIL COMMUNICATIONS – ODIA**

**(ଯୋଗାଯୋଗ ଅନୁବିଧି, ରୀତି ଓ ମାଧ୍ୟମ)**

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

**୧ମ ଏକକ / ଯୁନିଟ୍ – ୧ :**

ଯୋଗାଯୋଗର ପରିଭାଷା, ଅନୁବିଧି, ପରିସର ଓ ପ୍ରକାରଭେଦ

**୨ୟ ଏକକ / ଯୁନିଟ୍ – ୨ :**

ସାକ୍ଷାତକାର, ଭାଷଣ କଳା

**୩ୟ ଏକକ / ଯୁନିଟ୍ – ୩ :**

ସମ୍ବାଦର ପରିଭାଷା, ପରିସର ଓ ସମ୍ବାଦ ପ୍ରସ୍ତୁତି

**୪ର୍ଥ ଏକକ / ଯୁନିଟ୍ – ୪ :**

ଓଡ଼ିଆ ଭାଷାର ବର୍ଣ୍ଣମାଳା, ବର୍ଣ୍ଣାଙ୍କୁର ନିରାକରଣ । (ବନାନ ତୁଟି – ସାଦୃଶ୍ୟଜନିତ ଅଶୁଦ୍ଧି, ଲିଙ୍ଗଗତ ଅଶୁଦ୍ଧି, ସନ୍ଧିଗତ ଅଶୁଦ୍ଧି, ସମାସଗତ ଅଶୁଦ୍ଧି, ବଚନ ଓ ବିଭକ୍ତିଗତ ଅଶୁଦ୍ଧି, ବାକ୍ୟ ବିଧିଜନିତ ଅଶୁଦ୍ଧି, ସମାର୍ଥବୋଧକ ଶବ୍ଦାଶୁଦ୍ଧି, ପ୍ରତ୍ୟୟ ଜନିତ ଅଶୁଦ୍ଧି, ଶବ୍ଦ ସଂଯୋଗାତ୍ମକ ଓ ସ୍ୱରସଙ୍ଗତି ଜନିତ ଅଶୁଦ୍ଧି)

**ସହାୟକ ଗ୍ରନ୍ଥସୂଚୀ :**

୧. ଯୋଗାଯୋଗ ମୂଳକ ମାତୃଭାଷା (ଓଡ଼ିଆ) – ସାମଲ ବିରଞ୍ଚି ନାରାୟଣ, ସତ୍ୟନାରାୟଣ ବୁକ ଷୋର, କଟକ



୨. ସଂଯୋଗ ଅନୁବିଧି - ସତ୍ୟୋଷ କୁମାର ତ୍ରିପାଠୀ, ନାଳନ୍ଦା, କଟକ
୩. ଭାଷଣ କଳା ଓ ଅନ୍ୟାନ୍ୟ ପ୍ରସଙ୍ଗ - କୃଷ୍ଣଚନ୍ଦ୍ର ପ୍ରଧାନ, ସତ୍ୟନାରାୟଣ ରୁକ୍ ଷ୍ଟୋର, କଟକ
୪. ପ୍ରାୟୋଗିକ ଓଡ଼ିଆ ଭାଷା - ଓଡ଼ିଶା ରାଜ୍ୟପାଠ୍ୟ ପୁସ୍ତକ ପ୍ରଣୟନ ଓ ପ୍ରକାଶନ ସଂସ୍ଥା, ଭୁବନେଶ୍ୱର
୫. ସମ୍ବାଦ ଓ ସାମ୍ବାଦିକତା - ଚନ୍ଦ୍ରଶେଖର ମହାପାତ୍ର, ଓଡ଼ିଶା ରାଜ୍ୟ ପାଠ୍ୟପୁସ୍ତକ ପ୍ରଣୟନ ଓ ପ୍ରକାଶନ ସଂସ୍ଥା, ଭୁବନେଶ୍ୱର
୬. ନିର୍ଭୁଲ ଲେଖାର ମୂଳସୂତ୍ର - ନୀଳାଦିଭୂଷଣ ହରିଚନ୍ଦନ, ପି.ସି.ଆର ପବ୍ଲିକେସନ, ଭୁବନେଶ୍ୱର
୭. ସର୍ବସାର ବ୍ୟାକରଣ - ନାରାୟଣ ମହାପାତ୍ର ଓ ଶ୍ରୀଧର ଦାସ, ନିୟୁ ଷ୍ଟୁଡେଣ୍ଟସ୍ ଷ୍ଟୋର, କଟକ

### ମୂଲ୍ୟ ବିଭାଜନ ପଦ୍ଧତି : (ସବୁଥିରୁ ବିକଳ ପଡ଼ିବ)

- (କ) ପଢ଼ର ମୋଟ ନମ୍ବର - ୧୦୦
- (ଖ) ଅନ୍ତଃପରୀକ୍ଷା - ୨୦ ଓ ମୁଖ୍ୟ ପରୀକ୍ଷା - ୮୦
- (ଗ) ନିର୍ଦ୍ଧାରିତ ପାଠ୍ୟର ସବୁ ଏକକ(ୟୁନିଟ୍)ରୁ ବିକଳସହ ଦୁଇଟି ଲେଖାଏଁ ମୋଟ ୮ଟି ୧୫ନମ୍ବର ବିଶିଷ୍ଟ ଦୀର୍ଘ ପ୍ରଶ୍ନ ପଡ଼ିବ । ବିଦ୍ୟାର୍ଥୀଙ୍କୁ ୪ଟି ପ୍ରଶ୍ନର ଉତ୍ତର ଦେବାକୁ ହେବ ।  $(୧୫ \times ୪ = ୬୦)$
- (ଘ) ନିର୍ଦ୍ଧାରିତ ପାଠ୍ୟର ସବୁ ଏକକରୁ ୧୨ଟି ଅତିସଂକ୍ଷିପ୍ତ ପ୍ରଶ୍ନ ପଡ଼ିବ । ସେଥିରୁ ୧୦ଟି ପ୍ରଶ୍ନର ଉତ୍ତର ଦେବାକୁ ହେବ ।  $(୧୦ \times ୨ = ୨୦)$

## AECC-1.4 : MIL (ALTERNATIVE ENGLISH)

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

### Introduction:

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

### UNIT - I: Short Story

- a. Jim Corbett-The Fight between Leopards
- b. Dash Benhur- The Bicycle
- c. Dinanath Pathy- George V High School
- d. Alexander Baron- The Man who knew too much
- e. Will F Jenkins- Uneasy Homecoming

### UNIT - II: Prose

- a. Mahatma Gandhi- The way to Equal Distribution
- b. S Radhakrishnan- A Call to Youth
- c. C V Raman-Water- The Elixir of Life
- d. Harold Nicolson- An Educated Person
- e. Claire Needell Hollander- No Learning without Feeling

### UNIT - III:

Comprehension of a passage and answering the questions

### UNIT - IV:

Language exercises-test of vocabulary, usage and grammar

### Text Books:

1. All Stories and Prose pieces

**Reference Books:**

- ❖ *The Widening Arc: A Selection of Prose and Stories*, Ed. A R Parhi, S Deepika, P Jani, Kitab Bhavan, Bhubaneswar.
- ❖ *A Communicative Grammar of English*, Geoffrey Leech.
- ❖ *A University Grammar of English*, Randolph Quirk and Sidney Greenbaum
- ❖ *Developing Reading Skills*. F. Grellet. Cambridge: Cambridge University Press, 1981.

## SEMESTER-II

### C-2.1 : ARCHAEOLOGICAL ANTHROPOLOGY

**Full Marks – 100**

**Mid Sem – 15/1hr**

**End Sem Theory – 60/3 hrs**

**End Sem Practical – 25/3 hrs**

#### THEORY

##### UNIT - I :

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

##### UNIT - II :

Methods of Estimation of Time and Reconstruction of the Past; Absolute dating methods: Radiocarbon<sup>14</sup> dating (C<sup>14</sup>), Potassium-Argon, Dendochronology, 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 of fabrication techniques; Earliest evidence of culture in the World: Konso, Olgorgesaille, Olduvai Gorge, Pirro Nord, Dmanisi, Attirampakkam, Isampur, Kuliana.

#### PRACTICAL

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

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

##### **Text book recommended :**

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

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

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

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

Full Marks – 100  
Mid Sem – 15/1hr  
End Sem Theory – 60/3 hrs  
End Sem Practical – 25/3 hrs

### THEORY

#### UNIT - I:

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

#### UNIT - II:

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

#### UNIT - III:

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

#### UNIT - IV:

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

### PRACTICAL

- 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
- Osteometry: Measurements of long bones: lengths, minimum/least circumference and caliber index
- Identification of casts of fossils of family hominidae: Drawing and comparison of characteristics.

#### Text book recommended :

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

#### Suggested Readings :

- ❖ Buettner-Janusch, J. (1966). *Origins of Man: Physical Anthropology*. John Wiley & Sons, Inc., New York, London, Sydney.
- ❖ Conroy, G.C. (1997). *Reconstructing Human Origins: A Modern Synthesis*. W. W. Norton & Company, New York, London.
- ❖ Howell F.C. (1977). *Horizons of Anthropology*. Eds. S. Tax and L.G. Freeman, Aldine Publishing House, Chicago.
- ❖ Nystrom P. and Ashmore P. (2011). *The Life of Primates*. PHI Learning Private Limited, New Delhi.
- ❖ Seth P. K. and Seth S. (1986). *The Primates*. Northern Book Centre, New Delhi, Allahabad.
- ❖ Singh I. P. and Bhasin M.K. (1989). *Anthropometry: A Laboratory Manual on Biological Anthropology*. Kamla-Raj Enterprises, Chawri Bazar, Delhi.
- ❖ Stanford C.; Allen J.S. and Anton S.C. (2012). *Biological Anthropology: The Natural History of Mankind*. PHI Learning Private Limited, New Delhi.
- ❖ 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 – 20/1hr  
End Sem – 80/3 hrs

### UNIT - I: Introduction to Indian Economy and Current Challenges

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

### UNIT - II: Indian Agriculture

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

### UNIT - III: Industrial Development in India

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

### UNIT - IV: Service Sector in India

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

#### Text Book:

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

#### Reference Book:

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

## GE-2.3 : GEOGRAPHY OF INDIA

Full Marks – 100  
Mid Sem – 15/1hr  
End Sem Theory – 60/3 hrs  
End Sem Practical – 25/3 hrs

### THEORY

#### UNIT - I:

Physiographic Divisions of India, soil and vegetation, climate (characteristics and classification)

#### UNIT - II:

Population: Distribution and growth, Demographic structure, Distribution of population by race, religion, language and tribes, urbanisation

#### UNIT - III:

Mineral and power resources: distribution and utilisation of iron ore, coal, Petroleum, Natural gas, Nuclear Minerals: Irrigation, Cropping pattern, Production & distribution of rice, wheat, Tea, Coffee

#### UNIT - IV:

Industrial development: Iron and steel, Aluminum, Automobile and Information technology Transport in India: Road, Rail and Airways, Waterways

### PRACTICAL

1. Study and interpretation of topographic Maps
2. Cartograms – Pair-Bar diagram, complex bar, wheel diagram
3. Maps drawing – Simple dot maps, Multiple dot maps
4. Practical record and viva-voce

#### Text Books:

1. Sharma, T.C. (2013) Economic Geography of India. Rawat Publication, Jaipur
2. Khullar, D. R. India: A Comprehensive Geography

#### Reading List:

- ❖ Deshpand C. D., 1992: India: A Regional Interpretation, ICSSR, New Delhi
- ❖ Johnson, B. L.C., ed. 2001. Geographical Dictionary of India, Vision Books, New Delhi
- ❖ Sdyasuk Galina and P. Sengupta (1967): Economic Regionalisation of India, Census of India

## GE-2.3 : ସାହିତ୍ୟ ଅଧ୍ୟୟନ

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

୧ମ ଏକକ / ୟୁନିଟ୍ – ୧ : ଗନ୍ଧର୍ବ ସାହିତ୍ୟ

ବୁଢ଼ା ଶଙ୍ଖାରି – ଲକ୍ଷ୍ମୀକାନ୍ତ ମହାପାତ୍ର

ମାଗୁଣୀର ଶଗଡ଼ – ଗୋଦାବରୀଶ ମହାପାତ୍ର

ଶିକାର – ଭଗବତୀ ଚରଣ ପାଣିଗ୍ରାହୀ

୨ୟ ଏକକ / ୟୁନିଟ୍ – ୨ : ଉପନ୍ୟାସ ସାହିତ୍ୟ

ଶାସ୍ତି – କାହ୍ନୁଚରଣ ମହାନ୍ତି, ଫ୍ରେଣ୍ଡ୍‌ସ୍ ପବ୍ଲିଶର୍ସ, କଟକ

୩ୟ ଏକକ / ୟୁନିଟ୍ – ୩ : ନାଟକ

ଶେଷ କଥା – ଡକ୍ଟର ନାରାୟଣ ସାହୁ, ସତ୍ୟନାରାୟଣ ବୁକ୍ ଷୋର, କଟକ

୪ର୍ଥ ଏକକ / ୟୁନିଟ୍ – ୪ : ରମ୍ୟ ରଚନା

ବାଇ ମହାନ୍ତି ପାଞ୍ଜି (ପ୍ରଥମ ବିଡ଼ା) – ଗୋପାଳ ଚନ୍ଦ୍ର ପ୍ରହରାଜ

ବରୁଆ – ଗୋବିନ୍ଦ ତ୍ରିପାଠୀ

ସାଧୁ ସଙ୍ଗ – ଚୌଧୁରୀ ହେମକାନ୍ତ ମିଶ୍ର

**ସହାୟକ ଗ୍ରନ୍ଥସୂଚୀ :**

୧. କାହ୍ନୁଚରଣ ବିଶେଷାଙ୍କ, କୋଣାର୍କ, ଓଡ଼ିଶା ସାହିତ୍ୟ ଏକାଡେମୀ
୨. ଓଡ଼ିଆ କ୍ଷୁଦ୍ରଗଳ୍ପର ଇତିହାସ – ବୈଷ୍ଣବ ଚରଣ ସାମଲ, ଫ୍ରେଣ୍ଡ୍‌ସ୍ ପବ୍ଲିଶର୍ସ, କଟକ
୩. ଓଡ଼ିଆ କଥାସାହିତ୍ୟର କଥା ଓ ରମ୍ୟରଚନା – ମହାପାତ୍ର ନୀଳମଣି ସାହୁ, ଓଡ଼ିଶା ବୁକ୍ ଷୋର, କଟକ
୪. ଶାସ୍ତି – କାହ୍ନୁଚରଣ ମହାନ୍ତି, ଫ୍ରେଣ୍ଡ୍‌ସ୍ ପବ୍ଲିଶର୍ସ, କଟକ
୫. ଉପର ସତୁରୀ ଓଡ଼ିଆ ନାଟକ – ହେମନ୍ତ କୁମାର ଦାସ, ଗ୍ରନ୍ଥମନ୍ଦିର, କଟକ
୬. ଶେଷ କଥା – ନାରାୟଣ ସାହୁ, ସତ୍ୟନାରାୟଣ ବୁକ୍ ଷୋର, କଟକ

## GE-2.3 : INDIAN PHILOSOPHY

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

**UNIT – I:**

Salient features of Indian philosophy, Carvaka epistemology and metaphysic, Jainism Syadvada and Anekantavada

**UNIT – II:**

Buddhism- The Four Noble Truth, Doctrine of Dependent origination, No Soul Theory, Nirvana

**UNIT – III:**

Samkhya- Purusa, Prakrti, Theory of causation Yoga- Astanga Yoga

**UNIT – IV:**

Nyaya- Theory of Inference, Vaisheshika- Padarthas (Categories)

**Prescribed Books:**

1. Dutta and Chatterjee: An Introduction to Indian Philosophy

**Books for Reference:**

- ❖ C.D Sharma: A critical Survey of Indian Philosophy
- ❖ G.C Nayak: Bharatiya Darshana (Odia)
- ❖ B.B. Choudhury: Bharatiya Darshana Ruparekha (Odia Translated book)

**AECC-2.4 : ENVIRONMENTAL STUDIES**

**Full Marks – 100**

**Mid Sem – 20/1 hr**

**End Sem – 80/3 hrs**

**UNIT – I**

The Environment: The Atmosphere, Hydrosphere, Lithosphere, Biosphere, Ecology, Ecosystem, Biogeochemical Cycle (Carbon Cycle, Nitrogen Cycle), Environment Pollution: Air Pollution, Water Pollution, Soil Pollution, Radiation Pollution

**UNIT – II**

Population Ecology: Individuals, Species, Pollution, Community, Control Methods of Population, Urbanization and its effects on Society, Communicable Diseases and its Transmission, Non-Communicable Diseases

**UNIT – III**

Environmental Movements in India: Grass root Environmental movements in India, Role of women, Environmental Movements in Odisha, State Pollution Control Board, Central Pollution Control Board

**UNIT – IV**

Natural Resources: Conservation of Natural Resources, Management and Conservation of Wildlife, Soil Erosion and Conservation, Environmental Laws: Water Act, 1974, Air Act, 1981, The Wildlife (Protection) Act, 1972, Environment Protection, 1986, Natural Disasters and their Management

**Books Recommended:**

- ❖ Dash MC and Mishra PC, Man and Environment, McMillan, London.
- ❖ Mishra PC and Das MC, Environment and Society, McMillan, London.
- ❖ Odeem EP, Fundamentals of Ecology, Natraj Publication.
- ❖ Mishra DD, Fundamental Concept in Environmental Studies, S. Chand, New Delhi.
- ❖ Asthana DK and Asthana Meera, A Text book of Environmental Studies, S. Chand, New Delhi.
- ❖ Bharucah Erach, Textbook for Environmental Studies, Universities Press India Pvt. Ltd., Hyderabad.

**SEMESTER-III**

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

**Full Marks – 100**

**Mid Sem – 15/1hr**

**End Sem Theory – 60/3 hrs**

**End Sem Practical – 25/3 hrs**

**THEORY**

**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 of National Tribal Policy, Issues of acculturation assimilation and integration; Impact of development schemes and programme on tribal life.

**UNIT - III :**

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

**UNIT - IV :**

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



**PRACTICAL**

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

**Suggested Readings :**

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

**C-3.2 : HUMAN ECOLOGY****Full Marks – 100****Mid Sem – 15/1hr****End Sem Theory – 60/3 hrs****End Sem Practical – 25/3 hrs****THEORY****UNIT – I :**

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

**UNIT - II :**

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

**UNIT - III :**

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

**UNIT – IV :**

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

**PRACTICAL****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
2. Ponderal Index
3. Relative Sitting Height
4. Relative Upper Extremity Length
5. Relative Total Lower Extremity Length
6. Nasal Index

**Cultural Dimensions**

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

**Text book recommended :**

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

**Suggested Reading :**

- ❖ Human ecology: biocultural adaptation in human communities. (2006) Schutkowski, H.Berlin. Springer Verlag.
- ❖ Human ecology and cognitive style: comparative studies in cultural and physical adaptation. (1976).Berry, J.B. New York: John Wiley.
- ❖ Human ecology. (1964) Stapledon. Faber & Faber.
- ❖ Studies in Human Ecology. (1961) Theodorson, G.A. Row, Peterson & Company Elmsford, New York.
- ❖ Human ecology: (1973) Problems and Solutions. Paul R. Ehrlich, Anne H. Ehrlich and John P. Holdress.W.H. Freeman & Company, San Francisco.
- ❖ Cohen, Yehudi A. 1968. Man in adaptation; the cultural present. Chicago: Aldine Pub. Co.
- ❖ Redfield, Robert. (1965). Peasant society and culture an anthropological approach to civilization. Chicago [u.a.]: Univ. of Chicago Press.
- ❖ Symposium on Man the Hunter, Richard B. Lee, and Irven DeVore. 1969. Man the hunter. Chicago:Aldine Pub. Co.
- ❖ Dave Deeksha& S.S. Katewa (2012). Text Book of Environmental Studies. Cengage Learning India Pvt. Ltd., Delhi
- ❖ 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 – 15/1hr**

**End Sem Theory – 60/3 hrs**

**End Sem Practical – 25/3 hrs**

#### THEORY

**UNIT - I :**

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

**UNIT - II :**

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

**UNIT - III :**

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

**UNIT - IV :**

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

#### PRACTICAL

##### (ANY TWO)

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

**Text book recommended :**

1. Shukla B.R.K. & Rastogi, S. 1990. *Physical Anthropology & Human Genetics: An Introduction*. Plaka Prakashan. Delhi.
2. Das B.M. 2008. *Outlines of Physical Anthropology*. Kitab Mahal, New Delhi.



3. Sarkar, R. M. 2004. *Fundamentals of Physical Anthropology* (New Edition). Book World. Kolkata.
4. Mukherji, D., D. Mukherjee and P. Bharti and A. Mukhopadhyaya. 2018. *Laboratory Manual for Biological Anthropology: Revised and Enlarged 2nd Edition*. SCHOLAR Booksellers & Publishers, Kolkata.

**Suggested readings :**

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

## GE-3.4 : LANGUAGE AND LINGUISTICS

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

**Introduction:**

*This paper aims to offer the students some fundamental knowledge in Linguistics and English Language Teaching (ELT). It also seeks to acquaint the students with the variety of English that people come in contact with in contemporary times with a special emphasis on Asia and in particular, India.*

**UNIT - I:**

Language : What is Language, Linguistics, Branches and Scope, Applied Linguistics Global Englishes: Who Speaks English today? Standard Language and Language Standards, Language Variation, Postcolonial English, Pidgin and Creole, English in Asia and Europe

**UNIT - II:**

Phonology and Morphology

**UNIT - III:**

Syntax

**UNIT - IV:**

Semantics

**Reference Books:**

- ❖ *Introductory book on Linguistics and Phonetics* by R L Varshney
- ❖ *Global Englishes: A Resource Book for Students*, Jennifer Jenkins, 3rd Edn, Special Indian Edition, Routledge, 2016
- ❖ *An Introduction to Language and Communication*,
- ❖ A R Parhi, 'Localising the Alien: Newspaper English and the Indian Classroom', *English Studies in India*, Springer, 2018.
- ❖ Adrian Akmajian, R. A. Demers, Ann K Farmer and R. M. Harnish, Prentice Hall of India, 2012
- ❖ David Crystal, *Linguistics*
- ❖ Braj B Kachru, *The Indianization of English* (OUP)
- ❖ David Crystal, *English as a World Language*

## GE-3.4 : HISTORY OF INDIA II (1750-1950)

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

### UNIT – I: Foundation and Expansion of British Rule

1. Battle of Plessey (1757) and Conquest of Bengal
2. Conquest of Mysore and Maharashtra
3. Expansion through Diplomacy: Subsidiary Alliance and Doctrine of Lapse

### UNIT – II: Consolidation of British Rule and Indian Responses

1. Peasant & Tribal Resistance against British Rule: Sanyasi Rebellion (1763); Kondh Rebellion in Ghumusar, Santal Rebellion
2. Revolt of 1857: Nature and Significance
3. Land Revenue Settlements: Permanent Settlement, Ryotwari and Mahalwari Settlement

### UNIT – III: Social and Cultural Policies

1. Socio-Religious Reform Movements: Brahmo Samaj, Arya Samaj, Theosophical Society, Aligarh Movement.
2. Growth of Press and Education
3. Issues of Caste and Gender: Jyotiba Phule- Women Question and Issues, Depressed Class.

### UNIT – IV: Indian National Movement

1. Politics of Moderates and Extremists (1885-1920)
2. Gandhian Mass Movements (Non-Cooperation, Civil Disobedience and Quit India Movements), (1920-1940)
3. Communal Politics and Partition
4. Making of the Democratic Constitution

#### Suggested Text Books:

1. A.R. Desai, Social Background of Indian Nationalism, Popular, Mumbai
2. Priyadarshi Kar, Comprehensive History of Modern India.

#### Reference Reading:

- ❖ Sumit Sarkar, Modern India : 1885-1947, Mac Millon.
- ❖ B.R.Mani, Debrahminising History: Dominance and Resistance in Indian Society, Manohar, New Delhi, First Published 2005.
- ❖ Chandra Bharil, Social and Political Ideas of B.R. Ambedkar, Aalekh Publishers, Jaipur, 1977.
- ❖ Sumit Sarkar, Modern India (1885-1947), Mac Millan, Delhi, First Published 1983.
- ❖ Hirendra N.Mukherjee, Gandhi, Ambedkar and the Extirpation of Untouchability, PPT, New Delhi.

## GE-3.4 : GOVERNANCE: ISSUES AND CHALLENGES

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

**Objectives:** This paper deals with concepts and different dimensions of governance highlighting the major debates in the contemporary times. There is a need to understand the importance of the concept of governance in the context of a globalizing world, environment, administration, development. The essence of governance is explored through the various good governance initiatives introduced in India.

### UNIT-I: Government and governance: concepts

- (i) Governance: Meaning, Nature and Types
- (ii) Role of State in the Era of Globalisation: State, Market and Civil Society

### UNIT-II : Good Governance

- (i) Good Governance
- (ii) Sustainable Development and Governance

### UNIT-III: Local Governance

- (i) Democratic Decentralization: Institutions of Local Governance (PRIs),
- (ii) People' Participation in Local Governance & Deepening Democracy

### UNIT-IV : Good Governance Initiatives In India

- (i) Public Service Guarantee Acts & Electronic Governance
- (ii) Citizens Charter & Right to Information, Corporate Social Responsibility

#### Text Books:

1. A Baviskar, ((1995) The Belly of the River: Tribal Conflict Over Development in the Narmada Valley', Delhi, Oxford University Press.

2. A. Parel (2000) (ed) 'Gandhi, Freedom and Self-Rule', New Delhi, Lexington Books.
3. B. Parekh, (1997) 'Gandhi: A Brief Insight', Delhi, Sterling Publishing Company.
4. B. Parekh, (1999) 'Colonialism, Tradition and Reform: An Analysis of Gandhi's Political Discourse', New Delhi, Sage Publication.
5. D. Hardiman, (2003) 'Gandhi in his Time and Ours'. Delhi, Oxford University Press.

**Reference Books:**

- ❖ R Iyer, (ed) (1993) 'The Essential Writings of Mahatma Gandhi', New Delhi, Oxford University Press.
- ❖ R. Ramashray, (1984) 'Self and Society: A Study in Gandhian Thought', New Delhi, Sage Publication.

## SECC-I-3.5 : COMMUNICATIVE ENGLISH

(Enriching Linguistic Knowledge & Communication Proficiency)

**Full Marks – 100**

**Mid Sem – 20/1hr**

**End Sem – 80/3 hrs**

### 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

**Text Books:**

1. Communicative English – Odisha State Higher Education Council, Bhubaneswar

## SEMESTER-IV

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

Full Marks – 100

Mid Sem – 15/1hr

End Sem Theory – 60/3 hrs

End Sem Practical – 25/3 hrs

#### THEORY

##### UNIT - I :

Emergence of Anthropology: Interface with evolutionary theory and colonialism, Evolutionism, Diffusionism and Culture area theories.

##### UNIT - II :

Emergence of Fieldwork tradition; Historical Particularism, American Cultural Tradition.

##### UNIT - III :

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

##### UNIT - IV :

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

#### PRACTICAL

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

##### Text Book Recommended :

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

##### Suggested Readings :

- ❖ Applebaum H.A. (1987) *Perspectives in Cultural Anthropology*. Albany: State University of New York.
- ❖ Barnard A. (2000). *History and Theory in Anthropology*. Cambridge: Cambridge University.
- ❖ McGee R.J. and Warms R.L. (1996) *Anthropological Theories: An Introductory History*.
- ❖ 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 – 15/1hr**  
**End Sem Theory – 60/3 hrs**  
**End Sem Practical – 25/3 hrs**

### THEORY

#### UNIT - I :

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

#### UNIT - II :

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

#### UNIT - III :

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

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

#### UNIT - IV :

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

### PRACTICAL

#### (ANY TWO)

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

#### Text book recommended :

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

#### Suggested Readings :

- ❖ Bogin B. (1999) Patterns of human growth. Cambridge University Press.
- ❖ Frisancho R. (1993) Human Adaptation and Accommodation. University of Michigan Press.
- ❖ Cameron N and Bogin B. (2012) Human Growth and Development. Second edition, Academic press Elsevier.
- ❖ Harrison GA and Howard M. (1998). Human Adaptation. Oxford University Press.
- ❖ Harrison GA, Tanner JM, Pibeam DR, Baker PT. (1988). Human Biology. Oxford University Press.
- ❖ Jurmain R, Kilgore L, Trevathan W. Essentials of physical anthropology. Wadsworth publishing.
- ❖ Kapoor AK and Kapoor S. (1995) Biology of Highlanders. Vinod Publisher and Distributor.
- ❖ Kathleen K. (2008). Encyclopedia of Obesity. Sage.
- ❖ Malina RM, Bouchard C, Oded B. (2004) Growth, Maturation, and Physical Activity. Human Kinetics.
- ❖ McArdle WD, Katch FI, Katch VL. (2001) Exercise Physiology: Energy, Nutrition, and Human Performance.
- ❖ Singh I, Kapoor AK, Kapoor S. (1989). Morpho-Physiological and demographic status of the Western Himalayan population. In Basu and Gupta (eds.). Human Biology of Asian Highland Populations in the global context.
- ❖ 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 – 15/1hr

End Sem Theory – 60/3 hrs

End Sem Practical – 25/3 hrs

#### THEORY

##### UNIT - I :

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

##### UNIT - II :

Research Design, Review of literature, conceptual framework, formulation of research problem, formulation of hypothesis, sampling and reference. Genealogy; data analysis and report writing- Chapterization, preparing a text for submission and publication, concepts of preface, notes (end and footnotes), bibliography (annotated) and references cited, review and index.

##### UNIT - III :

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

##### UNIT - IV :

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

#### PRACTICAL

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.

##### Text book Recommended :

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

##### Suggested Readings :

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

### GE-4.4 : INDIAN ECONOMY - II

Full Marks – 100

Mid Sem – 20/1hr

End Sem – 80/3 hrs

##### UNIT - I: External Sector in India

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

## UNIT - II: Financial Markets in India

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

## UNIT - III: Indian Public Finance

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

## UNIT - IV: Current Challenges Facing Indian Economy

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

### Text Book:

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

### Reference Book:

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

## GE-4.4 : HUMAN GEOGRAPHY

Full Marks – 100

Mid Sem – 15/1hr

End Sem Theory – 60/3 hrs

End Sem Practical – 25/3 hrs

### THEORY

#### UNIT - I:

Meaning and scope of Human Geography; Major Themes; Contemporary Relevance and subfields, Development of human geography

#### UNIT - II:

Major races of mankind, their characteristics and distribution, Cultural Realms of the world; Religion and Language of World

#### UNIT - III:

World distribution of population, world Population Growth,, Population Composition; Demographic Transition Theory

#### UNIT - IV:

Types & Patterns of Rural Settlements; Urban Settlements; Definition, size and functional classification, characteristics, Trends and Patterns of World Urbanization

### PRACTICAL

1. Population distribution by multiple dots and population density
2. Decadal Population Growth- Time series graphs, bar diagrams
3. Pie Diagram showing occupational structure and population composition
4. Population Projection by A.P and GP method
5. Practical Record and Viva voce

### Text Book:

1. Hussain, Majid (2012) *Human Geography*. Rawat Publications, Jaipur

### Reading List:

- ❖ Hassan, M.I. (2005) *Population Geography*, Rawat Publications, Jaipur
- ❖ Daniel, P.A. and Hopkinson, M.F. (1989) *The Geography of Settlement*, Oliver & Boyd, London.
- ❖ Johnston R; Gregory D, Pratt G. et al. (2008) *The Dictionary of Human Geography*, Blackwell Publication.
- ❖ Jordan-Bychkov et al. (2006) *The Human Mosaic: A Thematic Introduction to Cultural Geography*. W. H. Freeman and Company, New York.
- ❖ Kaushik, S.D. (2010) *Manav Bhugol*, Rastogi Publication, Meerut.
- ❖ Maurya, S.D. (2012) *Manav Bhugol*, Sharda Pustak Bhawan. Allahabad.
- ❖ Hussain, Majid (2012) *Manav Bhugol*. Rawat Publications, Jaipur

## GE-4.4 : ପ୍ରାଚୀନ, ମଧ୍ୟଯୁଗ ଓ ଆଧୁନିକ ଓଡ଼ିଆ ସାହିତ୍ୟ

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

୧ମ ଏକକ / ୟୁନିଟ୍ – ୧ : ସାରଳା ମହାଭାରତରେ କାହାଣୀ

ସତ୍ୟଆତ୍ମ

ତୁଳସୀବଣ ବାଘ

ଗଙ୍ଗା ବୋଇଲେ ଥିବି ଗାଁଗା ବୋଇଲେ ଯିବି

୨ୟ ଏକକ / ୟୁନିଟ୍ – ୨ : ବଳରାମ ଦାସ ଓ ଜଗନ୍ନାଥ ଦାସଙ୍କ କାହାଣୀ

ବଳରାମ ଦାସଙ୍କ ବଉଳା ଅଧ୍ୟାୟ ଓ ମୃଗୁଣୀ ସ୍ତୁତି

ଜଗନ୍ନାଥ ଦାସଙ୍କ କପୋତ ଉପାଖ୍ୟାନ ଓ ପିଙ୍ଗଳା ଉପାଖ୍ୟାନ

୩ୟ ଏକକ / ୟୁନିଟ୍ – ୩ : ମଧ୍ୟକାଳୀନ ସାହିତ୍ୟ ପ୍ରସ୍ତାବ ସଂକ୍ଷିପ୍ତ ପରିଚୟ

ଦୀନକୃଷ୍ଣ ଦାସ, ଅଭିମନ୍ୟୁ ସାମନ୍ତସିଂହାର, କବିସମ୍ରାଟ ଉପେନ୍ଦ୍ର ଭଞ୍ଜ, କବିସୂର୍ଯ୍ୟ ବଳଦେବ ରଥ

୪ର୍ଥ ଏକକ / ୟୁନିଟ୍ – ୪ : ଆଧୁନିକ ଯୁଗର ସାହିତ୍ୟ ପ୍ରସ୍ତାବ ସଂକ୍ଷିପ୍ତ ପରିଚୟ

ରାଧାନାଥ ରାୟ, ଫକୀର ମୋହନ ସେନାପତି, ଗଙ୍ଗାଧର ମେହେର, ମାୟାଧର ମାନସିଂହ

**ସହାୟକ ଗ୍ରନ୍ଥସୂଚୀ :**

୧. ଓଡ଼ିଆ ସାହିତ୍ୟର ଇତିହାସ – ମାୟାଧର ମାନସିଂହ, ଗ୍ରନ୍ଥ ମନ୍ଦିର, କଟକ
୨. ଓଡ଼ିଆ ସାହିତ୍ୟର ଇତିହାସ – ସୂର୍ଯ୍ୟନାରାୟଣ ଦାଶ (୨ୟ ଓ ୩ୟ ଭାଗ), ଗ୍ରନ୍ଥ ମନ୍ଦିର, କଟକ
୧. ଓଡ଼ିଆ ସାହିତ୍ୟର ଇତିହାସ (୧୮୦୩-୧୯୨୦) – ନଟବର ସାମନ୍ତରାୟ, ବାଣୀ ଭବନ, ଭୁବନେଶ୍ୱର
୩. ଆଲୋକ ଓ ଅମୃତର କବି ଗଙ୍ଗାଧର – ମଣୀନ୍ଦ୍ର କୁମାର ମେହେର, ପଦାପତି, ଭୁବନେଶ୍ୱର

## GE-4.4 : ETHICS: THEORY AND PRACTICE

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

### UNIT – I:

Definition, Nature and Scope of Ethics, Distinction between moral and Non-moral action.

### UNIT – II:

Distinction between factual and moral judgement, objects of moral judgement.

### UNIT – III:

Moral Standards: Hedonism, Mill's Utilitarianism, And Kant's Rigorism and Perfectionism.

### UNIT – IV:

Environmental Ethics: Anthropocentrism and Non- Anthropocentrism Bio-centric Egalitarianism, Deep Ecology

### Prescribed Books:

1. J.N. Sinha- A Manual of Ethics
2. Peter Singer- Practical Ethics

### Books for Reference:

- ❖ H. Sahoo(ed) Ethics theory and practice



## SECC-II-4.5 : QUANTITATIVE AND LOGICAL THINKING

Full Marks – 100  
Mid Sem – 20/1hr  
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

#### Books Prescribed :

1. Quantitative And Logical Thinking – Odisha State Higher Education Council, Bhubaneswar

## SEMESTER-V

### C-5.1 : PREHISTORIC ARCHAEOLOGY OF INDIA

Full Marks – 100  
Mid Sem – 15/1hr  
End Sem Theory – 60/3 hrs  
End Sem Practical – 25/3 hrs

#### THEORY

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

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

#### UNIT - II : Mesolithic cultures in India.

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

#### UNIT - III : Neolithic cultures in India.

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

#### UNIT - IV : Rock art of India.

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

## PRACTICAL

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.

### Text Books Recommended :

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

### Suggested Reading :

- ❖ Agarwal, D. P.1984, *Archaeology of India*. New Delhi: Select Book Services Syndicate.
- ❖ Allchin, Briget. and Raymond Allchin,1982. *The Rise of Civilization in India and Pakistan*.Cambridge: Cambridge University Press.
- ❖ 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.
- ❖ Basa, K.K and P. Mohanty . *Archaeology of Odisha(Orissa)*, Delhi Pratibha Prakasan Chakrabarti, D.K. 2001. *India: An Archaeological History: Palaeolithic Beginning to Early Historic Foundation*. New Delhi: Oxford University press.
- ❖ Jain, V.K.2009, *Prehistory and Protohistory of India*. New Delhi: D.K. Printworld (P) Ltd.
- ❖ Paddayya, K. (Ed.), 2002, *Recent Studies in Indian Archaeology*. New Delhi.
- ❖ Pappu R. S.2001, *Aheulian Culture in Peninsular India-- An Ecological Perspective*, New Delhi: D.K. Printworld (P) Ltd.
- ❖ Rammi Reddy, V.1987, *Elements of Prehistory*. New Delhi: Mittal Publications.
- ❖ Rammi Reddy, V.1989, *Palaeolithic and Mesolithic Cultures*. New Delhi: Mittal Publications.
- ❖ Rammi Reddy, V.1991, *Neolithic and Post-Neolithic Cultures*. New Delhi: Mittal Publications.
- ❖ Sankalia, H.D.1974. *Prehistory and Protohistory of India and Pakistan*. Pune: Deccan College.
- ❖ Sankalia (1982) *Stone Tool Type and Technology*. Delhi, B.R.Publication.
- ❖ Settar, S. and R. Korisetar (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 – 15/1hr

End Sem Theory – 60/3 hrs

End Sem Practical – 25/3 hrs

## THEORY

### UNIT - I :

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

### UNIT - II :

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

### UNIT - III :

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

### UNIT - IV :

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

## PRACTICAL

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.

**Text Books Recommended:**

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

**Suggested Readings**

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

## **DSE-5.3 : ANTHROPOLOGY OF RELIGION, POLITICS AND ECONOMY**

**Full Marks – 100**

**Mid Sem – 15/1hr**

**End Sem Theory – 60/3 hrs**

**End Sem Practical – 25/3 hrs**

### **THEORY**

**UNIT - I :**

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

**UNIT - II :**

Economic institutions: principles of production, distribution, and consumption in simple and complex societies; 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; 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 - IV :**

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

### **PRACTICAL**

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

**Text book recommended :**

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

**Suggested Readings :**

- ❖ Durkheim E. (1986). The elementary forms of the religious life, a study in religious sociology. New York: Macmillan.
- ❖ Benedict A. (2006). Imagined Communities: Reflections on the Origin and Spread of Nationalism. Verso
- ❖ Gledhill J. (2000). Power and Its Disguises: Anthropological Perspectives on Politics. 2<sup>nd</sup> ed. London: Pluto Press.
- ❖ Henrich J, Boyd R, Bowles S, Camerer C, Fehr E, Gintis H, Mc Elreath 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;
- ❖ 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.
- ❖ Lambek. M. (2008) A Reader in the Anthropology of Religion.
- ❖ Eller JD. (2007). Introducing Anthropology of Religion. New York: Routledge.
- ❖ Barbara M. (2011). Cultural Anthropology. New Jersey: Pearson Education.
- ❖ Herskovits MJ. (1952). Economic Anthropology: A Study in Comparative Economics. New York: Alfred A Knopf Inc.
- ❖ Malinowski B. (1922) Argonauts of the Western Pacific. London: Routledge.
- ❖ Balandier G. (1972). Political Anthropology. Middlesex: Penguin

## DSE-5.4 : TRIBAL CULTURES OF INDIA

**Full Marks – 100**

**Mid Sem – 15/1hr**

**End Sem Theory – 60/3 hrs**

**End Sem Practical – 25/3 hrs**

### THEORY

**UNIT - I :**

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

**UNIT - II :**

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

**UNIT - III :**

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

**UNIT - IV :**

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

### PRACTICAL

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

**Text book recommended:**

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

**Suggested Readings:**

- ❖ Behera, D.K and Georg pfeffer. Contemporary Society Tribal Studies, Volume I to VII. New Delhi: Concept Publishing Company
- ❖ Georg Pfeffer. Hunters, Tribes and Peasant: Cultural Crisis and Comparison. Bhubaneswar: Niswas.
- ❖ Vidarthy, L.P. and Rai. Applied Anthropology in India.
- ❖ Vidarthy. L.P. and B.N. Sahay . Applied Anthropology and Development in India. New Delhi: National Publishing House.
- ❖ Bhende A. and Kaniikar, T. (2010) *Principles of Population Studies*. Himalaya Publishing House. Mumbai (All Units, It covers most topics)
- ❖ Caldwell J.C. (2006). *Demographic Transition Theory*. Springer.
- ❖ Census of India (2001,2011), SRS bulletin (2013), NFHS (2006 ), CRS, NSSO (Can be seen from browsing net)

- ❖ Gautam R.K., Kshatriya, G.K. and Kapoor A.K. (2010) *Population Ecology and Family Planning*. Serials publications. New Delhi.
- ❖ Howell N. (1986) Demographic Anthropology. *Ann. Rev. Anthropol.* 15: 219-246
- ❖ Kshatriya G.K. (2000). Ecology and health with special reference to Indian tribes. *Human Ecology special volume 9*:229-245.
- ❖ Misra BD (1982). *An introduction to the study of population*. South Asia publ. ltd. New Delhi.
- ❖ Park K. (2000) *Text book of Preventive and Social Medicine*. Banarsidas Bhanot, Jabalpur.
- ❖ Patra P.K. and Kapoor, A.K. (2009) *Demography And Development Dynamics in a Primitive Tribe of Himalayas*. International Book Distributors, Dehradun
- ❖ Riley N.E. and Mc Carthy, J. (2003) *Demography in the Age of the Postmodern*. Cambridge University press. UK. Pages 1-13 and 32-98

## SEMESTER-VI

### C-6.1 : FORENSIC ANTHROPOLOGY

Full Marks – 100

Mid Sem – 15/1hr

End Sem Theory – 60/3 hrs

End Sem Practical – 25/3 hrs

#### THEORY

##### UNIT - I:

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

##### UNIT - II:

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

##### UNIT - III:

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

##### UNIT - IV:

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

#### PRACTICAL

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

##### Text book recommended :

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

##### Suggested Readings :

- ❖ Bass W.M. (1971). *Human Osteology: A Laboratory and Field manual of the Human Skeleton*. Columbia: Special Publications Missouri Archaeological Society.
- ❖ Black S. and Ferguson E. (2011). *Forensic Anthropology 2000 to 2010*. CRC Press, London.
- ❖ Byers, S. N. (2008). *Forensic Anthropology*. Boston: Pearson Education LTD.
- ❖ Gunn A. (2009) *Essential Forensic Biology* (2nd ed). Chichester: Wiley-Blackwell
- ❖ Modi, R. B. J. P. (2013). *A Textbook of Medical Jurisprudence and Toxicology*. Elsevier.
- ❖ Reddy V. R. (1985). *Dental Anthropology*, Inter-India Publication, New Delhi.
- ❖ Spencer, C. (2004). *Genetic Testimony: A Guide to Forensic DNA Profiling*, Pearson, New Delhi.
- ❖ 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.
- ❖ Wilkinson, C. (2004). *Forensic facial reconstruction*. Cambridge University Press.
- ❖ Nath, Surendra. *Forensic Anthropology*. Kitab Mahal, New Delhi.



## C-6.2 : FIELD WORK AND DISSERTATION

Full Marks – 100

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

Mid-term Examination = 15 marks

(Seminar presentation by the student based on his/her fieldwork/field topic)

End-term Examination

Dissertation based on 21 days fieldwork = 60 marks

Field diary (15 marks) and Viva-voce (10 marks) = 25 marks

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

## DSE-6.3(A) : ANTHROPOLOGY OF INDIA

Full Marks – 100

Mid Sem – 15/1hr

End Sem Theory – 60/3 hrs

End Sem Practical – 25/3 hrs

### THEORY

#### UNIT - I :

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

#### UNIT - II :

Aspects of Indian Village –social 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, tribal movement and quest for identity

#### UNIT - III:

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

#### UNIT - IV :

Problems of exploitation and deprivation of scheduled caste/ tribe and Other Backward Classes. Constitutional Provisions for the Scheduled caste and scheduled tribes, Evaluation and Development of Indian Population; Human Rights, Protection and enforcement of human rights, Human rights of special category and marginal groups, Emerging trends of human rights with respect to terrorism, globalization and environment.

### PRACTICAL

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.

#### Text book recommended :

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

#### Suggested Reading :

- ❖ Nichola, S D. (2001). Castes of Mind: Colonialism and the Making of Modern India. Princeton University Press.
- ❖ Bernard C.S. (2000). India: The Social Anthropology of Civilization. Delhi: Oxford University Press.
- ❖ Bhasin M.K, Watter H and Danker-Hopfe H. (1994). People of India – An Investigation of Biological variability in Ecological, Ethno-economic and Linguistic Groups. Kamla Raj Enterprises, Delhi
- ❖ Lopez D.S. (1995). Religions of India in Practice. Princeton University Press

- ❖ Gupta D. Social Stratification. Delhi: Oxford University Press.
- ❖ Karve I. (1961). Hindu Society: An Interpretation. Poona : Deccan College
- ❖ Guha BS. (1931). The racial attributes of people of India. In: Census of India, 1931, vol I, Part III (BPO, Simla)
- ❖ Vidyarthi L.P and Rai B.K.. (1976). The tribal culture of India. Concept Publishing Co, Delhi.
- ❖ Haddon AC. (1929). Races of man. Cambridge University, London.
- ❖ Kapoor A.K. (1992). Genetic Diversity among Himalayan Human Populations. M/S Vinod Publishers, Jammu
- ❖ Majumdar, D.N. (1901). Races and Culture of India. Asia Publishing House, Bombay
- ❖ Dumont, L. (1980). Homo Hierarchicus. University of Chicago Press.
- ❖ Guha B.S. (1931). The racial attributes of people of India. In : Census of India, 1931, vol I, Part III (BPO, Simla)

OR

### DSE-6.3(B) : HUMAN GENETICS

Full Marks – 100

Mid Sem – 15/1hr

End Sem Theory – 60/3 hrs

End Sem Practical – 25/3 hrs

#### THEORY

##### UNIT - I :

Human Genetics: Meaning and Scope; Structure and Function DNA and RNA, DNA replication, repair and recombination, Concept of Human genome and codon.

##### UNIT - II :

Gene expression, Expression of genetic information from Transcription to Translation, RNA processing, encoding genetic information

##### UNIT - III :

Methods of studying heredity: Twin method, Pedigree method and Sib- pair method; Heritability estimate; Human Cytogenetics: Chromosome Karyotypes, Banding Techniques and Molecular cytogenetic, Polygenic Inheritance in Man , Concept of non-mendelian inheritance and complex diseases.

##### UNIT - IV :

Population Genetics: Hardy-Weinberg Law and its application. Genomic Diversity & Human Evolution Genomic Variation: Genomic Polymorphisms (SNPs, VNTR, CNVs, etc); haplotypes and haplogroups; genotype-phenotype correlations, epigenetics, Peopling of the Indian Subcontinent: Evidence from *mtDNA* and Y-chromosome.

#### PRACTICAL

(ANY TWO)

1. Blood group typing-A1, A2, B, O, MN and Rh (D) blood groups
2. Color Blindness
3. Glucose-6-phosphate dehydrogenase deficiency (G6PD)
4. PTC tasting ability
5. Gel Documentation
6. Biochemical markers-DNA isolation and polymerase chain reaction (PCR)

##### Text book recommended:

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

##### Suggested Readings:

- ❖ Strachan T and Read AP. (2004). Human Molecular Genetics. Garland Science
- ❖ Brown TA. (2007). Genomes. Garland Science.
- ❖ Griffiths AJF. (2002). Modern Genetic Analysis: Integrating Genes and Genomes. WH Freeman Press.
- ❖ Griffiths AJF, Wessler SR, Carroll SB, Doebley J. (2011). An Introduction to Genetic Analysis. Macmillan Higher Education.
- ❖ Cavalli-sforza LL, Menozzi P, Piazza A (1994). History and Geography of Human Genes. Princeton University.
- ❖ Cummings Michael R. (2009). Human Genetics. Cengage Learning India Pvt. Ltd, Delhi.
- ❖ Cummings MR (2011). Human Heredity: Principles and Issues. Brooks/Cole, Cengage Learning
- ❖ Giblett, ER. (1969). Genetic Markers in Human Blood. Blackwell Scientific, Oxford.

- ❖ Jobling M, Hurler M and Tyler-Smith C. (2004). Human Evolutionary Genetics: Origins, Peoples & Disease. New York: Garland Science.
- ❖ Lewis R. (2009). Human Genetics: Concepts and Application. The McGraw-Hill Companies, Inc.
- ❖ Patch C. (2005). Applied Genetics in Healthcare. Taylor & Francis Group
- ❖ Snustad D.P. and Simmons M.J. (2006). Principles of Genetics, Fourth Edition, John Wiley & Sons USA
- ❖ Verma, P.S. and V.K. Aggarwal (1974). Cell Biology, Genetic, Molecular Biology, Evolution and Ecology. S.Chand and Company Pvt. Ltd., New Delhi.
- ❖ Vogel F. and Motulsky A.G. (1996). Human Genetics. Springer, 3rd revised edition.

OR

### DSE-6.3(C) : DEMOGRAPHIC ANTHROPOLOGY

Full Marks – 100

Mid Sem – 15/1hr

End Sem Theory – 60/3 hrs

End Sem Practical – 25/3 hrs

#### THEORY

##### UNIT - I :

Demographic Anthropology; Introduction, definition and basic concepts Relationship between demography, population studies and anthropology Population Theories: John Graunt, Thomas R. Malthus; Biological theory of population; Theory of demographic transition.

##### UNIT - II :

Tools of Demographic Data; Measures of population composition, distribution and growth; Measures of fertility; Measures of mortality; Measures of migration.

##### UNIT - III :

Population of India; Sources of demographic data in India; Growth of Indian population; Demography of Indian tribal and non-tribal groups; Anthropological determinants of population growth; Impact of urbanization on the migration of tribal groups.

##### UNIT - IV :

National policies; National Population Policy; National Health Policy; National Policy on Reproductive Health Care.

#### PRACTICAL

A student will collect and compile demographic data from different secondary sources on any given topic by the concerned teacher and a project report will be submitted for its evaluation.

##### Text book recommended:

1. Bhende A. and Kanitkar, T. (2010) *Principles of Population Studies*. Himalaya Publishing House. Mumbai (All Units, It covers most topics)
2. Sinha V C and Zacharia E, (2010). *Elements of Demography*, 2nd Ed. New Delhi: Allied Publishers

##### Suggested Readings :

- ❖ Caldwell J.C. (2006). *Demographic Transition Theory*. Springer.
- ❖ Census of India (2001, 2011), SRS bulletin (2013), NFHS (2006), CRS, NSSO (Can be seen from browsing net)
- ❖ Howell N. (1986) Demographic Anthropology. *Ann. Rev. Anthropol.* 15: 219-246
- ❖ Kshatriya G.K. (2000). Ecology and health with special reference to Indian tribes. *Human Ecology special volume 9*:229-245.
- ❖ Kshatriya G.K., Rajesh,G. and Kapoor , A.K. (2010) Population Characteristics of Desert Ecology. VDM Verlag Dr. Muller Gmbh and Co., Germany.
- ❖ Misra BD (1982). *An introduction to the study of population*. South Asia publ. ltd. New Delhi.
- ❖ Park K. (2000) *Text book of Preventive and Social Medicine*. Banarsidas Bhanot, Jabalpur.
- ❖ Riley N.E. and Mc Carthy, J. (2003) *Demography in the Age of the Postmodern*. Cambridge University press. UK. Pages 1-13 and 32-98
- ❖ Sharma A.K. (1979) Demographic transition: A Determinant of Urbanization. *Social Change* 9: 13-14.
- ❖ Srivastava O.S. (1996) *Demographic and Population Studies*. Vikas Publishing House, India
- ❖ Zubrow E.B.W. (1976) *Demographic anthropology. Quantitative approaches*. University of New Mexico Press, Albuquerque.



**DSE-6.4 : MUSEUM AND MUSEOLOGY**

**Full Marks – 100**  
**Mid Sem – 15/1 hr**  
**End Sem Project – 85/3 hrs**

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

**Mid- term Examination** (Each student has to answer one elective question of **15 marks** from the two units on Museum and Museology given below for the Mid Term Examination) **= 15 marks**

**End – term Examination=85 marks**

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

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

Viva- Voce **= 10 marks**

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

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

**Unit – I : Museums :** Meaning and scope; History and development of museums in India; Types of Museums in India; Role of Anthropological museums in education.

**Unit –II: Museology and Basic Principles of Museum:** Modes and ways of acquisition of museum specimens; Principles of display and arrangement in museum; Basic principles of museum, Documentation, labeling, display of the museum specimens of material cultures of tribal and rural people.

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

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

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

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

**Books Recommended:**

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

**Suggested Readings:**

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

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