

# **COURSES OF STUDIES**

FOR

THREE YEAR DEGREE COURSE

IN

**ARTS HONOURS**

**DEPARTMENT OF ANTHROPOLOGY**

**Choice Based Credit System (CBCS)**

First & Second Semester Examination – 2022-23

Third & Fourth Semester Examination – 2023-24

Fifth & Sixth Semester Examination – 2024-25



**GOVERNMENT AUTONOMOUS COLLEGE,  
PHULBANI, KANDHAMAL**

**DISTRIBUTION OF MARKS**

<b>Paper with Practical</b>	
<b>Mid Sem (15Marks)</b>	
Two questions to be answered carrying 1 mark each	2X1 mark =2marks
Two questions to be answered carrying 1.5 marks each	2X1.5 marks= 3marks
Two questions to be answered carrying 2 marks each	2X2 marks=4marks
One questions to be answered carrying 6 marks each	1X6marks= 6marks
<b>End Sem (60Marks)</b>	
Eight questions to be answered carrying 1 mark each	8X1 mark =8marks
Eight questions to be answered carrying 1.5 marks each	8X1.5marks=12marks
Eight questions to be answered carrying 2 marks each	8X2marks=16marks
Eight questions to be answered carrying 6 marks each	4X6marks=24marks
<b>Paper without Practical</b>	
<b>Mid Sem(20Marks)</b>	
Three questions to be answered carrying 1 mark each	3X1 mark =3marks
Two questions to be answered carrying 2 marks each	2X2 marks=4marks
Two questions to be answered carrying 3 marks each	2X3 marks=6marks
One question to be answered carrying 7 marks each	1X7marks= 7marks
<b>End Sem(80Marks)</b>	
Twelve questions to be answered carrying 1 mark each	12X1 mark=12marks
Eight questions to be answered carrying 2 marks each	8X2marks=16marks
Eight questions to be answered carrying 3 mark each	8X3marks=24marks
Four questions to be answered carrying 7 marks each	4X7marks=28marks

### SYLLABI FORCBCS 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 AECC-III (EV-I)			GE-IA
	CORE-II				
II	CORE-III	AECC-II AECC-III(EV-II)			GE-1B
	CORE -IV				
III	CORE-V	AECC-III(EV-III)	SEC-I		GE-2A
	CORE-VI				
	CORE-VII				
IV	CORE-VIII	AECC-III(EV-IV)	SEC-II		GE-2B
	CORE-IX				
	CORE-X				
V	CORE-XI	AECC-III(EV-V)		DSE-I	
	CORE-XII			DSE-II	
VI	CORE-XIII	AECC-III(EV-VI)		DSE-III	
	CORE-XIV			DSE-IV /Project	

## YEAR&SEMESTER-WISEPAPERS&CREDITSATA GLANCE

Three-Year(6-Semester)CBCS Programme (B.A. Hons) (Anthropology Department)				
Yr.	Sl. No.	Course Structure	Code	Credit Points
<b>FIRSTYEAR</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	Introduction to Biological Anthropology	GE-1.3	4+2
	4			
	5	Ethics &Values(Unit-I)	AECC-1.5	1
	<b>SEMESTER-II</b>			
	6	Archaeological Anthropology	C-2.1	4+2
	7	Fundamentals of Human Origin &Evolution	C-2.2	4+2
	8			
9				
10	Ethics &Values(Unit-II)	AECC-2.5	1	
<b>SECONDYEAR</b>	<b>SEMESTER-III</b>			
	11	Tribes and Peasants in India	C-3.1	4+2
	12	Human Ecology	C-3.2	4+2
	13	Biological Diversity in Human Populations	C-3.3	4+2
	14	Archaeological Anthropology	GE-3.4	4+2
	15			
	16	Ethics &Values(Unit-III)	AECC-3.6	1
	<b>SEMESTER-IV</b>			
	17	Theories of Culture and Society	C-4.1	4+2
	18	Human Growth and Development	C-4.2	4+2
	19	Research Methods	C-4.3	4+2
	20			
21				
22	Ethics& Values(Unit-IV)	AECC-4.6	1	
<b>FINAL YEAR</b>	<b>SEMESTER-V</b>			
	23	Prehistoric Archaeology of India	C-5.1	4+2
	24	Anthropology in Practice	C-5.2	4+2
	25	Human Genetics	DSE-5.3	4+2
	26	Anthropology of Religion ,Politics and Economy	DSE-5.4	4+2
	27	Ethics &Values(Unit-V)	AECC-5.5	1
	<b>SEMESTER-VI</b>			
	28	Forensic Anthropology	C-6.1	4+2
	29	Anthropology of India	C-6.2	4+2
	30	Tribal Cultures of India	DSE-6.3	4+2
31	Project Work	DSE-6.4	6	
32	Ethics& Values(Unit-VI)	AECC-6.5	1	

**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

**Programme Outcome (PO):**

**Programme Specific Outcome (PSO):**

Our Bachelor program's greatest strengths are its flexibility in meeting the intellectual needs of individual students, the high level of cooperation and collaboration that exists within the student community and interdisciplinary approaches to scholarship.

- Our end semester dissertation presentation enables students to present their research to faculty and other students.
- Students will demonstrate an understanding of an anthropological perspective built upon a holistic understanding of cultural and biological systems.
- Students will develop an understanding of local and global processes and social complexity through space and time.
- Students will develop basic knowledge of data collection methods and the analytic techniques that anthropologists use to evaluate these data.
- Students will develop the ability to critically evaluate anthropological data.

## **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 – 25/3hrs**

**Course Outcomes (CO)**

- The students will learn about various theories related to human evolution and variation.
- They will learn about history of Physical Anthropology and how it is related to other disciplines.
- They will also learn about the relationship between non-human and human primates.
- From the practical component they will learn about how to measure and study various parts of the human body.

### **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, Application of Biological Anthropology for human welfare

**UNIT-II:**

History and development of understanding human evolution (pre-19<sup>th</sup> 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
2. Sitting height
3. Body weight
4. Maximum head length
5. Maximum head breadth
6. Maximum bizygomatic breadth
7. Bigonial breadth
8. Morphological facial height
9. Head circumference
10. Minimum frontal breadth

#### **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 2<sup>nd</sup> Edition*. SCHOLAR Book sellers & 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 – 25/3hrs

### Course Outcomes (CO)

- The students will learn about the scope and relevance of Social-Cultural Anthropology and its relationship with other branches of anthropology.
- They will learn about concepts of society, culture, social stratification, etc.
- They will also learn about important institutions like family, marriage and kinship.
- From the practical component they will learn how to follow up some of the commonly used techniques of data collection in Social-Cultural Anthropology.

## 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, Social Institution-family, marriage, kinship

**UNIT- IV:**

Theory and practice of ethnographic field work; 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. Havil and , 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,*Socialstructure*,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*. New bury 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-Black well.
- ❖ 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: INTRODUCTION TO BIOLOGICAL ANTHROPOLOGY**

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

**Course Outcomes (CO)**

- The students will learn about various theories related to human evolution and variation.
- They will learn about history of Physical Anthropology and how it is related to other disciplines.
- They will also learn about the relationship between non-human and human primates.
- From the practical component they will learn about how to measure and study various parts of the human body.

## 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, Application of Biological Anthropology for human welfare

### UNIT-II:

History and development of understanding human evolution (pre-19<sup>th</sup> 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 Nonhuman 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 :**

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 .Bhartiand A .Mukhopadhyia. 2018 .*Laboratory Manual for Biological Anthropology: Revised and Enlarged 2<sup>nd</sup> Edition*. SCHOLAR Book sellers & 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.

## AECC-1.5(EV-I): ETHICS & VALUES

### UNIT-I: Issues Relating to Women

#### 1.1 Introduction

*End Sem – 25 Marks*

*Full Marks–25Marks*



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

**1.2 Women and Family:**

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

**1.3 Women and Work:**

Women's work: The Invisible hands, Exploitation of women at work, Gender Stereo typing at work, Glass Ceiling, Women and pay gap, Sexual Harassment of women at work, Working women and role conflict

**1.4 Women, Community and Society:**

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

## SEMESTER-II

### C-2.1: ARCHAEOLOGICAL ANTHROPOLOGY

Full Marks – 100

Mid Sem –15/1hr

End Sem Theory – 60/3 hrs

End Sem Practical–25/3hrs

#### Course Outcomes (CO)

- The students will learn about archaeological anthropology and its relationship with other sciences.
- They will learn about how the past is reconstructed.
- They will also learn about the method of understanding the prehistoric culture on the basis of archaeological finds.
- From the practical component they will learn about identification and interpretation of prehistoric tools.

#### 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: Radio carbon14 dating (C14), Potassium- Argon, Dendrochronology, FissionTrack 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, Olorgesaille, 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. Micro lithic Tool Type
5. Neolithic Tool Type

### **Text book recommended :**

1. Bhattacharya D.K.(1990).*An introduction to Prehistoric Archaeology, Delhi*, Hindustan Publishing Corporation.
2. RammiReddy, 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*. Nether lands, Humanities Press.
- ❖ Championetal . (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 Bahn1996, *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 – 25/3hrs**

### **Course Outcomes (CO)**

- The students will learn about the origin of hominoid group in the primates.
- They will learn about the origin, distribution and characteristics of extinct hominids and the process of hominization.
- The components of the Practical paper will help students to understand how craniometric measurements and derived indices are useful in studying evolutionary changes in modern humans.

### **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**

- |  |                         |
|--|-------------------------|
| 1. Craniometry: Maximum cranial length | Maximum cranial breadth |
| Maximum bizygomatic breadth            | Maximum frontal breadth |
| Minimum frontal breadth                | Nasal height            |
| Nasal breadth                          | Bi-mastoid breadth      |

- |  |                            |                     |
|--|----------------------------|---------------------|
|  | Greatest occipital breadth | Upper facial height |
|  | Cranial index              | Nasal index         |
- 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 Entreprises, 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. Taxand L.G .Freeman, Aldine Publishing House, Chicago.
- ❖ Nystrom P. and Ashmore P. (2011). *The Life of Primates*. PHIL earning 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, ChawriBazar, Delhi.
- ❖ Standford 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.

**AECC-2.5(EV-II): ETHICS & VALUES**

**UNIT-II: Values and Good Citizenship**

*End Sem – 25 Marks*

*Full Marks–25Marks*

**2.1 Indian**

**Constitution:**

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

**2.2 Patriotism:**

Patriotic value and ingredient so nation building, Concept of Good citizenship, Emotional connection with the country, Duties of citizens and Qualities of good citizens

**2.3 Volunteerism:**

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

**2.4 Work Ethics:**

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

## 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 – 25/3hrs

#### Course Outcomes (CO)

- The students will learn about the concepts of tribes, their classification and distribution.
- They will learn about how tribes are linked with the wider world.
- They will also learn about peasantry and how it is related to tribes.
- From the practical component they will learn to read original ethnographies and extract relevant information from the same.

#### 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 Live lihood 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–15/1 hr**

**End Sem Theory – 60/3 hrs**

**End Sem Practical – 25/3 hrs**

#### **Course Outcomes (CO)**

1. The students will learn about biological aspects of ecology and adaptation.
2. They will learn about cultural aspects of ecology and adaptation.
3. They will also learn about the relationship between ecology and state formation.
4. From the practical component they will learn about measurement of various parts of the human body and about preparing a research design on study of any environmental problem.

#### **THEORY**

##### **UNIT– I:**

Concepts in Ecology: Definition, Eco-sensitivity, adaptation, acclimation, and 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 theme so state formation: .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 (Anytwo)*

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

##### **Cultural Dimensions**

- 1.Makea 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.Mukhopadhy. 2018 .*Laboratory Manual for Biological Anthropology: Revised and Enlarged 2<sup>nd</sup> Edition*. SCHOLAR Book sellers &Publishers, Kolkata.

##### **Suggested Reading:**

- ❖ Human ecology: biocultural adaptation in human communities. (2006) Schutkowski,

H. Berlin. Springer Verlag.

- ❖ Human ecology and cognitivist 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. Manin 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 De Vore. 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 – 25/3hrs

#### Course Outcomes (CO)

- The students will learn about the use of various markers of biological variation.
- They will learn about the mechanisms of human adaptability.
- They will also learn about the contribution of some anthropologists towards understanding the population diversity in India.
- From the practical component they will learn about the use of blood group antigens and dermatoglyphic traits in measuring biological diversity.

#### THEORY

##### Unit-I

Concept of Biological Variability; Hardy-Weinberg equilibrium, 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

(ANYTWO)

- Craniometric Measurements (Skull & Mandible)



- Determination of A, B, O; and Rh blood groups often subjects.
- 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)
- Collection of demographic data from secondary sources.

**Textbook 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.
- Mukherji, D., D. Mukherjee and P. Bharti and A. Mukhopadhyaya. 2018. *Laboratory Manual for Biological Anthropology: Revised and Enlarged 2<sup>nd</sup> Edition*. SCHOLAR Book sellers & 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*. 2<sup>nd</sup> 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*. Mc Grand 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.
- ❖ Jurma in Robert Lynn Kilgore Wenda Treva than 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.
- ❖ Klepinge L.L.(2006). *Fundamentals of Forensic Anthropology*. John Willey & 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*. 3<sup>rd</sup> edition, Pearson, USA.
- ❖ Bhende A. and Kaniikar, T.(2010) *Principles of Population Studies*. Himalaya Publishing House. Mumbai

## GE-3.4: ARCHAEOLOGICAL ANTHROPOLOGY

Full Marks – 100

Mid Sem – 15/1hr

End Sem Theory – 60/3 hrs

End Sem Practical – 25/3hrs

### Course Outcomes (CO)

- The learning outcomes of this paper are:
- The students will learn about archaeological anthropology and its relationship with other sciences.
- They will learn about how the past is reconstructed.
- They will also learn about the method of understanding the prehistoric culture on the basis of archaeological finds.
- From the practical component they will learn about identification and interpretation of prehistoric tools.

### 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, Dendrochronology, 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, Olorgesaille, Olduvai Gorge, Pirro Nord, Damanisi, 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. Micro lithic Tool Type
5. Neolithic Tool Type



**Textbook 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 *Archaeology* 1996
- ❖ Sankalia H.D. (1964). *Stone Age Tools*. Poona Deccan College

**AECC-3.6(EV-III): ETHICS & VALUES**

**UNIT-III: Issues of Drug, Tobacco and Alcohol Addiction**

*End Sem – 25 Marks  
Full Marks – 25 Marks*

**3.1 Extent of the Problem:**

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

**3.2 Socio-economic impact:**

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

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

**3.3 Laws to Address this Problem:**

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

**3.4 Role of Stake -holders:**

Provision of Tobacco free campus and role of students, Role of students in their family and immediate surroundings, Role of NGOs and other agencies

SEMESTER-IV

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



### Learning Course Outcomes (CO)

- The students will learn about the classical theories of culture like evolutionism, diffusionism and culture area.
- They will learn about historical particularism and neo-evolutionism.
- They will also learn about functionalism, structuralism and other more recent theories.
- From the practical component they will learn about formulation of research questions and hypotheses, hypotheses, etc.

### 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 apart 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: Black well Publishing.

## C-4.2: HUMAN GROWTH AND DEVELOPMENT

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

### Learning Course Outcomes (CO)

- The students will learn about the concepts and indicators of human growth and development.
- They will learn about pre-natal and post-natal growth.
- They will also learn about various bio-cultural factors that influence growth.
- From the practical component they will learn about how to assess growth, obesity and nutritional status.

### 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 or 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, Health and Carter methods.

### PRACTICAL (ANYTWO)

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

#### Textbook recommended:

- Das B.M. 2008. *Outlines of Physical Anthropology*. Kitab Mahal, New Delhi.
- Mukherji, D., D. Mukherjee and P. Bharti and A. Mukhopadhyaya. 2018. *Laboratory Manual for Biological Anthropology: Revised and Enlarged 2<sup>nd</sup> 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 G A and Howard M.(1998).Human Adaptation. Oxford University Press.
- ❖ Harrison GA, Tanner JM, Pibeam DR, BakerPT.(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 High landers. 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.
- ❖ Mc Ardle 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 Himalyan population. In Basu and Gupta (eds.).Human Biology of Asian Highland Populations in the global context.
- ❖ Sinha Rand KapoorS.(2009).Obesity:A multidimensional approach to contemporary global issue.Dhanraj Publishers. Delhi

## C-4.3: RESEARCH METHODS

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

### Learning Course Outcomes (CO)

- The students will learn about the similarities and differences between technique, method and methodology.
- They will learn about fieldwork traditions in Anthropology.
- They will also learn about tools and techniques of data collection.
- From the practical component they will learn about how to construct tables, make observations and conduct interviews.

### THEORY

#### UNIT- I:

Field work tradition in Anthropology; Ethnographic approach, contribution of Malinowski, Boas and other pioneers; cultural relativism, ethno centrism, 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 Freelist, 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 Bhilof 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

**AECC-4.6 (EV-IV): ETHICS & VALUES**

**UNIT-IV: Ethical Values for Student Life**

*End Sem – 25 Marks*

*Full Marks – 25 Marks*

**4.1 Extent of the Problem:**

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

**4.2 Socio-economic impact:**

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

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

**4.3 Laws to Address this Problem:**

Silent features of social legislation such as NDPS Act, 1985 and COTPA Act, 2003, Mechanism and Government Schemes for prevention, deaddiction and rehabilitation

**4.4 Role of Stake -holders:**

Provision of Tobacco free campus and role of students, Role of students in their family and immediate surroundings, Role of NGOs and other agencies



## 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 – 25/3hrs

#### Course Outcomes (CO)

The learning outcomes of this paper are:

1. The students will learn about prehistoric culture through the technique of manufacturing tools.
2. They will learn about the methods of climatic reconstruction.
3. They will also learn about Pleistocene chronology of India.
4. From the practical component they will learn about identification of tools and lithic technology

#### 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)Micro lithic 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 Prakashan
- ❖ 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. Print world (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  
MidSem –15/1hr  
End Sem Theory –60/3hrs  
End Sem Practical – 25/3hrs

### Course Outcomes (CO)

The learning outcomes of this paper are:

1. The students will learn about various applications of anthropological knowledge and techniques.
2. They will learn about the role of anthropology in development practices.
3. They will also learn about various constitutional provisions that protect human rights.
4. From the practical component they will learn about how to prepare report on an NGO or a project on tourism.

### 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 – 25/3hrs**

#### **Learning Course Outcomes (CO)**

- The students will learn about anthropological approach to understanding religion, economy and politics of simple societies.
- They will also learn about how religion, economy and politics interface with each other.
- From the practical component they will learn how to conduct a case study of one of the religious, economic or political institutions of a given society

### **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 social ness

#### **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

***Textbook 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 –60/3hrs

End Sem Prac-25/3hrs

#### Course Outcomes (CO)

- The learning outcomes of this paper are:
- The students will learn about various concepts of tribes and the importance of studying them.
- They will learn about the difficulties of differentiating between tribe and caste in India.
- They will also learn about classification of tribes based on religion, economy, occupation, race, etc.
- From the practical component they will learn about distribution of various categories of tribes in India and how to write an annotated bibliography and social structure of one of them.

#### 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

#### **Textbook recommended:**

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

#### **Suggested Readings:**

- ❖ Behera, D. Kand Georgpfeffer .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 published by PRACTICAL 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

## **AECC-5.5 (EV-V): ETHICS & VALUES**

### **UNIT-V: Vulnerable Sections of Society: Understanding their Issues**

#### **5.1 Extent of the Problem:**

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

#### **5.2 Socio-economic impact:**

Socio-economic impact of Drug and Tobacco addiction and alcoholism: Loss of physical and mental strength, Loss of character, Loss of family ties and relationship, Loss of earning and livelihood potentials, Loss of societal respect and dignity etc

#### **5.3 Laws to Address this Problem:**

Silent features of social legislation such as NDPS Act, 1985 and COTPA Act, 2003, Mechanism and Government Schemes for prevention, deaddiction and rehabilitation

## **SEMESTER-VI**

### **C-6.1: Forensic Anthropology**

**Full Marks – 100 MidSem –15/1hr**

**End Sem Theory –60/3hrs**

**End Sem Prac-25/3hrs**

#### **Course Outcomes (CO)**

- The students will learn about the aims and scope of forensic anthropology.
- They will learn about identification of skeletal and non-skeletal human remains.
- They will also learn about various methods of identifying living persons.
- From the practical component they will learn about identification of individuals on the basis of bones, blood, urine, semen, saliva, fingerprint and handwriting.

#### **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. Somato metric and Somatoscopic Observatio non living persons.
3. Identification of bloodstain, urine, semen and saliva.
4. Examination & of Fingerprints and Hand writing.

#### **Textbook recommended :**

1. Mukherji, D., D. Mukherjee and P. Bharti and A. Mukhopadhyaya. 2018  
*Laboratory Manual for Biological Anthropology: Revised and Enlarged 2<sup>nd</sup> 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
- ❖ 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: FIELDWORK AND DISSERTATION

Full Mark-100

#### **Course Outcomes (CO)**

- The students will learn about how to do fieldwork.
- They will learn about use of various techniques of data collection.
- They will learn about classification, interpretation and presentation of data.
- They will also learn about writing a dissertation, selecting chapter headings and subheadings, writing references, footnotes, endnotes, etc.

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

The learning outcomes of this paper are:

1. The students will learn about how anthropology originated and evolved in India.
2. They will learn about Indian society on the basis of some key concepts developed by various anthropologists and sociologists.
3. They will also learn about the contributions of some western anthropologists to understanding Indian society and culture.
4. From the practical component they will learn about diversities in Indian society on the basis of biological and cultural traits

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

## **THEORY**

### **UNIT- I:**

## PRACTICAL

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, pseudo tribalism.

### UNIT- IV:

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

## PRACTICAL

1. Identify various straits/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. Dubesc. (1992). Indian Society. National book trust, India : new delhi.
2. Malhotrak .C. (1978). Morphological composition of people of India. J. Human Evolution.
3. Trautmann. R.(2011). India: Brief history of civilization .Oxford university press: Delhi

### **Suggested reading:**

- ❖ Nichola, SD.(2001). Castes of mind: colonialism and the making of modern india. Princeton University Press.
- ❖ Bernardc. 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
- ❖ Lopezd. S.(1995). Religions of India in Practice. Princeton university press
- ❖ Guptad. Social stratification. Delhi:oxford university press.
- ❖ Karvei. (1961). Hindu society: An Interpretation. Poona: deccan college
- ❖ Guha BS. (1931).The racial attributes of people of india. In: Census of India,1931, voli, partiii (BPO, Simla)
- ❖ Vidyarthil .Pand raib. K.(1976).The tribal culture of India. Concept Publishing Co, Delhi.
- ❖ Haddon AC. (1929).Races of man. Cambridge university, London.
- ❖ Kapoora .K.(1992). Genetic diversity among Himalayan human Populations. M/svinod publishers, Jammu
- ❖ Majumdar, D.N.(1901). Races and culture of india. Asia publishing house, Bombay
- ❖ Dumont, L.(1980).homo hierachicus. University of chicagon press.

- ❖ Guhab.S.(1931).the racial attributes of people of india. In:census of india,1931, voli, partiii(BPO, Simla)

OR

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

Full Marks – 100

Mid Sem –15/1hr

End Sem Theory –60/3hrs

End Sem Prac-25/3hrs

#### Course Outcomes (CO)

- The students will learn about human genes, their structure, replication and function.
- They will learn about how genetic information is expressed.
- They will also learn about the methods of studying human genes.
- From the practical component they will learn about DNA extraction, quantification, gel documentation, etc.

#### 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 *mt* DNA and Y-chromosome.

(ANYTWO)

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 2<sup>nd</sup> Edition*. SCHOLAR Booksellers & Publishers, Kolkata.

#### Suggested Readings:

- ❖ Strachan Tand Read AP. (2004).Human Molecular Genetics. Garland Science
- ❖ Brown TA.(2007).Genomes. Garland Science.

**PRACTICAL**

- ❖ Griffiths AJF. (2002). Modern Genetic Analysis: Integrating Genes and Genomes. WHF reeman 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, Hurlstam 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 Health care. 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, 3<sup>rd</sup> 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 – 25/3hrs**

**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.

**Textbook recommended:**

1. Bhende A. and Kanitkar, T. (2010) *Principles of Population Studies*. Himalaya Publishing House. Mumbai (All Units, It covers most topics)
2. Sinha VC and Zacharia E, (2010). *Elements of Demography*, 2<sup>nd</sup> 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. VDMV erlag 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*. Banarsi das 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.

## PRACTICAL

### DSE-6.4: MUSEUM AND MUSEOLOGY

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

#### Course Outcomes (CO)

- The learning outcomes of this paper are:
- The students will learn about history of museums in India and the relationship between museums and anthropology.
- They will learn about museum collection, documentation and display.
- They will also learn about security, storage and marketing.
- From the practical component they will learn about how to document, conserve and prepare a profile of a museum.

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) = **15marks**

**End-term Examination** = **85marks**

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 = **10marks**

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

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

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

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

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

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

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

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





**Books Recommended:**

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

**Suggested Readings:**

- ❖ Aiyappan, A. and S.T. Satyamurti (Ed), 1960, *Hand book 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

**AECC-6.5(EV-VI): ETHICS & VALUES**

**UNIT-VI: Environmental & Techno Ethics**

*End Sem – 25 Marks  
Full Marks – 25 Marks*

**6.1 Environmental Ethics:**

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

**6.2 Promotion of Green Technology:**

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

**Refuse and Responsibility.**

**Green Technology in relation to:-** Energy and Construction.

**6.3 Ethics and Technology:**

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

**Agricultural, Industrial, Digital, Globalized Age etc**

**6.4 Judicious Use of Technology:**

**Judicious use of** Mobile Phones, Electrical machines, Plastics, Television, Computers and their harmful effects

**Ethics and Use of Digital Technology:** Cyber ethics- Crimes and Ethical hacking,

**Ethics of social media:** Whats App, Face book, Twitter and others

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