

# **Syllabus for M. Sc. in Anthropology**

**Department of Anthropology  
Central University of Orissa  
Koraput**

## M.Sc. in ANTHROPOLOGY

### Semester-I:

Course No.	Course Code	Title	Credits	Full Mark
1	ANT – C 311	Biological Anthropology -I	4	100
2	ANT – C 312	Socio-Cultural Anthropology	4	100
3	ANT – C 313	Archaeological Anthropology & Museology	4	100
4	ANT – C 314	Research Methods	4	100
5	ANT – C 315	Tribes in India	2	100
6	ANT – C 316	General Practical – I	2	100

### Semester-II:

Course No.	Course Code	Title	Credits	Full Mark
7	ANT – C 321	Biological Anthropology -II	4	100
8	ANT – C 322	Theories of Society and Culture	4	100
9	ANT – C 323	Pre- and Proto- History of India, Africa and Europe	4	100
10	ANT – C 324	Indian Anthropology	4	100
11	ANT – C 325	Peasants in India	2	100
12	ANT – C 326	General Practical – II	2	100

**Semester-III: (GROUP – A: Physical / Biological Anthropology)**

Course No.	Course Code	Title	Credits	Full Mark
13	ANT – C 331	Anthropological Demography	4	100
14	ANT – C 332	Field Work Training	2	100
15	ANT – C 333	Human Ecology: Biological & Cultural dimensions	2	100
16	ANT – C 334 ‘A’	Medical Genetics	4	100
17	ANT – C 335 ‘A’	Practical in Biological Anthropology - I	4	100
18	ANT – E <sub>1</sub> 336 ‘A’	Growth and Nutrition, OR	4	100
	ANT – E <sub>2</sub> 336 ‘A’	Forensic Anthropology – I, OR		
	ANT – E <sub>3</sub> 336 ‘A’	Environmental Anthropology		

Students can choose one **Extra Electives** offered by Department and one **Allied Electives** from other Subjects in 3<sup>rd</sup> Semester

**Semester-III: (GROUP – B: Socio - Cultural Anthropology)**

Course No.	Course Code	Title	Credits	Full Mark
13	ANT – C 331	Anthropological Demography	4	100
14	ANT – C 332	Field Work Training	2	100
15	ANT – C 333	Human Ecology: Biological & Cultural dimensions	2	100
16	ANT – C 334 ‘B’	Theory and Method in Socio-cultural Anthropology	4	100
17	ANT – C 335 ‘B’	Applied Socio-cultural Anthropology	4	100
18	ANT – E <sub>1</sub> 336 ‘B’	Developmental Anthropology OR	4	100
	ANT – E <sub>2</sub> 336 ‘B’	Anthropology of Children and Childhood OR		
	ANT – E <sub>3</sub> 336 ‘B’	Anthropology of Communication		

Students can choose one **Extra Electives** offered by Department and one **Allied Electives** from other Subjects in 3<sup>rd</sup> Semester

**Semester-III: (GROUP – C: Tribal Studies)**

Course No.	Course Code	Title	Credits	Full Mark
13	ANT – C 331	Anthropological Demography	4	100
14	ANT – C 332	Field Work Training	2	100
15	ANT – C 333	Human Ecology: Biological & Cultural dimensions	2	100
16	ANT – C 334 ‘C’	Tribal Culture and its Transformation	4	100
17	ANT – C 335 ‘C’	Tribal Development	4	100
18	ANT – E <sub>1</sub> 336 ‘C’	Tribal Demography, Nutrition and Health OR	4	100
	ANT – E <sub>2</sub> 336 ‘C’	Tribal Language and Literature OR		
	ANT – E <sub>3</sub> 336 ‘C’	Tribal Movements in India		

Students can choose one **Extra Electives** offered by Department and one **Allied Electives** from other Subjects in 3<sup>rd</sup> Semester

**Semester-III: (GROUP – D: Archaeological Anthropology)**

Course No.	Course Code	Title	Credits	Full Mark
13	ANT – C 331	Anthropological Demography	4	100
14	ANT – C 332	Field Work Training	2	100
15	ANT – C 333	Human Ecology: Biological & Cultural dimensions	2	100
16	ANT – C 334 ‘D’	Prehistoric Archaeology of Africa and Europe	4	100
17	ANT – C 335 ‘D’	Practical in Archaeological Anthropology	4	100
18	ANT – E <sub>1</sub> 336 ‘D’	Indian Prehistory and its relevance OR	4	100
	ANT – E <sub>2</sub> 336 ‘D’	Tool Techniques in Archaeology OR		
	ANT – E <sub>3</sub> 336 ‘D’	Palaeontology and Dating methods		

Students can choose one **Extra Electives** offered by Department and one **Allied Electives** from other Subjects in 3<sup>rd</sup> Semester

**Semester-IV: (GROUP – A: Physical / Biological Anthropology)**

Course No.	Course Code	Title	Credits	Full Mark
19	ANT – C 341	Medical Anthropology	2	100
20	ANT – C 342	Anthropology in Practice	2	100
21	ANT – C 343	Dissertation	4	100
22	ANT – C 344 ‘A’	Population Genetics	4	100
23	ANT – C 345 ‘A’	Practical in Biological Anthropology - II	4	100
24	ANT – E <sub>1</sub> 346 ‘A’	Human Genome: Meaning and Methods of Study OR	4	100
	ANT – E <sub>2</sub> 346 ‘A’	Forensic Anthropology – II OR		
	ANT – E <sub>3</sub> 346 ‘A’	Bio - Cultural Anthropology		

Students can choose one **Extra Electives** offered by Department and one **Allied Electives** from other Subjects in 4<sup>th</sup> Semester

**Semester-IV: (GROUP – B: Socio - Cultural Anthropology)**

Course No.	Course Code	Title	Credits	Full Mark
19	ANT – C 341	Medical Anthropology	2	100
20	ANT – C 342	Anthropology in Practice	2	100
21	ANT – C 343	Dissertation	4	100
22	ANT – C 344 ‘B’	Economic Anthropology	4	100
23	ANT – C 345 ‘B’	Rural Development	4	100
24	ANT – E <sub>1</sub> 346 ‘B’	Urban Anthropology OR	4	100
	ANT – E <sub>2</sub> 346 ‘B’	Anthropology of Gender OR		
	ANT – E <sub>3</sub> 346 ‘B’	Anthropology of Symbolism		

Students can choose one **Extra Electives** offered by Department and one **Allied Electives** from other Subjects in 4<sup>th</sup> Semester

**Semester-IV: (GROUP – C: Tribal Studies)**

Course No.	Course Code	Title	Credits	Full Mark
19	ANT – C 341	Medical Anthropology	2	100
20	ANT – C 342	Anthropology in Practice	2	100
21	ANT – C 343	Dissertation	4	100
22	ANT – C 344 ‘C’	Tribal Ecology and Economy	4	100
23	ANT – C 345 ‘C’	Ethno-medicine	4	100
24	ANT – E <sub>1</sub> 346 ‘C’	Status and Empowerment of Tribal Women OR	4	100
	ANT – E <sub>2</sub> 346 ‘C’	National Policy on Tribals and Tribal Rights OR		
	ANT – E <sub>3</sub> 346 ‘C’	Folk art and Culture		

Students can choose one **Extra Electives** offered by Department and one **Allied Electives** from other Subjects in 4<sup>th</sup> Semester

**Semester-IV: (GROUP – D: Archaeological Anthropology)**

Course No.	Course Code	Title	Credits	Full Mark
19	ANT – C 341	Medical Anthropology	2	100
20	ANT – C 342	Anthropology in Practice	2	100
21	ANT – C 343	Dissertation	4	100
22	ANT – C 344 ‘D’	Theory and Methods in Archaeological Anthropology	4	100
23	ANT – C 345 ‘D’	Ethno-archaeology	4	100
24	ANT – E <sub>1</sub> 346 ‘D’	Applied Archaeological Anthropology OR	4	100
	ANT – E <sub>2</sub> 346 ‘D’	Practical in Material Culture OR		
	ANT – E <sub>3</sub> 346 ‘D’	New Archaeological Anthropology		

Students can choose one **Extra Electives** offered by Department and one **Allied Electives** from other Subjects in 4<sup>th</sup> Semester

**LIST OF EXTRA ELECTIVE COURSES:**

ANT EE -301: Anthropology of Disaster Management

ANT EE -302: Anthropology of Education

ANT EE -303: Psychological and Linguistic Anthropology

ANT EE -304: Political Anthropology

ANT EE -305: Anthropology of Management

ANT EE -306: Visual Anthropology

ANT EE -307: Sports and Nutritional Anthropology

ANT EE -308: Neuro Anthropology

ANT EE -309: Forensic Dermatoglyphics

ANT EE -310: Paleoanthropology

ANT EE -311: Anthropology of Religion, Politics, and Economy

ANT EE -312: Indian Archaeology

ANT EE -313: Fashion Anthropology

ANT EE -314: Urban Anthropology

ANT EE -315: Public Health and Epidemiology

ANT EE -316: Industrial / Business and Corporate Anthropology

ANT EE -317: Media Anthropology

ANT EE -318: Tourism Anthropology

ANTEE -319: Ethnic Entrepreneurship

## **SEMESTER-I**

### **COURSE - 1: BIOLOGICAL ANTHROPOLOGY - I: (ANT-C 311)**

#### **HUMAN EVOLUTION, VARIATION, and GROWTH**

Full Marks: 100, Credits: 4

(Questions are to be set covering all Units)

#### **Unit-I**

History and development of understanding human variation and evolutionary thought;  
Theories of evolution: Lamarckism, Neo Lamarckism, Darwinism, Synthetic theory, Mutation and Neo-Mutation theory;

History of Physical Anthropology and development of Modern Biological anthropology; aim, scope and its relationship with allied disciplines; emerging trends in Biological Anthropology; Application of Biological Anthropology in Nation building;

Difference in the approaches of modern and traditional Biological Anthropology with emphasis on human evolution; Origins of Man: Multiregional vs. Out of Africa evolution model.

#### **Unit-II**

Non human primates in relation to human evolution

Classification and characteristics of living primates;

Comparative anatomy and behaviour of human and non-human primates;

Significance of non-human primate study in Biological Anthropology;

Comparison of morphological and anatomical features of Man-Ape and Ape-Man, Erect posture and Bipedalism

Primates and Fossils:

Earliest primates of Oligocene, Miocene and Pliocene: Aegyptopithecus, Propliopithecus, Dryopithecus and Proconsul;

Primate evolution: Primate Evolution with special reference to skull, jaw, limbs, dentition and brain.

#### **Unit-III**

Stages of Human evolution: Processes of homanization and emergence of hominids;

Characteristic features and cultural evidences of (a) Early Hominoids: Ramapithecus, Australopithecine, Homohabilis; (b) Later Hominids: Homo erectus (Asia, Europe and Africa), Homo-sapien-neanderthalensis (classical/conservative), Homo-sapien-sapiens (Cro-Magnon, Chancelade, Grimaldi)

## **Unit-IV**

Living Human Populations and Human Diversity: A conceptual clarity

Criteria for studying human Diversity: Metric, Non- metric, Dermatoglyphics and Genetics;

Distribution and Characteristics different Human Diversity of the world: Australoid, Caucasoid, Negroid, Mongoloid;

A comparative account of various racial classifications (Hooton, Deniker, Risley and Guha);

UNESCO Statement on Race;

Recent understanding of human biological categories in the context of human genome research;

Genetic Variation: ABO Blood Group, Rh Factor, MN Blood Group, Kell and Duffy Blood Group

ABH Secretor factor;

Abnormal Haemoglobin: Sickle Cell Anaemia, Thalassaemia; G6PD deficiency;

Distribution of selected genetic traits in Indian Caste and Tribal Populations

## **Unit-V**

Concept of Human Growth and Development;

Stages of Growth: Prenatal; Post -natal, adolescent; adult, aged

Factors affecting Growth;

Ageing and Senescence

## **Suggested Readings**

1. Bogin B. (1999) Patterns of human growth. Cambridge University Press.
2. Buettner-Janusch, J. (1966). *Origins of Man: Physical Anthropology*. John Wiley & Sons, Inc., New York, London, Sydney.
3. Cameron N and Bogin B. (2012) Human Growth and Development. Second edition, Academic press Elsevier.
4. Conroy G.C. (1997). *Reconstructing Human Origins: A Modern Synthesis*. W. W. Norton & Company, New York, London.
5. Frisancho R. (1993) Human Adaptation and Accommodation. University of Michigan Press.
6. Harrison GA and Howard M. (1998). Human Adaptation. Oxford University Press.
7. Harrison GA, Tanner JM, Pibeam DR, Baker PT. (1988). Human Biology. Oxford University Press.

8. Howell F.C. (1977). *Horizons of Anthropology*. Eds. S. Tax and L.G. Freeman, Aldine Publishing House, Chicago.
9. Jurmain R, Kilgore L, Trevathan W. *Essentials of physical anthropology*. Wadsworth publishing.
10. Jurmain R., Kilgore L., Trevathan W., Ciochon R.L. (2012). *Introduction to Physical Anthropology*. Wadsworth Publ., USA
11. Kapoor AK and Kapoor S. (1995) *Biology of Highlanders*. Vinod Publisher and Distributor.
12. Kathleen K. (2008). *Encyclopedia of Obesity*. Sage.
13. Kroeber A. L. (1948). *Anthropology*. Oxford & IBH Publishing Co., New Delhi.
14. Malina RM, Bouchard C, Oded B. (2004) *Growth, Maturation, and Physical Activity*. Human Kinetics.
15. McArdle WD, Katch FI, Katch VL. (2001) *Exercise Physiology: Energy, Nutrition, and Human Performance*.
16. Nystrom P. and Ashmore P. (2011). *The Life of Primates*. PHI Learning Private Limited, New Delhi.
17. Seth P. K. and Seth S. (1986). *The Primates*. Northern Book Centre, New Delhi, Allahabad.
18. 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*.
19. Singh I. P. and Bhasin M.K. (1989). *Anthropometry: A Laboratory Manual on Biological Anthropology*. Kamla-Raj Enterprises, Chawri Bazar, Delhi.
20. Sinha R and Kapoor S. (2009). *Obesity: A multidimensional approach to contemporary global issue*. Dhanraj Publishers. Delhi.
21. Stanford C.; Allen J.S. and Anton S.C. (2012). *Biological Anthropology: The Natural History of Mankind*. PHI Learning Private Limited, New Delhi.
22. Stanford C., Allen J.S. and Anton S.C. (2010). *Exploring Biological Anthropology. The Essentials*. Prentice Hall Publ, USA.
23. *Statement on Race: Annotated Elaboration and Exposition of the Four Statements on Race* (1972). Issued by UNESCO. Oxford University Press.
24. Swindler D. R. (2009). *Introduction to the Primates*. Overseas Press India Pvt. Ltd., New Delhi.

## **COURSE - 2: SOCIAL AND CULTURAL ANTHROPOLOGY (ANT-C 312)**

Full Marks-100, Credits: 4

(Questions are to be set covering all units)

### **Unit-I:**

Aim, Scope, Historical Development, Relationship with other sciences, Different branches of Anthropology and their interrelatedness

Major areas of Anthropology: Ethnography, Ethnology, Folklore, Economic Anthropology, Linguistic Anthropology, Symbolic Anthropology, Medical Anthropology, Nutritional Anthropology, Population Anthropology, Urban Anthropology, Industrial Anthropology, Educational Anthropology, Visual Anthropology, Applied and Action Anthropology. Development Anthropology, Philosophical Anthropology, Anthropology of Religion, Anthropology of Crime/Violence, Anthropology of Communication

Aim and scope of Social and Cultural Anthropology; Relation of Social and Cultural Anthropology with other sub- disciplines of Anthropology, with other Social Sciences and other disciplines.

Emerging Areas: Ethnicity and Culture, Post-Modern Anthropology, Globalization, Glocalization

### **Unit-II:**

Culture: Concept, Definition, Nature, Characteristic and Paradoxes of Culture; Culture Locus; Poverty of Culture and Culture of Poverty;

Culture change: Innovation, Diffusion, Acculturation, Assimilation, Attenuation and Integration.

Cultural Adaptation, Enculturation and Socialization, Culture pattern, Cultural Focus, Cultural system, Culture shock and Culture conflict

### **Unit-III:**

Concept and Definition of Marriage, Types of Marriage, Marriage Rules, Ways of acquiring mates, Marriage payments, Bride-Price/Wealth, Dowry, Divorce, Couvade Alliance Theory

Concept and Definition Family, Universalisation of Family, Types of family (by structure and by residence), Functions of family, Family in Transition

Concept and definition of kinship, Types of kin, Types of kin groups; Kin terms; Descent and affiliations; Ritual/Fictive, kinship, Kinship Behaviour, Kinship System, Incest Taboo

### **Unit-IV:**

Religion: Concept, Origin, Aspects, Functions; Primitive Religion: Naturalism, Animism, Animatism, Bongalism, Fetishism, Totemism, Manatism, Polytheism, Monotheism, and

Syncretism

Magic: Black Magic, White Magic. Sympathetic, Homeopathic, Imitative, Destructive, Witchcraft Sorcery, Shamanism

Taboo; Sacred and Profane.

Political Organisations: Concept, Types, Band, Stateless and State;

Primitive Government: Forms & functions, Leadership, Social and political movement,

Concept of law; Customary and modern law, Law and justice; Deviation and conformity;

Social control: Forms and Agents, Social Sanction: Negative, Positive and Legal, Feud, Blood vengeance, Oath and order

#### **Unit-V:**

Economic Organization:

Concepts: Production, Consumption, Exchange and Distribution;

Primitive and Peasant Economy;

Reciprocity and Redistribution, Useful rights, Barter, Subsistence and Market Economy.

Division of Labour;

Techno- economic levels: Foraging, Nomadism, Pastoralism, Transhumance, Horticulture,

Swidden / Shifting Cultivation, Terrace Cultivation, Dry and Wet Cultivation, Mixed farming

Ceremonial Exchange: Kula ring and Potlatch.

#### **Suggested Readings**

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

10. Parsons T. (1968). *The Structure of Social Action*. New York: Free Press
11. Rapport N. and Overing J. (2004). *Key Concepts in Social and Cultural Anthropology*. London: Routledge.
12. Royal Anthropological Institute of Great Britain and Ireland (1971). *'Methods' In Notes and Queries on Anthropology*. London: Routledge & Kegan Paul Ltd.

## SEMESTER -I

### **COURSE – 3: ARCHAEOLOGICAL ANTHROPOLOGY AND MUSEOLOGY (ANT-C 313)**

Full Marks – 100, Credits: 4

(Questions are to be set covering all units)

#### **Unit- I**

Definition and Scope: *Aim*, Scope, Historical Development, Relationship to other branches of Anthropology and with Earth Sciences, Physical Sciences, Life Sciences, Social Sciences  
Ethno-archaeology, Environmental Archaeology

Basic Concepts and Methods: Archaeological Site, Artefact, Material Culture, Survey, Excavation, Ordering, Recording, and Explaining the past

#### **Unit-II**

Geological Framework: Environmental Changes during Pleistocene-Holocene, Relationship between culture and environment in Glacial and Interglacial Periods (Ice Age) and between Pluvial and Inter-Pluvial Periods

Dating Methods: Concept of Chronology, Relative and absolute dating methods (Stratigraphy Palaeontology, Fluorine dating, Collagen analysis, Pollen dating, Patination, River terraces, Radiocarbon (C-14) dating, Potassium-Argon dating, Thermo luminescence, Palaeomagnetism, Varve analysis, Dendrochronology, Uranium dating, Amino acid racemization

#### **Unit- III**

Culture Chronology in Archaeological Anthropology: Concept of Three Age System and subsequent modification in Stone Age Culture Chronology

Prehistoric Technology and Tool types of Early Man: Manufacturing techniques of major Palaeolithic, Mesolithic and Neolithic tool types

#### **Unit- IV**

Museology: Meaning and Scope of Museology;  
History and development of museums in world

Types of Museums

Role of Anthropological and Archaeological museums in education

### **Unit-V**

Museum material: Modes and ways of acquisition of museum specimens

Principle of display and arrangement in museum and its dynamics

Conservation and preservation of museum materials and antiquities

### **Suggested Readings**

1. Allchin and Allchin (1993). *The Rise of Civilization of India and Pakistan*. Cambridge University Press
2. Bhattacharya D.K. (1978). *Emergence of Culture in Europe*, Delhi, B.R. Publication.
3. Bhattacharya D.K. (1979). *Old Stone Age Tools and Techniques*. Calcutta, K.P. Bagchi Company
4. Bhattacharya D.K. (1996). *Palaeolithic Europe*. Netherlands, Humanities Press.
5. Champion et al. (1984). *Prehistoric Europe*. New York, Academic Press.
6. Fagan B.M. (1983). *People of Earth: An Introduction*. Boston, Little, Brown & Company.
7. Phillipson D. W. (2005). *African Archaeology*. Cambridge, Cambridge University Press.
8. Sankalia H.D. (1964). *Stone Age Tools*. Poona Deccan College

## SEMESTER-I

### **COURSE - 4: RESEARCH METHODS (ANT-C 314)**

Full Marks: 100, Credits: 4

(Questions are to be set covering all units)

#### **Unit I: Research Design**

Purpose of Research and Preparation for Research; Review of literature; conceptual framework; formulation of research problem; formulation of hypothesis, sampling, tools and techniques of data collection, data analysis and report writing, guiding ideals and critical evaluation of major approaches in research methods, basic tenets of qualitative research and its relationship with quantitative research.

#### **Unit II: Fieldwork tradition in Anthropology**

Ethnographic approach, contribution of Malinowski, Boas and other pioneers; cultural relativism, ethnocentrism, etic and emic perspectives; comparative and historical methods; maintenance of field diary, field note, and logbook

#### **Unit III: Tools and techniques of data collection**

Concept of survey, relationship of survey method with ethnographic method, construction of questionnaire and interview schedule, validation and internal consistency of questionnaire  
Observation - Direct, Indirect, Participant, Non-participant, Controlled Interview - Structured and unstructured, Focussed Group Discussion, key informant interview

Case Study and life history

Genealogy - Technique and application

#### **Unit III: Research Ethics**

1. Identify, define, and analyze ethical issues in multicultural context.
2. Reasons for conducting ethical review of research, theories and concepts related to ethical decision-making including consequentialism, respect, dignity, discourse ethics, Ethnicity, liberalism.
3. Ethical importance of consent, privacy, and confidentiality in research
4. Issues of academic decency and plagiarism, conflicts of interest, authorship and publication

#### **Unit IV: Analysis and Writing Up**

1. Chapterization, preparing a text for submission and publication, concepts of preface, notes (end and footnotes), glossary, prologue and epilogue, appendix, bibliography (annotated) and references cited, review and index.

2. Similarities and differences between qualitative and quantitative data analysis; introduction of software for data analysis.

#### **Unit V: Bio-Statistics**

1. Types of variables, presentation and summarization of data (tabulation and illustration).

2. Descriptive statistics- Measurers of Central Tendency, Measure of Variation, Skewness and Kurtosis, Variance and standard deviation, Normal and binomial distribution.

3. Tests of Inference- Variance ratio test, Student's 't' tests, Chi-square test and measures of association, Analysis of variance, Estimation of confidence interval, Correlation,

Regression Analysis, Study design issues: Unit and Universe; Sample size and Power,

4. Pedigree Analysis- Importance and implication.

#### **Suggested Readings**

1. Bernard R. 2011. *Research Methods in Anthropology: Qualitative and Quantitative Approaches*. AltaMira Press.
2. Emerson RM, Fretz RI and Shaw L. 1995. *Writing Ethnographic Fieldnotes*. Chicago, University of Chicago Press.
3. Garrard E and Dawson A. 2005. What is the role of the research ethics committee? Paternalism, inducements, and harm in research ethics. *Journal of Medical Ethics*; 31: 419-23.
4. Lawrence NW. 2000. *Social Research Methods, Qualitative and Quantitative Approaches*. Boston: Allyn and Bacon.
5. Madrigal L. 2012. *Statistics for Anthropology*. Cambridge: Cambridge University Press.
6. Michael A. 1996. *The Professional Stranger*. Emerald Publishing.
7. Nayank J. K. and Singh P. 2015. *Fundamentals of Research Methodology –Problems and Prospects*. New Delhi: SSDN Publishers and Distributers.
8. O'reilly K. 2005. *Ethnographic Methods*. London and New York: Routledge.
9. Patnaik S.M. 2011. *Culture, Identity and Development: An Account of Team Ethnography among the Bhil of Jhabua*. Jaipur: Rawat Publications.
10. Pelto PJ and Pelto GH. 1978. *Anthropological Research, The Structure of Inquiry*. Cambridge: Cambridge University Press.
11. Sarantakos S. 1998. *Social Research*. London: Macmillan Press.
12. Zar JH. 2010. *Biostatistical Analysis*. Prentice Hall.

## SEMESTER-I

### COURSE - 5: TRIBES IN INDIA (ANT-C 315)

Full Marks: 100, Credits: 2

(Questions are to be set covering all units)

#### Unit I: Anthropological Concept of Tribe

- Problems of nomenclature, definition, and classification
- General and specific characteristics of tribes
- Tribes in India: Antiquity, historical, academic, administrative and anthropological importance, PVTGs.

#### Unit II: Tribes and Wider world

- Tribe- caste continuum,
- The history of tribal administration; Constitutional safeguards
- Draft National Tribal Policy, Issues of acculturation assimilation and integration. Impact of development schemes and programme on tribal life

#### Unit III

- Gender and Tribe, Distribution of tribes in India
- Tribes: Nomenclature- emic and etic differences
- Classification of tribes based on their economy, occupation and religion
- Racial elements among the tribes
- Scheduled and non-scheduled categories of tribes

#### Unit IV

- Ethnicity Issues: Tribal movements; Identity issues
- Tribal monographs
- Problems of tribal development

#### Unit V

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

#### List of Ethnographies:

- Walker A. (1986). *The Todas*. Delhi : Hindustan Publishing Corporation Verrier Elwin (1992). *The Muria and their Ghotul*. USA: Oxford University Press.
- Malinowski M. (1922). *Argonauts of the Western Pacific*. London: Routledge and Kegan Paul Ltd.

- Furer-Haimendorf C.V. (1939). *The Naked Nagas*. London: Methuen and Co.
- Evans-Pritchard E.E. (1940). *The Nuer: A Description of the Modes of Livelihood and Political Institutions of a Nilotic People*. Oxford : Clarendon Press.
- Majumdar D. N. (1950). *Affairs of tribes*. Lucknow: Universal Publishers Ltd.

**Suggested Readings:**

1. Behera, D.K and Georg pfeffer. Contemporary Society Tribal Studies, Volume I to VII. New Delhi: Concept Publishing Company
2. Georg Pfeffer. Hunters, Tribes and Peasant: Cultural Crisis and Comparison. Bhubaneswar: Niswas.
3. Gupta D. (1991). Social Stratification. Oxford University Press: Delhi.
4. Nathan D. (1998). Tribe-Caste Question. Simla: IAS.
5. National Tribal Policy (draft). (2006). Ministry of Tribal Affairs. Government of India.
6. Patnaik S.M. (1996). Displacement, Rehabilitation and Social change. Inter India Publication, Delhi.
7. Shah G. (2002). Social Movement and the State. Delhi: Sage.
8. Vidarrthy.L.P. and B.N. Sahay . Applied Anthropology and Development in India. New Delhi: National Publishing House
9. Vidyarthi L.P. and Rai B.K. (1985) Tribal Culture in India, New Delhi, Concept Publishing Company.

**SEMESTER-I**

**COURSE - 6: GENERAL PRACTICAL IN ANTHROPOLOGY - I**

**(ANT-C 316)**

Full Marks: 100, Credit: 2

(Questions are to be set covering all units)

**Practical under Biological Anthropology**

**Somatometry**

1. Maximum head length	9. Physiognomic facial height
2. Maximum head breadth	10. Morphological facial height
3. Minimum frontal breadth	11. Physiognomic upper facial height
4. Maximum bizygomatic breadth	12. Morphological upper facial height

5. Bigonial breadth	13. Head circumference
6. Nasal height	14. Stature
7. Nasal length	15. Sitting height
8. Nasal breadth	16. Body weight

### **Somatoscopy**

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

### **Osteology & Craniometry**

A) Each student has to identify and draw with levelling different parts of the following human bones.

a)Skull, b)Mandible, c) Clavicle, d) Scapula, e) Humerus, f) Radius & Ulna, g) Femur, h)Tibia-fibula, i) a Vertebrae

B) Each student has to study two human crania *I* mandible and record the following measurement. The students are to be familiar with different landmarks of the skull and mandible, instruments and methods of taking measurement.

- 1) Maximum Cranial Length
- 2) Nasion-inion Length
- 3) Cranial Height
- 4) Max Cranial Breadth
- 5) Nasion-Prosthion height
- 6) Bio-zygomatic breadth
- 7) Minimum frontal breadth
- 8) Nasal Length
- 9) Nasal Breadth
- 10) Glabella inion Length
- 11) Palatal breadth
- 12) Palatal Length
- 13) Breadth of Ramus
- 14) Length of Ramus
- 15) Angle of Mandible
- 16) Facial Angle

Each student has to draw sagittal contour of two crania in F.H. Plane and construct:

i) Facial Profile Angle, ii) Quadrangle of Skull

Laboratory Record maintenance is compulsory.

### **Practical under 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

Laboratory Record maintenance is compulsory.

### **Practical under Archaeological Anthropology**

The students are required to identify, draw and perform metrical analysis of lithic artefacts belonging to different cultural periods. They are to describe the nature (core/flake) of tool, technique of making, (flaking types, grinding, polishing etc.) rolling, weather effect patina, condition of the working edges etc.

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

Laboratory Record maintenance is compulsory.

### **Museology**

The students are required to learn the basic principles of museum, documentation, labelling, and display of museum specimens. They are to learn the techniques of preservation, conservation of museum specimens. Each student has to apply the above methods whichever applicable on specimens of following materials.

#### **Composition:**

Plant remains: Wood, Bamboo,

Fibre: Cloth/Linen,

Metals: Iron, Brass, Copper, Silvers

Animal remains: Bone, antler, horn, leather, hide

Laboratory Record maintenance is compulsory

### **Suggested Readings:**

1. Bhasin, M.K and Chahal, S.M.S. 1996. Laboratory manual for human blood analysis. Delhi: Kamla Raj Enterprises.
2. Omohundro, John T. 2008. Thinking like an anthropologist: a practical introduction to cultural anthropology. New York: McGrawHill Publication.
3. Roy, Deepak Kumar. 2006. Museology: some cute points. New Delhi; Kalpaz Publications.
4. Singh, Indera P and Bhasin, M. K. 1989. Anthropometry: a laboratory manual on biological anthropology. New Delhi: Kamal-Raj Enterprises
5. Vergo, Peter. 1989. New museology. London: Reaktion Books.

## SEMESTER-II

### COURSE - 7: BIOLOGICAL ANTHROPOLOGY - II (HUMAN GENETICS)

#### (ANT-C 321)

Full Marks: 100

(Questions are to be set covering all units)

#### Unit-I

Human Genetics: Scope and Developments;

Mendel's Law of Inheritance and its application to Man;

Patterns of Inheritance of Autosomal (dominant, recessive and co-dominant) and sex-linked traits, Lethal and sub-Lethal genes; Modifying genes; Suppressor genes

#### Unit-II

Methods of studying human heredity: Twin method, Pedigree method and Sib-pair method;

Linkage and crossing over;

Polygenic Inheritance in Man;

#### Unit-III

Population Genetics: Hardy-Weinberg Law and its application;

Genetic Polymorphism: Balanced and Transient;

Natural Selection; Consanguinity and Inbreeding Coefficient, Genetic Drift, Hybridization;

#### Unit-IV

Structure & function of Cell, Cell division: Mitosis & Meiosis

Human Cytogenetics: Chromosome, Karyotypes, Banding Techniques, Sex -determination,

Chromosomal aberration: Numerical and Structural

#### Unit-V

Genome Diversity of Indian Populations;

Application areas of human genetics: Pre-natal diagnosis and genetic counselling; Paternity determination;

#### **Suggested Readings:**

1. Brown TA. (2007). Genomes. Garland Science.
2. Cavalli-sforza LL, Menozzi P, Piazza A (1994). History and Geography of Human Genes. Princeton University.
3. Cummings MR (2011). Human Heredity: Principles and Issues. Brooks/Cole, Cengage Learning
4. Giblett, ER. (1969). Genetic Markers in Human Blood. Blackwell Scietific, Oxford.

5. Griffiths AJF, Wessler SR, Carroll SB, Doebley J. (2011). An Introduction to Genetic Analysis. Macmillan Higher Education.
6. Griffiths AJF. (2002). Modern Genetic Analysis: Integrating Genes and Genomes. WH Freeman Press.
7. Jobling M, Hurler M and Tyler-Smith C. (2004). Human Evolutionary Genetics: Origins, Peoples & Disease. New York: Garland Science.
8. Lewis R. (2009). Human Genetics: Concepts and Application. The McGraw–Hill Companies, Inc.
9. Patch C. (2005). Applied Genetics in Healthcare. Taylor & Francis Group
10. Snustad .D.P. and Simmons M.J. (2006). Principles of Genetics, Fourth Edition, John Wiley & Sons USA
11. Strachan T and Read AP. (2004). Human Molecular Genetics. Garland Science
- 12.** Vogel F. and Motulsky A.G. (1996). Human Genetics. Springer, 3rd revised edition.

## SEMESTER - II

### COURSE - 8: THEORIES OF SOCIETY AND CULTURE (ANT-C 322)

Full marks: 100; Credits: 4

(Questions are to be set covering all units)

#### Unit-I:

Early theories of culture, Classical Evolutionism and Diffusionism; Functionalism: Malinowski, Neo-evolutionism

#### Unit-II:

Interpretive and Symbolic Anthropology; Culture and Cognition / Cognitive Anthropology

#### Unit-III:

Structural-Functionalism: Redcliffe-Brown, Neo-Functionalism: Leach, Gluckman, Nadel and Firth.

#### Unit-IV:

Structuralism and Neo Structuralism: Levi-Strauss, Althusser, Foncoult; Structural Marxism: Godelier, Meillassoux

#### Unit-V:

Post Modern Anthropology: Marcus, Fischer, and Clifford.

#### **Suggested Readings:**

1. Applebaum H.A. (1987) *Perspectives in Cultural Anthropology*. Albany: State University of New York.
2. Barnard A. (2000). *History and Theory in Anthropology*. Cambridge: Cambridge University.
3. Berger, A.A. 1992. *Popular culture genres: theories and texts*. London: Sage Publications.
4. Jha, Makhan. 1994. *An introduction to anthropological thought*. New Delhi: Vikas Pub. House Pvt. Ltd.
5. McGee R.J. and Warms R.L. (1996) *Anthropological Theories: An Introductory History*.
6. Misra, Kamal K. 2000. *Textbook of anthropological linguistics*. New Delhi; Concept Publishing Company.
7. Moore M. and Sanders T. (2006). *Anthropology in Theory: Issues in Epistemology*, Malden, MA: Blackwell Publishing.
8. Upadhyay, V.S and Pandey, Gaya. 1993. *History of anthropological thought*. New Delhi; Concept publishing company.

## SEMESTER -II

### COURSE - 9: PRE AND PROTO-HISTORY (ANT-C 323)

Full Marks – 100; Credits: 4

(Questions are to be set covering all units)

This course aims at familiarizing the students about the pre-and-proto history of India, Africa and Europe from the lower Palaeolithic to the Iron Age.

#### Unit-I

Lower Palaeolithic Cultures – Typo-technology, Habitat, Environment Economy, People and Distribution

Palaeolithic Outline in India

Pebble tool culture: Sohan; Oldowan; Choukoutien

Acheulian Cultures of India (Peninsular); Acheulian Cultures of Africa; Acheulian Cultures of Europe

#### Unit-II

Middle Palaeolithic Cultures / Mousterian Culture – Habitat, Environment, Typo-technology, Economy, Social Organisation, Religion

Middle Palaeolithic Culture in India, Africa, and Europe

Upper Palaeolithic cultures - Habitat, Environment, Typo-technology, Economy, Social Organisation, Religion, Art

Upper Palaeolithic cultures in India, Africa, and Europe

#### Unit -III

Mesolithic Cultures – Climate changes, Typo-technology, Habitat, Economic activity, Socio-religious features

Indian Mesolithic: Langhnaj; Teri Site; Birbhanpur; Bagor; Bhimbetka; Adamgarh, Sarainahar Rai; Lekhahlia; Mahadeva

Mesolithic Art in India

Mesolithic Europe: Azilian culture; Tardenoisian Culture; Maglemosian Culture; Kitchen Midden Culture; Natuffian Culture

Neolithic Culture in India: General Features of Neolithic Culture; Regional variation: Northern Zone, Central Zone, Eastern Zone, North-eastern Zone, Southern Zone.

Important early farming centres and sites in old world (excluding India) – Jericho, Catal Huyuk, Jarmo, Beidha, Khirokitia, Zawi Chemi, Shanidar

#### Unit-IV

The Harappan Civilization: Meaning of civilization; Chronology, Extent and distribution of the Harappan Civilization;

Salient features (Town planning and settlement, Agriculture, Art, Craft and Metallurgy, Trade, Religion, Burials, Theories of Origin and Cause of decline

Palaeo-demographic and Pathological genes with regard to the Harappan Civilization

#### Unit- V

Chalcolithic Cultures: Emergence of early farming communities, Chalcolithic Cultures in

Central India, Deccan and Eastern India; The Copper-Hoard Culture in India

Iron Age Cultures: Origin, emergence and chronology of Iron Age in India. Megalithic cultures in South India: Various types of chronology, Exchange and burial practices

**Suggested Readings:**

1. Basa, Kishor K. and Mohanty, Pradeep. 2000. Archaeology of Orissa. New Delhi: Pratibha Prakashan.
2. Bhattacharya, D. K. 2011. An outline of Indian prehistory. Delhi: Palaka Prakashan.
3. Birx, H. James. 2006. Encyclopedia of anthropology. New Delhi: Sage Publications.
4. Burroughs, William J. 2006. Climate change in prehistory: the end of the reign of chaos. Cambridge: Cambridge University Press.
5. Dennell, Robin. 2009. Palaeolithic settlement of Asia. Cambridge: Cambridge University Press.
6. Fagan, Brian M. 2013. World prehistory: a brief introduction. London: Routledge.
7. Fagan, Brian M. and Durrani, Nadia. 2017. World prehistory: a brief introduction. New York: Routledge.
8. Fagan, Brian M. and Durrani, Nadia. People of the earth: an introduction to world prehistory. London: Routledge.
9. Gosden, Chris. 1999. Anthropology and archaeology: a changing relationship. New York: Routledge Publication.
10. Haviland, William A. 2011. Evolution and prehistory: the human challenge. Australia: Wadsworth Cengage Learning Publication.
11. Haviland, William A. 2011. Evolution and prehistory: the human challenge. Australia: Wadsworth Cengage Learning Publication.
12. Jain, V.K. 2006. Prehistory and protohistory of India: an appraisal palaeolithic--non-harappan chalcolithic cultures. New Delhi: D.K. printworld.
13. Johnson, Matthew. 2010. Archaeological theory: An introduction. United Kingdom: Wiley Blackwell.
14. Kelly, Robert L. and Thomas, David Hurst. 2013. Archaeology. Australia: Wadsworth Cengage Publications.
15. Kochhar, Rajesh. 2000. Vedic people: their history and geography. Hyderabad: Orient Blackswan Privated Limited.
16. Kohl, Philip L. 2007. Making of bronze age Eurasia. Cambridge: Cambridge University Press.
17. Leakey, M. D. and Roe, D. A. 1994. Olduvai gorge. Cambridge: Cambridge University Press.
18. Neumann, Thomas W.; Sanford, Robert M.; and Harry, Karen G. 2010. Cultural resources archaeology: an introduction. Lanham: Altamira Publications.
19. Reddy, V. Rami. 2014. Elements of prehistory. Tirupati: V. Indra.
20. Souvatzi, Stella G. 2008. Social archaeology of households in neolithic Greece: an anthropological approach. Cambridge: Cambridge University Press.
21. Stoczkowski, Wiktor. 2002. Explaining human origins: myth, imagination, and conjecture. Cambridge: Cambridge University Press.

## SEMESTER -II

### COURSE - 10: INDIAN ANTHROPOLOGY (ANT-C 324)

Full Marks – 100, Credits: 4

(Questions are to be set covering all units)

#### Unit – I

Growth of anthropology in India:

Contributions of the 19th century and early 20th century scholar administrators;

Contribution of Indian Anthropologists to tribal and caste studies;

Concept used in the study of Indian society and culture:

Indian civilization – Dimension and Structure; Linguistic classification and cultural Division;

Unity and Diversity; Sacred Complex in India; Nature-Man-Spirit complex in India; Little

Traditions and Great traditions; Universalization and Parochialization; Sanskritisation and Westernization

#### Unit – II

Basic concepts:

Indian village as part society, as an isolate

Caste as a group and system

Scheduled Caste and Scheduled Tribe

Tribe, Caste, Varna and Caste / Jati

Notified and Denotified Groups

Other Backward classes and castes

#### Unit –III

Caste and Economy: Theories of origin of caste, Caste hierarchy, Caste mobility, role of purity and pollution, Jajmani System, Caste and Politics, Dominant Caste

Village communities: Integration and Extension, village studies in India, Peasant society and culture

Regionalism and Ethnicity

#### Unit - III

Impact of Buddhism, Jainism, Islam and Christianity on Indian society

Urban Communities: Structure and types; Cultural role and Function of Cities; Folk-urban and Tribe-Caste continuum

#### Unit - IV

Basic Issues:

New Panchayati Raj

Grama Sabha

Women in new Panchayats

Constitutional safeguards for Scheduled Tribes and Scheduled Caste

Major tribal groups

Tribal States in India; Tribal Movements for Autonomy; Development Schemes for Tribals

#### Unit – V

Ethnographic profiles of Indian tribes;

Contributions of:

S. C. Roy, G. S. Ghurye, N. K. Bose, D. N. Majumdar, Verrier Elwin, M. N. Srinivas,  
S. C. Dube, L. P. Vidhyarthi

#### **Suggested Reading**

1. Bernard CS. (2000). India: The Social Anthropology of Civilization. Delhi: Oxford University Press.
2. Bhasin MK, Watter H and Danker-Hopfe H. (1994). People of India – An Investigation of Biological variability in Ecological, Ethno-economic and Linguistic Groups. Kamla Raj Enterprises, Delhi
3. Dube SC. (1992). Indian Society. National Book Trust, India : New Delhi.
4. Dumont L. (1980). Homo Hierachicus. University of Chicagon Press.
5. Guha B.S. (1931). The racial attributes of people of India. In : Census of India, 1931, vol I, Part III (BPO, Simla)
6. Guha BS. (1931). The racial attributes of people of India. In: Census of India, 1931, vol I, Part III (BPO, Simla)
7. Gupta D. Social Stratification. Delhi: Oxford University Press.
8. Haddon AC. (1929). Races of man. Cambridge University, London.

9. Kapoor A.K. (1992). Genetic Diversity among Himalayan Human Populations. M/S Vinod Publishers, Jammu
10. Karve I. (1961). Hindu Society: An Interpretation. Poona : Deccan College
11. Lopez DS. (1995). Religions of India in Practice. Princeton University Press
12. Majumdar DN. (1901). Races and Culture of India. Asia Publishing House, Bombay
13. Malhotra K.C. (1978). Morphological Composition of people of India. J. Human Evolution.
14. Nicholas D. (2001). Castes of Mind: Colonialism and the Making of Modern India. Princeton University Press.
15. Trautmann TR (2011). India: Brief history of Civilization. Oxford University Press: Delhi
16. Vidyarthi LP and Rai BK. (1976). The tribal culture of India. Concept Publishing Co, Delhi.

## **SEMESTER -II**

### **COURSE - 11: PEASANTS IN INDIA (ANT-C 325)**

Full Marks – 100, Credits: 2

(Questions are to be set covering all units)

#### **Unit I: Anthropological Concept of 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 changes

#### **Unit II**

- American studies and the contribution of Robert Redfield
- Folk- Urban continuum Features of Peasant Society and Culture

#### **Unit-III**

- Ethnicity Issues: Peasant movements; Identity issues

#### **Unit-IV**

- Theoretical approaches to Peasant Studies: Historic-Structural approach, Microeconomic and Cognitive Approaches

#### **Unit-V**

- Status of the Peasant in Anthropology, De-territorialization and Trans-nationalization

#### **List of Ethnographies:**

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

#### **Suggested Readings**

1. Gupta D. (1991). *Social Stratification*. Oxford University Press: Delhi.
2. Madan V. (2002). *The Village in India*. Oxford University Press: Delhi.
3. Nathan D. (1998). *Tribe-Caste Question*. Simla: IAS.
4. Patnaik S.M. (1996). *Displacement, Rehabilitation and Social change*. Inter India Publication, Delhi.
5. Redfield, Robert. (1965). *Peasant society and culture an anthropological approach to civilization*. Chicago [u.a.]: Univ. of Chicago Press.
6. Shah G. (2002). *Social Movement and the State*. Delhi: Sage.
7. Shanin T. (1987). *Peasants and Peasantry*. New York, Blackwell.
8. Wolf E. (1966). *Peasants*. NJ, Prentice Hall.

## SEMESTER -II

### COURSE - 12: GENERAL PRACTICAL IN ANTHROPOLOGY – II (ANT-C 326)

Full Marks – 100; Credits: 2

The general practical shall include the following components with distribution of marks indicated against each section

I.	Forensic Anthropology	40 marks
II.	Nutritional Anthropology	30 marks
III.	Serological, Haematological and Physiological test	30 marks
<b>Total</b>		<b>100 marks</b>

#### Forensic Anthropology

- a) Determination of age and sex from skull and mandible
- b) Examination of Blood Stain
- c) Development of Latent print
- d) Identification of finger ball patterns & determination of main-line formula (both hands of 5 individuals)

#### Nutritional Anthropology:

The students are to be taught on the following aspects of Nutritional Anthropology.

Determination of nutritional Status:

- a. Each Student is to record dietary intake of household members belonging to three households and calculate intake of different nutrients consumed
- b. Nutritional Anthropology (For assessment of Grades of Malnutrition): (i) Weight (Wt) for age (ii) Height (Ht) for age (iii) Wt / Ht (iv) Mid Arm Circumference
- c. Calculation of Body Mass Index (BMI)
- d. Calculation of Total Body Fat
- e. Measurement of Sub-Cutaneous fat: Triceps, Bicep, Sub-scapula

#### Serological, Haematological and Physiological test:

The students are to perform the following serological and bio-chemical tests on five persons and record the results. They are to be familiar with details of each experiment such as aim of the experiment, apparatus required, chemicals needed, procedure, precaution and results of the experiment.

- i. ABO & Rh Blood group typing
- ii. Sickle-cell test
- iii. Haemoglobin estimating (Sahalis method)
- iv. Demonstration of Blood Smear technique, Malaria parasite detection, Total *RBC/WBC*

- count, ESR, Haemocrit
- v. Blood Pressure & Blood Sugar estimation
  - vi. Colour blindness test.

**Suggested Readings:**

1. Bell, Suzanne. 2010. Encyclopedia of forensic science. New Delhi: Viva Books.
2. Berry, J., & Stoney, D. A. (2001). The history and development of fingerprinting. *Advances in fingerprint Technology*, 2, 13-52.
3. Bhasin, M. K.; Nath, Surinder; Sehgal, V. N. 2007. Human blood analysis. New Delhi: Kamla-Raj Enterprises.
4. Bhasin, M.K and Chahal, S.M.S. 1996. Laboratory manual for human blood analysis. Delhi: Kamla Raj Enterprises.
5. Cowger, J. F. (1992). *Friction ridge skin: comparison and identification of fingerprints* (Vol. 8) CRC Press.
6. Cummins, H., & Midlo, C. (1961). *Finger prints, palms and soles: An introduction to dermatoglyphics* (Vol. 319). New York: Dover Publications.
7. Dirkmaat, Dennis (ed.). 2012. Companion to forensic anthropology. West Sussex: Wiley-Blackwell Press.
8. Ember, Carol R. and Ember, Melvin. 2004. Encyclopedia of medical anthropology: health and illness in the world's cultures. Berlin: Springer Publishers.
9. Jain, A. K., Flynn, P., & Ross, A. A. (2007). *Handbook of biometrics*. Springer Science & Business Media.
10. Lee, H. C., Ramotowski, R., & Gaensslen, R. E. (Eds.). (2001). *Advances in fingerprint technology*. CRC press.
11. Mehta, M. K. (1980). Identification of thumb impression and cross examination of fingerprints. N. M. Tripathi Publication, Bombay.
12. Singh, Indera P and Bhasin, M. K. 1989. Anthropometry: a laboratory manual on biological anthropology. New Delhi: Kamal-Raj Enterprises
13. Singh, Indera P. 2004. A manual of biological anthropology. Delhi: Kamla-Raj Enterprises.
14. White, Tim D.; Black, Michael T.; and Folkens, Pieter A. 2012. Human osteology. Amsterdam: Elsevier/Academic Press.

### **Semester-III:**

#### **COURSE – 13: Anthropological Demography (ANT – C 331)**

Full Marks – 100; Credits: 4

(Questions are to be set covering all units)

Unit – I:

Anthropological Demography:

1. Introduction, definition and basic concepts
2. Relationship between demography, population studies and anthropology
3. Importance of population studies in Anthropology

Basic Demographic Variables:

Age, Sex, Marriage, Sex Ratio, Fertility, Migration, Mortality, Morbidity, and Population Growth

Factors affecting Demographic Variables:

Physical, Environmental, Biological, Socio-Cultural.

Unit – II:

Population Growth Theories : Pre-Malthusian Theory, Malthus Theory, theory of optimum population, Biological theories-Michael Thomas Sadler's Theory, Doubleday's Diet Theory, Pearl and Reed's logistic curve Theory, Corrado Gini's Theory, Herbert Spencer's, Castro's Theory of Protein Consumption, Theory of Demographic Transition.

Unit - III

Factors Regulating Population Growth;

Basic concepts: Fertility rate, Birth Rate, Age-specific Fertility Rates, Net Reproductive Rate, Mortality Rate, Prenatal and Postnatal Life Table, Migration Rates, Intrinsic Rate of Natural Increase, Effective Population Size;

Demography and Human Adaptation, Concept of Environment, Ecology and Functional Adaptation of Human Populations

Unit – IV:

Demographic Consequences of Family Planning and Family Welfare;

Population Structure: Isonomy and Kinship Model;

Demographic profile of India: Decadal population growth, Ethnic composition, Age - Sex Structure, Sex ratio trend, Population Density, Rural-urban Dichotomy, Trends of Fertility and Mortality, Demography of Indian tribal and non-tribal groups, Impact of urbanization on the migration of tribal groups

Unit – V:

Population problems with special reference to India;

National policies: National Population Policy, National Health Policy, National Policy on Reproductive Health Care

Policies Aimed at Growth, Policies Aimed at Distribution, Policy Instruments

### **Suggested Readings**

1. Bhende A. and Kaniikar, T. (2006) *Principles of Population Studies*. Himalaya Publishing House. Mumbai
2. Caldwell J.C. (2006). *Demographic Transition Theory*. Springer.
3. Census of India (2001, 2011), SRS bulletin (2013), NFHS (2006 ), CRS, NSSO ( Can be seen from browsing net)
4. Gautam R.K., Kshatriya, G.K. and Kapoor A.K. (2010) *Population Ecology and Family Planning*. Serials publications. New Delhi.
5. Howell N. (1986) Demographic Anthropology. *Ann. Rev. Anthropol.* 15: 219-246
6. <http://biography.yourdictionary.com/john-graunt>
7. <http://human-nature.com/dm/chap3.html>
8. <http://www.marathon.uwc.edu/geography/demotrans/demtran.htm>
9. Kshatriya G.K. (2000). Ecology and health with special reference to Indian tribes. *Human Ecology special volume 9:229-245*.
10. Kshatriya G.K., Rajesh,G. and Kapoor , A.K. (2010) Population Characteristics of Desert Ecology.VDM Verlag Dr. Muller Gmbh and Co., Germany.
11. Misra BD (1982). *An introduction to the study of population*. South Asia publ. ltd. New Delhi.
12. National Population Policy <http://populationcommission.nic.in/npp.htm>
13. Park K. (2000) *Text book of Preventive and Social Medicine*. Banarsidas Bhanot, Jabalpur.
14. Patra P.K. and Kapoor, A.K. (2009) *Demography And Development Dynamics in a Primitive Tribe of Himalayas*. International Book Distributors, Dehradun
15. 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
16. Sharma A.K. (1979) Demographic transition: A Determinant of Urbanization. *Social Change* 9: 13-17.
17. Srivastava O.S. (1996) *Demographic and Population Studies*. Vikas Publishing House, India
18. Zubrow E.B.W. (1976) *Demographic anthropology. Quantitative approaches*. University of New Mexico Press, Albuquerque.

### **Semester-III:**

#### **COURSE – 14: Field Work Training (ANT – C 332)**

Full Marks – 100; Credits: 2

Each student shall have to undergo training for learning and use of different field techniques for data collection during 30 days of fieldwork under the supervision of a teacher, in a tribal/rural area. The fieldwork shall be camp-based one where the students and supervising teachers have to stay in the field till the completion of the work. There shall be instructional hours or classes per week for every candidate for preparation of synopsis and inventories. The supervising teacher shall be the examiner. Students' performance in fieldwork and evening workshop will be the indicators of evaluation. The performance of the candidate shall be evaluated on a daily basis by the supervising teacher during the field work. The final grading will be done by the supervising teacher at the end of the semester taking into the following aspect:

Preparation of Synopsis and preparatory work	20
Field work performance	40
Field notes and field diary	20
Workshop	20

#### **Suggested Readings**

1. Amit, Vered. 2009. Biographical dictionary of social and cultural anthropology. London: Routledge Publications.
2. Chaudhuri, Sarit K. (eds.). 2014. Fieldwork in South Asia: memories, moments, and experiences. New Delhi: SAGE Publications.
3. Konopinski, Natalie (ed.). 2014. Doing anthropological research: a practical guide. New York: Routledge.
4. Okely, Judith. 2012. Anthropological practice: fieldwork and the ethnographic method. London: Berg Publications.
5. Robben, Antonius C. G. M. and Sluka, Jeffrey A. 2012. Ethnographic fieldwork: an anthropological reader. West Sussex: Wiley-Blackwell Press.
6. Sakel, Jeanette and Daniel Leonard. 2012. Linguistic fieldwork: a student guide. Cambridge: Cambridge University Press
7. Srinivas, M. N. 2002. The Fieldworker and the field: problems and challenges in sociological investigation. New Delhi: Oxford University Press.
8. Srivastava, Vinay Kumar (ed.). 2004. Methodology and fieldwork. New Delhi: Oxford University Press.
9. Subhedar, I. S. 2011. Fieldwork training in social work. Jaipur: Rawat Publications.

**Semester-III:**

**COURSE – 15: HUMAN ECOLOGY: BIOLOGICAL & CULTURAL DIMENSIONS**

**(ANT-C 333)**

Full Marks – 100; **Credit- 2**

**Biological Dimensions**

Unit 1:

- Concepts in Ecology:  
Definition, ecosensitivity adaptation, acclimation, acclimatization, biotic and abiotic component.
- Methods of studying human ecology

Unit II:

- Adaptation to various ecological stresses
- Ecological rules and their applicability to human populations

Unit III:

- Impact of urbanization and industrialization on Man

**Cultural Dimensions**

Unit IV:

- Culture as a tool of adaptation
- various modes of human adaptation in pre-state societies
  - Hunting and food gathering
  - Pastoralism
  - Shifting cultivation

Unit V:

- Ecological themes of state formation:
  - Neolithic revolution
  - Hydraulic civilization
  - Agriculture and peasantry
  - Industrial civilization and growth of urban societies

**Suggested Reading**

1. Berry, J.B. (1976). Human ecology and cognitive style: comparative studies in cultural and physical adaptation. New York: John Wiley.
2. Case RM. (1985). Variations in Human Physiology. Manchester University Press.

3. Cohen, Yehudi A. 1968. Man in adaptation; the cultural present. Chicago: Aldine Pub. Co.
4. Faber & Faber. (1964). Human ecology. Stapledon.
5. Hale T. (2003). Exercise Physiology. England :John Wiley & Sons Inc.
6. McArdle WD, Katch FI and Katch VL. (2010). Exercise Physiology: Nutrition, Energy, and Human Performance. Lippincott Williams & Wilkins.
7. Nageswari KS and Sharma S. (2006). Practical workbook of Human Physiology. Jaypee Brothers, Medical Publisher.
8. Paul R. Ehrlich, Anne H. Ehrlich and John P. Holdress. W.H. (1973). Human ecology: Problems and Solutions. Freeman & Company, San Francisco.
9. Powers SK and Howley ET. (2007). Exercise Physiology: Theory and Application to Fitness and Performance. McGraw-Hill.
10. Redfield, Robert. (1965). Peasant society and culture an anthropological approach to civilization. Chicago [u.a.]: Univ. of Chicago Press.
11. Richard B. Lee, and Irven DeVore. 1969. Man the hunter. Chicago: Aldine Pub. Co.
12. Schutkowski, H. Berlin. Springer Verlag. (2006) Human ecology: biocultural adaptation in human communities.
13. Sherwood L. (2008). Human Physiology: From Cells to Systems. Brooks Cole.
14. Theodorson, G.A. Row. (1961). Studies in Human Ecology. Peterson & Company Elmsford, New York.
15. Vander AJ, Sherman JH and Dorothys L. (1978). Human Physiology: The Mechanisms of Body Functions. Mc Graw-Hill Education.
16. Wildmaier EP, Raff H, Strang KT. (2014). Vander's Human Physiology: The Mechanisms of Body. Mc Graw Hill Education.

**Semester-III: (GROUP – A: Physical / Biological Anthropology)**

**COURSE – 16: Medical Genetics (ANT – C 334 ‘A’)**

Full Marks – 100; **Credit- 4**

(Questions are to be set covering all units)

**Unit-I:**

Medical Genetics: Meaning and Scope; History and impact of genetics in medicine;

Human Molecular Genetics: Structure and function of DNA and RNA; Replication of DNA, Recombinant DNA and Techniques of DNA assay: PCR, RFLP, Southern blotting, DNA sequencing

Gene Disease-Environment interaction; Genetic susceptibility to common diseases: Diabetes, Hypertension, Coronary Heart Diseases

**Unit-II:**

Inborn Error Metabolism: Phenyleketonuria, Alpha 1 Antitrypsin Deficiency, G6-PD Deficiency, Disorder of Lipid Metabolism: Familial Hypercholesterolaemia and LDL Binding

**Unit-III:**

Haemoglobinopathies: Sickle Cell anaemia, Thalassemia; Autosomal Dominant Diseases: Huntington Disease, Neurofibromatosis; Autosomal Recessive Diseases; Albinism, Cystic Fibrosis; Genetics of X-linked Diseases: Duchenne Muscular Dystrophy (DMD), Hemophilia and Factor VIII Gene;

Other forms of Genetic Disorders: Bloom's syndrome, Autism, Ataxia; Immunogenetics: HLA and Disease; Blood group and Disease: Erythroblastosis fetalis, Small pox and Malaria; Genetics of Deafness.

**Unit-IV:**

Methods in identification of genetic diseases: Pedigree method, cytogenetics method, biochemical and molecular methods; Prenatal diagnosis of genetic disease and Genetic Counselling; Population Screening and Community genetics.

**Unit-V:**

Medical Biotechnology and Treatment of genetic Diseases; Gene Therapy; Stem Cell Therapy, Ethical Issues in Medical Genetics

**Suggested Reading**

1. Gunder, Laura M. and Martin, Scott A. 2011. Essentials of medical genetics for health professionals. USA: Jones & Bartlett Learning.
2. Nussbaum, Robert L.; McInnes, Roderick R.; and Willard, Huntington F. 1950. Thompson & Thompson Genetics in Medicine. Philadelphia: Saunders, an imprint of Elsevier Inc.
3. Pritchard, D. J. and Korf, Bruce R. 2003. Medical genetics at a glance. Oxford: Blackwell Science Ltd.

**Semester-III: (GROUP – A: Physical / Biological Anthropology)**

**COURSE – 17: Practical in Biological Anthropology - I (ANT – C 335 ‘A’)**

Full Marks – 100; Credit- 4

(Questions are to be set covering all units)

**1. Somatometry (Based on Current Techniques)**

**Measurement on Head :**

(i) Maximum Head Length; (ii) Maximum Head Breadth; (iii) Least Frontal Breadth; (iv) Bizygomatic Breadth; (v) Bigonial Breadth; (vi) Nasal Height; (vii) Nasal Breadth; (viii) Nasal Depth; (ix) Auricular Height; (x) Physiognomic Facial Length; (xi) Morphological Facial Length; (xii) Physiognomic Superior Facial Length; (xiii) Morphological Superior Facial Length; (xiv) Physiognomic Ear Length; (xv) Physiognomic Ear Breadth; (xvi) Horizontal Circumference of the Head; (xvii) Transverse arch of the Head; (xviii) Profile Angle

**2. Indices :**

(i) Cephalic Index; (ii) Nasal Index; (iii) Ear Index; (iv) Physiognomic Facial Index; (v) Morphological Facial Index.

**3. Measurement on Trunk and Limbs :**

(i) Height Vertex; (ii) Height Tragus; (iii) Height Sternale; (iv) Height Illiospinale; (v) Height Tibiale; (vi) Height Spherion; (vii) Height Acromian; (viii) Height Radiale; (ix) Height Stylion; (x) Height Dactylion; (xi) Sitting Height Vertex; (xii) Span (Arm Stretch); (xiii) Bi-acromial Diameter; (xiv) Chest Girth; (xv) Length of Hand; (xvi) Breadth of Hand; (xvii) Length of Foot; (xviii) Breadth of Foot; (xix) Bicristal Breadth; (xx) Weight of Body.

**4. Indices :**

(i) Length Breadth index of Hand; (ii) Length Breadth index of Foot; (iii) Relative Sitting Height Index.

**5. Somatoscopy:**

(i) Skin colour; (ii) Hair colour; (iii) Hair form; (iv) Hair texture; (v) Hair whorls; (vi) Colour of Iris; (vii) Colour of sclera; (viii) Eye lids; (ix) Eye brow (shape and quantity); (x) Eye opening; (xi) Eye folds; (xii) Supra orbital ridges; (xiii) Nasal Root; (xiv) Profile of nasal bridge; (xv) Nasal septum; (xvi) Tip of nose; (xvii) Fore-head; (xviii) Chin; (xix) Prognathism; (xx) External ear : Ear shapes, Ear lobe attachment, Ear lobe shape size Darwins

tubercle; (xxi) Lips; (xxii) Frontal outline of the face; (xxiii) Tongue rolling; (xiv) Tongue folding; (xv) Hand clasping; (xvi) Arm folding.

### **DERMATOGLYPHICS :**

Techniques of taking Finger, Palm and Sole Prints:

- (a) Finger : Identification of Whorls, Loops and Arches; Dankmeijer's Index; Furushato's Index; Ridge Counting, Absolute Finger Ridge Count (AFRC), Total Finger Ridge Count (TFRC), Genotyping.
- (b) Palm and Sole : Main Line Formula; Axial Triadius; Angle atd; Patterns on Interdigital Areas; a-b, b-c and c-d ridge counts.  
Calculation of the following indices : Pattern Intensity Indices; Main Line Index
- (c) Palmer Creases: Analysis of Palmer Flexion Creases – Main and Subtypes.

### **FORENSIC ANTHROPOLOGY**

- a) Finger Printing; Classification, Filing and Search Development of Latent Prints
- b) Bones and Teeth for determination of Sex and Age
- c) Reconstruction of Facial Features using Somatometry and Somatoscopy

### **SEROLOGY**

Blood groups and Genetical Strains. Techniques of ABO blood groups with subgroups, MN and Rh blood grouping, ABH secretion. Complete Blood Cell Count: White Cell Count, Red Cell Count, Haemoglobin estimation,

Haematocrite reading or packed cell volume,

### **PTC Sensitivity**

Preparation of PTC solution, PTC test (Taster and Non-taster), Calculation of relative gene frequencies (Analysis of the blood groups and PTC testing of at least thirty individuals should be recorded)

### **Suggested Readings:**

1. Bell, Suzanne. 2010. Encyclopedia of forensic science. New Delhi: Viva Books.
2. Berry, J., & Stoney, D. A. (2001). The history and development of fingerprinting. *Advances in fingerprint Technology*, 2, 13-52.

3. Bhasin, M. K.; Nath, Surinder; Sehgal, V. N. 2007. Human blood analysis. New Delhi: Kamla-Raj Enterprises.
4. Bhasin, M.K and Chahal, S.M.S. 1996. Laboratory manual for human blood analysis. Delhi: Kamla Raj Enterprises.
5. Cowger, J. F. (1992). *Friction ridge skin: comparison and identification of fingerprints* (Vol. 8) CRC Press.
6. Cummins, H., & Midlo, C. (1961). *Finger prints, palms and soles: An introduction to dermatoglyphics* (Vol. 319). New York: Dover Publications.
7. Dirkmaat, Dennis (ed.). 2012. Companion to forensic anthropology. West Sussex: Wiley-Blackwell Press.
8. Ember, Carol R. and Ember, Melvin. 2004. Encyclopedia of medical anthropology: health and illness in the world's cultures. Berlin: Springer Publishers.
9. Jain, A. K., Flynn, P., & Ross, A. A. (2007). *Handbook of biometrics*. Springer Science & Business Media.
10. Lee, H. C., Ramotowski, R., & Gaensslen, R. E. (Eds.). (2001). *Advances in fingerprint technology*. CRC press.
11. Mehta, M. K. (1980). Identification of thumb impression and cross examination of fingerprints. N. M. Tripathi Publication, Bombay.
12. Singh, Indera P and Bhasin, M. K. 1989. Anthropometry: a laboratory manual on biological anthropology. New Delhi: Kamal-Raj Enterprises
13. Singh, Indera P. 2004. A manual of biological anthropology. Delhi: Kamla-Raj Enterprises.
14. White, Tim D.; Black, Michael T.; and Folkens, Pieter A. 2012. Human osteology. Amsterdam: Elsevier/Academic Press.

**Semester-III: (GROUP – A: Physical / Biological Anthropology)**

**COURSE – 18: Growth and Nutrition (ANT – E<sub>1</sub> 336 ‘A’)**

Full Marks – 100; Credit- 4

(Questions are to be set covering all units)

Unit-I

Human Growth and Development: History, Definition and Scope; Motor skills, milestones and functions; Sequences of motor skill Development

Patterns of Growth: Prenatal and Postnatal, Infancy, Childhood, Adolescence, Adulthood, Senility

Factors Affecting Growth

Concept of Age – Chronological, Skeletal and Dental

Unit-II

Human Growth Curves; Methods of Growth Studies: Cross Sectional, Longitudinal and Mixed Longitudinal; Changing Growth Patterns: Secular Trend

Unit-III

Nutrition: Basic Terms and Concepts: Socio-Cultural Attributes of Foods - Hot, Cold, Preferences and Avoidances;

Determinants of Nutritional Levels: Anthropometric, Clinical Signs, Biochemical, Diet, and Nutrition, Socio-economic Assessment, Evaluation, Monitoring and Surveillance; Concept of Standards and / or reference values of Growth and Nutritional Status.

Unit-IV

Nutritional Disorders with special reference to Anaemia: Iron Deficiency, Folic acid Deficiency and Vitamin ‘B12’ Deficiency; Infant Feeding Practices.

Nutrient conditions: Malnutrition, Under-Nutrition, Over-Nutrition, Obesity, etc.

Broad View and Special Problems related to Growth and Nutrition; Groups at Risk: Infants, Pregnant Mothers Lactating Mothers, and Old Age Problems

Unit-V

Government Programmes: ANP, ICDS, SNP, Mid-Day Meal Programme, Vitamin ‘A’ Prophylaxis Programme, Nutritional Anaemia Prophylaxis Programme, Goitre Control Programme, Vitamin ‘C’ and Vitamin ‘D’ Deficiency.

Important Role of Maternal Education regarding Health and Nutrition at Home and for Community.

Infections: Diarrhoea, Dysentery, Dehydration, Amoebiasis, Worm Infection, TB, AIDS.

## Suggested Readings

1. Bogin B. (1999) Patterns of human growth. Cambridge University Press.
2. Cameron N and Bogin B. (2012) Human Growth and Development. Second edition, Academic press Elsevier.
3. Frisancho R. (1993) Human Adaptation and Accommodation. University of Michigan Press.
4. Harrison GA and Howard M. (1998). Human Adaptation. Oxford University Press.
5. Harrison GA, Tanner JM, Pibeam DR, Baker PT. (1988). Human Biology. Oxford University Press.
6. Howell F.C. (1977). *Horizons of Anthropology*. Eds. S. Tax and L.G. Freeman, Aldine Publishing House, Chicago.
7. Kapoor AK and Kapoor S. (1995) Biology of Highlanders. Vinod Publisher and Distributor.
8. Kathleen K. (2008). Encyclopedia of Obesity. Sage.
9. Malina RM, Bouchard C, Oded B. (2004) Growth, Maturation, and Physical Activity. Human Kinetics.
10. McArdle WD, Katch FI, Katch VL. (2001) Exercise Physiology: Energy, Nutrition, and Human Performance.
11. Singh I, Kapoor AK, Kapoor S. (1989). Morpho-Physiological and demographic status of the Western Himalyan population. In Basu and Gupta (eds.). Human Biology of Asian Highland Populations in the global context.
12. Sinha R and Kapoor S. (2009). Obesity: A multidimensional approach to contemporary global issue. Dhanraj Publishers. Delhi.

**Semester-III: (GROUP – A: Physical / Biological Anthropology)**

**COURSE – 18: Forensic Anthropology – I (ANT – E<sub>2</sub> 336 ‘A’)**

Full Marks – 100; Credit- 4

(Questions are to be set covering all units)

Unit-I

Definition, aim & Scope of Forensic Anthropology and its relationship with other biological & chemical Sciences

Unit-II

Definition of crime, Theories on Crimes, Crime Investigation: Location, Evaluation, Evidence Collection, Protection of Evidence, Photographs, Sketching and Search.

Unit-III

Assessment of time & cause of death; Establishment of complete or partial identity from decomposed or mutilated bodies; Study of fragmentary or burnt bones; Reconstruction of Face, Stature, and human dentition

Unit-IV

Skeletal biology and its importance in forensic anthropology; Study of Human Skeleton; Comparison between Human and Non-human Skeletal remains; Age Changes; Sex Differences; Differences among Ethnic Groups; Microscopic and gross anatomy of human bones;

Unit-V

Human Skull: Determination of Age, Sex and Ethnic Group; Skull Structure: Fusion of Sutures

Human Dentition: Determination of Age, Sex and Ethnic Groups; Importance of Dental records in Forensic Odontology.

**Suggested Readings:**

1. Berry, J., & Stoney, D. A. (2001). The history and development of fingerprinting. *Advances in fingerprint Technology*, 2, 13-52.
2. Cowger, J. F. (1992). *Friction ridge skin: comparison and identification of fingerprints* (Vol. 8) CRC Press.
3. Cummins, H., & Midlo, C. (1961). *Finger prints, palms and soles: An introduction to dermatoglyphics* (Vol. 319). New York: Dover Publications.

4. Jain, A. K., Flynn, P., & Ross, A. A. (2007). *Handbook of biometrics*. Springer Science & Business Media.
5. Lee, H. C., Ramotowski, R., & Gaensslen, R. E. (Eds.). (2001). *Advances in fingerprint technology*. CRC press.
6. Mehta, M. K. (1980). Identification of thumb impression and cross examination of fingerprints. N. M. Tripathi Publication, Bombay.

**Semester-III: (GROUP – A: Physical / Biological Anthropology)**

**COURSE – 18: Environmental Anthropology (ANT – E<sub>3</sub> 336 ‘A’)**

Full Marks – 100; **Credit- 4**

(Questions are to be set covering all units)

Unit-I:

Ecology and Ecosystem: Definition of Ecology; Ecosystem; Concept, Meaning, types and components; Adaptation and Evolution; Bio-cultural Adaptation of Man to heat, cold and High Altitude; Eco-niche; Environmental Determinism and Environmental Possibilism; Energetic and Human Society; Sources of Energy, Nutritional Value of Foods, Food chain and Web, Flow of energy.

Unit-II

Environmental Problems: Causes and Consequences of degradation of Land, Water, Air, Forests and Bio-Diversity Resources; Global Warming, Greenhouse Effect and Environmental Pollution; Effects of Development Projects and Process on Environment;

Unit-III

Ecological Anthropology: Definition and Scope; History and Development of Ecological Anthropology; Difference between Ecological Anthropology and Anthropological Ecology; Concepts and Perspectives of Cultural Ecology, Population Ecology, Systems Ecology, Ethno-ecology, Paleoecology, Social Ecology and Ecology and Evolution.

Unit-IV

Ecological Transition: Concept of Culture Core and its relation with environmental and other aspects of culture: Ecological Ethnography: Study of features of Hunter-Gatherers, Nomads and Island Communities; Concept of Carrying Capacity: Ecological Equilibrium; Cultural Component of Eco-system: Culture as a Master Variable

Unit-V

Concept of Ecologically / Environmentally Sustainable Development; Environmentalism: Environmental Movements, Protests and Activism; Ecological Factors influencing population

growth and regulation, Population growth and Environmental Degradation; Environmental Policy in India; Conservation Strategies: JFM and MFP

### **Suggested Reading**

1. Berry, J.B. (1976). Human ecology and cognitive style: comparative studies in cultural and physical adaptation. New York: John Wiley.
2. Bhasin, M.K. and Bhasin, Veena. (2000). Man environment relationship. New Delhi: Kamla Raj enterprises.
3. Bhasin, Veena; Srivastava, V.K. and Bhasin, M.K. (2001). Human ecology in the new millennium. New Delhi; Kamla-Raj Enterprises.
4. Bhasin. M.K. (1998). Contemporary studies in human ecology. New Delhi: Kamla Raj enterprises.
5. Bodley, John H. 2012. Anthropology and contemporary human problems. Lanham: Altamira Publications.
6. Case RM. (1985). Variations in Human Physiology. Manchester University Press.
7. Cohen, Yehudi A. (1968). Man in adaptation; the cultural present. Chicago: Aldine Pub. Co.
8. Cowie, Jonathan. (2007). Climate change: biological and human aspects. New York: Cambridge University Press.
9. Dash, Jagannatha. (1998). Human ecology of foragers: a study of the Kharia (Savara), Ujia (Savara), and Birhor in Similipal hills. New Delhi: Commonwealth.
10. Descola, Philippe. and Palsson, Gisli. (2007). Nature and society: anthropological perspectives. London; Routledge Publication.
11. Dove, Michael R. and Carpenter, Carol. 2008. Environmental anthropology: historical reader. Malden: Black Well Publishing.
12. Ellen, Roy. 2007. Modern crises and traditional strategies: local ecological knowledge in island southeast Asia. New York; Berghahn Books.
13. Faber & Faber. (1964). Human ecology. Stapledon.
14. Gregory, Robert J. (2003). Human ecology and community. New Delhi: Kamla-Raj Enterprises.
15. Hale T. (2003). Exercise Physiology. England :John Wiley & Sons Inc.
16. Huggan, Graham. and Tiffin, Helen. (2010). Postcolonial Ecocriticism: literature, animals , environment. New York: Routledge Publication.
17. Keating, Norah. (2008). Rural ageing: a good place to grow old? UK: Policy Press.

18. Kopnina, Helen. and Ouimet, E.S. 2011. Environmental anthropology today. London: Routledge Publications.
19. McArdle WD, Katch FI and Katch VL. (2010). Exercise Physiology: Nutrition, Energy, and Human Performance. Lippincott Williams & Wilkins.
20. Nageswari KS and Sharma S. (2006). Practical workbook of Human Physiology. Jaypee Brothers, Medical Publisher.
21. Paul R. Ehrlich, Anne H. Ehrlich and John P. Holdress. W.H. (1973). Human ecology: Problems and Solutions. Freeman & Company, San Francisco.
22. Pirta, Raghubir Singh. (2005). Ecology And Human Well Being: Nature And Society In Himachal Pradesh. New Delhi: Shirpa Publications.
23. Powers SK and Howley ET. (2007). Exercise Physiology: Theory and Application to Fitness and Performance. McGraw-Hill.
24. Redfield, Robert. (1965). Peasant society and culture an anthropological approach to civilization. Chicago [u.a.]: Univ. of Chicago Press.
25. Richard B. Lee, and Irven DeVore. (1969). Man the hunter. Chicago: Aldine Pub. Co.
26. Roth, Eric Abella. (2004). Culture, biology and anthropological demography. Cambridge: Cambridge University Press.
27. Schutkowski, H. Berlin. Springer Verlag. (2006) Human ecology: biocultural adaptation in human communities.
28. Sherwood L. (2008). Human Physiology: From Cells to Systems. Brooks Cole.
29. Theodorson, G.A. Row. (1961). Studies in Human Ecology. Peterson & Company Elmsford, New York.
30. Vander AJ, Sherman JH and Dorothys L. (1978). Human Physiology: The Mechanisms of Body Functions. Mc Graw-Hill Education.
31. Wildmaier EP, Raff H, Strang KT. (2014). Vander's Human Physiology: The Mechanisms of Body. Mc Graw Hill Education.
32. Wiley, Andrea S. (2004). Ecology of high-altitude infancy: a biocultural perspective. Cambridge: Cambridge University press.
33. Yadav, P.; Mishra, R.; and Shubhrata R. (2004). Human ecology. New Delhi; Discovery Publishing House.

**Semester-III: (GROUP – B: Socio - Cultural Anthropology)**

**COURSE – 16: Theory and Method in Socio-cultural Anthropology (ANT – C 334 ‘B’)**

Full Marks – 100; Credit- 4

(Questions are to be set covering all units)

Unit-I

Autonomous Nature of Anthropology: Integration of Scientific and Humanistic Approaches;

Anthropologist as Scientist, Citizen and Humanist;

History of Anthropological thought;

Classical Schools, Evolutionism;

A Survey of the Important Contributions of the following thinkers: Spencer, Morgan, Tylor;

New Evolutionism – Leslie White, Julian Steward; Reactions to Evolutionism.

Unit-II

Diffusionism : A Critical Examination of the Key Words like, Cultural Area, Culture Circle,

Culture Centre, Culture Margin; Diffusionism versus Migration;

British Diffusionism : Elliot Smith, W.H.R. Rivers.

German Diffusionism: Wilhem Schmidt and Fritz Graebner;

American Diffusionism: Wissler Clark and Alfred Kroeber; Franz Boas’s Historical Particularism and Its Impact on American Anthropology.

Functionalism: Conceptual, Theoretical and Methodological, Contributions of Malinowski and Merton;

Structural Functionalism : Redcliffe Brown, Evans Prichard, Raymond Firth and S.F. Nadel.

Unit-III

Structuralism: Levi Strauss and Leach; Psychological Anthropology: Culture and Personality

Studies: Kardiner, Linton, Benedict, Margaret Mead and Stephen Taylor; Philosophical

Anthropology: Concept of Value, Cultural Relativism: Herskovits

Unit-IV

Anthropological Theory and Method for Policy Planning and Application : Concept of

Primitive and Native in Anthropology; Primitive as a conceptual model in Anthropological

Research; Ethnographic method for Policy Planning and Intervention; using Anthropological

Sensitivity for Designing Development / Disaster Management Project

Kenneth Pike and Marvin Harris in regard to Etic and Emic Approaches; Policy Planning Issues: Education, Health, Gender; Ethnicity: Identity, Rehabilitation, Environment, Human Rights, and World Peace

Unit-V

Contribution to Indian Studies : S.C. Roy, N.K. Bose, D.N. Majumdar, V. Elwin, Robert Redfield, L.P. Vidyarthi, Haimendorf, Irawati Karve, M.N. Srinivas; S.C. Dube, Leela Dube

**Suggested Readings:**

1. Applebaum H.A. (1987) *Perspectives in Cultural Anthropology*. Albany: State University of New York.
2. Barnard A. (2000). *History and Theory in Anthropology*. Cambridge: Cambridge University.
3. Berger, A.A. 1992. *Popular culture genres: theories and texts*. London: Sage Publications.
4. Jha, Makhan. 1994. *An introduction to anthropological thought*. New Delhi: Vikas Pub. House Pvt. Ltd.
5. McGee R.J. and Warmus R.L. (1996) *Anthropological Theories: An Introductory History*.
6. Misra, Kamal K. 2000. *Textbook of anthropological linguistics*. New Delhi; Concept Publishing Company.
7. Moore M. and Sanders T. (2006). *Anthropology in Theory: Issues in Epistemology*, Malden, MA: Blackwell Publishing.
8. Upadhyay, V.S and Pandey, Gaya. 1993. *History of anthropological thought*. New Delhi; Concept publishing company.

**Semester-III: (GROUP – B: Socio - Cultural Anthropology)**

**COURSE – 17: Applied Socio-cultural Anthropology (ANT – C 335 ‘B’)**

Full Marks – 100; **Credit- 4**

(Questions are to be set covering all units)

Unit-I

Meaning and Scope of Applied Socio-Cultural Anthropology: Applied Anthropology in United Nations.

Concept of Sol Tax in Action Anthropology, Applied Anthropology in Administration, Applied Anthropology in Industry, Applied Anthropology in Education, Applied Anthropology in Public Health Programmes.

Unit-II

Indigenous Technology, Maximisation of Local Resources, Rural Development in India, Concept of Planning for Development.

Relocation and Rehabilitation : Strategies, Agencies and Formulation of Policy and Planning Strategy, Micro and Macro Level Planning, Participatory Approach in Development, Anthropological Perspective and Data in Development Planning.

#### Unit-III

Agencies of Development; Governmental and Non-Governmental Indices and Measurements of Developmental Planning; Human Development Report and Human Development Index (UNO)

Displacement and Disaster Management; Displacement Situation: Voluntary, Involuntary, Natural and Man Made, Socio-Cultural, Economic, Psychological and Ecological Consequences of Displacement.

#### Unit-IV

Organisational Structure, Rehabilitation Policies and Management

Applied Anthropology and Socio-cultural Change: Concepts and Theories of Social and Cultural Change, Diffusion, Evolution, Acculturation, Assimilation

Modernisation, Westernization, Industrialization, Innovation, Transculturation; Cultural Context of Technological Change

#### Unit-V

Applied Anthropology and Development; Gandhian Approach to Development; New Approaches to Development particularly Comprehensive need Based Development

Formulation of Policy and Planning Strategy, Micro and Macro Level Planning, Participatory Approach in Development, Anthropological Perspective and Data in Development Planning

#### **Suggested Readings:**

1. Goldman, Laurence R (ed.). 2000. Social impact analysis: an applied anthropology manual. Oxford: Berg Publications.
2. Kedia, Satish. And Willigen, John Van. 2005. Applied anthropology: domains of application. London: Praeger Publications.

3. Pandey, Gaya. 2008. Developmental anthropology. New Delhi; Concept Publishing Company.
4. Pink, Sarah. (). Applications of anthropology. New York: Berghahn.

**Semester-III: (GROUP – B: Socio - Cultural Anthropology)**

**COURSE – 18: Developmental Anthropology (ANT – E<sub>1</sub> 336 ‘B’)**

Full Marks – 100; **Credit- 4**

(Questions are to be set covering all units)

**Unit-I**

Development: Meaning and Evolution of the Concept; Indices and Measurements of Development; Development Theories and Models; Sustainable Development: Environment, Natural Resources, People’s Concern and Needs

Agencies for Development: Governmental and Non-Governmental, Approaches, Models, Administration, Training Man Power, Peoples Participation

**Unit-II**

Applied, Action and Development Anthropology: Meaning, Scope and Emerging Trends, Contributions of Anthropology to Development Studies; Development Studies Contribution to Anthropological thought and Method, Moral / Ethical Issues and Limitation of Development Anthropology

Policy and Planning: Concept of Planning, Formulation of Policy and Planning Strategy – Phases, Target, Regions, Resources and People; Participatory Approach in Development

**Unit-III**

Anthropological Perspectives and Data in Development Planning; Conflict in People Centred and Programme Centred Paradigms

Evaluation and Impact: Indices and Measures; Anthropological Approaches: Assessment of Social Impact, Evaluation of Development Programmes, Gender Issues in Development

#### **Unit-IV**

Role of Values and Institutions in Development: Caste, Region and Culture – Weber, Milton, Singer and Madan

Rural Development in India: Special Programmes and Poverty Alleviation Programmes; Land Reforms, Panchayati Raj; Community Based Organisations

#### **Unit-V**

Development of Scheduled Caste and Scheduled Tribe: Constitutional Provisions and Safeguards, Protective Legislation, Structure of Tribal Development Administration; Evaluation of Tribal Sub-plans; Problems and Prospects of Tribal Development

#### **Suggested Readings:**

1. Goody, Jack. (). Developmental cycle in domestic groups. Cambridge: Cambridge University Press.
2. Pandey, Gaya. 2008. Developmental anthropology. New Delhi; Concept Publishing Company.

**Semester-III: (GROUP – B: Socio - Cultural Anthropology)**

**COURSE – 18: Anthropology of Children and Childhood (ANT – E<sub>2</sub> 336 ‘B’)**

Full Marks – 100; **Credit- 4**

(Questions are to be set covering all units)

**Unit-I**

Histories of childhood, Anthropology of childhood: Memory of children in ethnography, children as social actors, IUAES commission on Anthropology of children, youth and childhood, children & childhood in India.

**Unit-II**

Giving voice to children's voices, UN commission on the rights of the child, children 's participation, children's competency, children citizenship

**Unit-III**

Children in cyber environment, children's use of space, children's creatively, children's contribution to household economy, educational institutionalization of tribal children, Ashram School / Kanyashram School, Impact of drought on tribal children.

**Unit-IV**

Children without childhood; Rights of girl child in India, overburdened school-going children, growing up in slums, child poverty, street children, child labour in India, Female working children, children and corporal punishment, HIV / AIDS affected children.

**Unit-V**

National policies for better childhood for all children; NGOs working for children's rehabilitation

**Suggested Readings:**

1. Lancy, David F. 2008. Anthropology of childhood: cherubs, chattle, changelings. New York: Cambridge University Press.
2. Lancy, David F.; Bock, John.; and Gaskins, Suzanne. 2010. Anthropology of learning in childhood. Lanham: Altmira Press.

**Semester-III: (GROUP – B: Socio - Cultural Anthropology)**

**COURSE – 18: Anthropology of Communication (ANT – E<sub>3</sub> 336 ‘B’)**

Full Marks – 100; Credit- 4

(Questions are to be set covering all units)

**Unit- I**

Meaning and definition of communication;

The nature, role and functions of communication; human communication; approaches to study of communication - Anthropological, Sociological and Psychological perspectives of communication;

Theories and models of communication;

Channels of communication: Inter personal and oral communication, mass communication, transport communication, electronic media, and satellite communication;

The process of information dissemination

**Unit- II**

Folk Media: Folk dance, drama, songs, tales, puppet show, storytelling, music, theatre and their communication potentiality;

Integrated use of folk media and mass media, art and visual communication, dormitories;

Mass Media: The elements of mass communication theories, new communication technologies and communication revolution, role of television - films, musicals, family serials and mythologies

**Unit-III**

Culture and Communication: Culture, history and technology; Enculturation and Socialization as cultural communication;

Language and communication: Verbal and non- Verbal communication. Art in Anthropological perspectives, photographs and pictures, kinetics (gestural communication)

**Unit-IV**

Development communication: Relationship between communication and development, Awareness building, communication and urbanization, modernization process. The effects of mass media on youth, children, women, disadvantaged groups & the role of communication in education, agriculture, health and family welfare and national development - Communication and the dynamics of social and cultural change.

TV and educational media: UGC, IGNOU, National Geographic, Animal Planet, Discovery, etc.

### **Suggested Readings:**

1. Boyer, Pascal. 1990. Tradition as truth and Communication: a cognitive description of traditional discourse. Cambridge; Cambridge University Press
2. Leaf, Murray.; Leaf, Murray.; and Read, Dwight. 2012. Human thought and social organization: Anthropology on a new plane. New York: Lexington books publication
3. Singh, Ajit K. 1982. Tribal festivals of bihar: a functional analysis. New Delhi: Concept Publishing Company.

### **Semester-III: (GROUP – C: Tribal Studies)**

#### **COURSE – 16: Tribal Culture and its Transformation (ANT – C 334 ‘C’)**

Full Marks – 100; **Credit- 4**

(Questions are to be set covering all units)

#### Unit-I:

Emergence and Growth of Tribal Studies in India; Nature and Scope; Relevance of Tribal Studies; Changing Concept of Tribe; Tribes in Indian Civilization; Classification and Distribution of Tribes in India and Odisha

#### Unit-II:

Tribal self-image and Identity: Ethnic conflict, Tribal Unrest, Ethos and Values, Identity & language, Social Category vis-a-vis Administrative categories, Globalisation and tribal culture, world-view of Indian Tribes, patterns of inter-tribal relations, Tribe-Caste contrast Vs continua

#### Unit-III:

Culture change in tribes of India: Factors of change – i. Traditional factors – impact of Hinduism; ii. Modern factors – impact of Christianity, Modernisation, Urbanisation, Industrialisation and Welfare-programmes

#### Unit-IV:

Tribal issues in contemporary India: Land issue, Displacement and Rehabilitation, Forest and Environment, Indebtedness, Poverty and Unemployment, Malnutrition and Reproductive Health, Problems of Tribal Education, Problems of genetic disorders among tribal population.

#### Unit-V:

Tribal Situation in Orissa: Demographic Characteristics, Racial and Language affinity, multiple pattern of integration of tribes & Castes in Orissa.

## **Suggested Readings:**

1. Singh, Bhupinder and Bhandari, J.S. 1980. The tribal world and its transformation. New Delhi: Concept Publishing Company.
2. Choudhury, Buddhadeb. 1992. Tribal transformation in India. New Delhi; Inter-India Publications.
3. Gupta, Ramnika. 2007. Tribal contemporary issues: appraisal and intervention. New Delhi: Concept Publishing Company.
4. Hasnain, Nadeem. 2011. Tribal India. Delhi: Palaka Prakashan.
5. Misra, K.K. 1993. Tribal elites and social transformation. New Delhi: Inter India Publications.
6. Naganna, A. and Umamohan, Ch. 2011. Tribal development programmes and social transformation. New Delhi: Discovery Publishing House.
7. Pandit, Apoorva. 2006. Tribal culture and technology. New Delhi: Inter-India Publications.
8. Pfeffer, Georg. and Behera, Deepak Kumar. 2009. Contemporary society: tribal studies. New Delhi: Concept Publishing Company.
9. Saraswati, Baidyanath. 1991. Tribal thought and culture: essays in honours of Shri Surajit Chandra Sinha. New Delhi: Concept Publishing Company.
10. Thornton, Robert J. and Skalnik, Peter (ed.). 1993. Early writings of Bronislaw Malinowski. Cambridge: Cambridge University Press.
11. Vidyarthi, L. P. and Rai, Binay Kumar. 1985. Tribal culture of India. New Delhi: Concept Publishing Company.

## **Semester-III: (GROUP – C: Tribal Studies)**

### **COURSE – 17: Tribal Development (ANT – C 335 ‘C’)**

Full Marks – 100; **Credit- 4**

(Questions are to be set covering all units)

Unit-I:

The Concept of Tribal Development; Tribal policy during Pre- and Post- Independence era; Tribal problems; Approaches to tribal development: Anthropological, Social Workers' Government's and NGOs'

Unit-II:

Constitutional provisions and Safe-guards, Administrations of Scheduled areas of V<sup>th</sup> and VI<sup>th</sup> Schedules, Implementation Strategies, Development Interventions in tribal areas.

Unit-III:

Planning and Development, Tribal development during different Plan periods, SMPT blocks, T.D. Blocks, T.D. Agency Tribal Sub- Plan approach, MADA, Cluster, Special Provisions for PT G & DTDP for dispersed tribals, Monitoring and Evaluation, Research and Training.

Unit-IV:

Unit-V:

International and National NGOs working for tribal development; Barriers and stimulants to tribal development

**Suggested Readings:**

1. Behura, N.K. and Panigrahi, Nilakantha. 2006. Tribals and the Indian constitution. Jaipur: Rawat Publications.
2. Chaudhary, S. N. 2008. Tribal development since independence. New Delhi: Concept Publishing Company.
3. Hasnain, Nadeem. 2011. Tribal India. Delhi: Palaka Prakashan.
4. Mishra, Padmaja. 2006. Natural resources and economic development. New Delhi: Deep & Deep Publications.
5. Pfeffer, Georg. and Behera, Deepak Kumar. 2009. Contemporary society: tribal studies. New Delhi: Concept Publishing Company.

**Semester-III: (GROUP – C: Tribal Studies)**

**COURSE – 18: Tribal Demography, Nutrition and Health (ANT – E<sub>1</sub> 336 ‘C’)**

Full Marks – 100; **Credit- 4**

(Questions are to be set covering all units)

Unit-I

Tribal Demography: An appraisal (Meaning and Scope); Demographic Characteristics of Scheduled Tribes of India; Distribution of Indian Tribes, Decadal Growth of Population of Indian Tribes, Fertility, Mortality, Migration, Sex Ratio, Literacy of Indian Tribes, Fertility, Mortality, Migration, Sex Ratio, Literacy, Labour Force, BPL

Unit-II

Demography of Tribes in Odisha: Distribution, Growth and Decline of Tribes in Odisha, Fertility, Mortality, Migration, Sex Ratio, Literacy, Labour Force, BPL

Unit-III

Tribal Health: Meaning and Scope, Socio Cultural aspects of Health and healing; Bio-Medical of Health and Disease, Environmental aspects of health genetic aspects of Health, Environmental aspects of health, Tribal perspective of Health and health care system

#### Unit-IV

Nutrition: Meaning and Scope, Nutritional constituent & Human Body, Nutritional requirements of human, Nutritional Value of Tribal foods, Problems of Hunger and Malnutrition in India with reference to Tribal groups

#### Unit-V:

Health and Sanitation programme for STs of India, Nutritional status of selected Tribes, Nutritional Support Programmes, and Nutritional Policy in India, National Food Security Programme, Health and Nutritional Problems of Tribal Populations of KBK region

### **Semester-III: (GROUP – C: Tribal Studies)**

#### **COURSE – 18: Tribal Language and Literature (ANT – E<sub>2</sub> 336 ‘C’)**

Full Marks – 100; **Credit- 4**

(Questions are to be set covering all units)

#### Unit-I

Language and Script: Meaning and Definition; Classification of Indian Language family; Tribal languages in India and Orissa: Classification and Distribution

#### Unit-II

Origin and development of tribal scripts in Odisha: *Olchiki (Santali)*, *Sorang Sampe (Saora)* and *Orang Chiki (Ho)*

#### Unit-III

Tribal literature: Myths, Legends, Riddles, Proverbs, Tales, Aphorisms, Oral epics, Style and emotion in Tribal literature, Structural analysis of Tribal literature

#### Unit-IV

Tribal literature: Types of tribal songs, its style and nature, status of myth and story tells, singles

#### Unit-V

Tribal literature and nationalism; women in Tribal literature; Man, animals and plants in Tribal literature

### **Semester-III: (GROUP – C: Tribal Studies)**

#### **COURSE – 18: Tribal Movements in India (ANT – E<sub>3</sub> 336 ‘C’)**

Full Marks – 100; **Credit- 4**

(Questions are to be set covering all units)

## Unit-I

Meaning, Definition and types of movements; Feature, Nature and functions of movements;  
Nature and types of tribal movements

## Unit-II

Religious Movements: Tana Bhagat Movements, Mav Mania rebellion, Donnyi Poloibm and other indigenous religious movements;

Movements for tribal solidarity: Birsa Munda, Raghunath Murmu

## Unit-III

Tribes in Independence movements: Laxmann Naiki, Sonaram Soren, Surendra Sai, Rani Gaidilu, Dharanidhar

Tribal Political Movements: Jharkhand and Bodo Movement, Movement for Kamata Land

## Unit-IV

Pre-Colonial tribal movements: Causes and solutions; Post-Colonial tribal movements: Causes and solutions;

Tribal uprisings over resource use: Kol, Kandha and Santal uprising; Tribals' involvement in Narmada and Chipko movements, Kalinga Nagar and Narayan Patna unrest situation

## Unit-V

Tribal ethnic problems and quest for identity formation

Tribal Ethnic movements in India

**Semester-III: (GROUP – D: Archaeological Anthropology)**

**COURSE – 16: Prehistoric Archaeology of Africa and Europe (ANT – C 334 ‘D’)**

Full Marks – 100; **Credit- 4**

(Questions are to be set covering all units)

**Unit-I:**

Meaning and Importance of Regional Archaeology

Natural Regions and Pleistocene events: Major Natural Regions of the World and Pleistocene events in the Glaciated area, Periglacial area and Pluviated area.

**Unit-II:**

Lower Palaeolithic Pebble Tools Culture - evidences from Hadar, Laetoli, Olduvai Gorge Koobi Forra; Importance of (the African Rift valley) Olduvai Gorge

**Unit- III:**

Acheulian Culture in Africa - Evidences from Olduvai Gorge, Ismilia, Kalambo Falls, Olorgesailie; Middle and Late Palaeolithic culture of North Africa

**Unit-IV:**

Acheulian Culture in South Western Europe - Evidences from Terra Amata, Torra-brona, Pech-Iu-Aze Lazaret; Middle Palaeolithic Cultures in Western and Central Europe.

**Unit-V:**

Upper Palaeolithic Cultures of Western and Central Europe; Upper Palaeolithic habitations; economy and art in Europe

**Semester-III: (GROUP – D: Archaeological Anthropology)**

**COURSE – 17: Practical in Archaeological Anthropology (ANT – C 335 ‘D’)**

Full Marks – 100; **Credit- 4**

(Questions are to be set covering all units)

1. Identification, drawing, metric analysis, calculation of Indices of lithic /bone tools
2. Drawing, measurement and reconstruction of ceramic/metal objects
3. Physical and Chemical Analysis of soil (colour, texture, silt-sand and clay ratio of soil; estimation of pH value)

4. Identification, preservation and conservation of antiquities and museum specimen (bone/horn/ivory/food grains/terracotta and metal objects)

5. Survey of micro-region with the aid of Maps (Topo-sheet reading)

**Semester-III: (GROUP – D: Archaeological Anthropology)**

**COURSE – 18: Indian Prehistory and its relevance (ANT – E<sub>1</sub> 336 ‘D’)**

Full Marks – 100; Credit- 4

(Questions are to be set covering all units)

Unit-I

Prehistory of Eastern India: An Ecological perspective of Stone Age

Palaeolithic Cultures in Eastern India (special reference to Bihar, Bengal and North Eastern Regions)

Mesolithic Neolithic Culture in Eastern India (Special reference to Bihar, Bengal and North Eastern Regions)

Unit-II

Archaeology of Orissa (Prehistoric, Protohistoric and Early Historic Events):

Prehistoric Archaeology of Orissa (i) Palaeolithic (lower, middle upper) cultures, (ii) Mesolithic culture and Neolithic culture

Unit-III

Protohistoric and Early Historic Archaeology of Orissa: Metal Age Cultures (Chalcolithic and Iron Age phases) in Orissa; Megalithic Traditions in Orissa; Early Historic Urban Centres in Orissa (Evidences from Sisupalgarh, Jaugarh, Asurgarh, Radhanagar, Manamunda).

Unit-IV

Pleistocene and Holocene Events in Southeast Asia:

Pleistocene Events : Land and Records of Early Human in South East Asia; Pleistocene Epoch in Southeast Asia; Stone tool Industries of the Middle Pleistocene and Upper Pleistocene periods.

## Unit-V

Holocene Events in Southeast Asia : Early Holocene Stone tool industry – the Hoabinhian Techno-complex of the Southeast Asian main land; Neolithic and Early Metal Age Cultures on the Southeast Asia mainland.

### **Semester-III: (GROUP – D: Archaeological Anthropology)**

#### **COURSE – 18: Tool Techniques in Archaeology (ANT – E<sub>2</sub> 336 ‘D’)**

Full Marks – 100; **Credit- 4**

(Questions are to be set covering all units)

Technology and Typology in Prehistoric Archaeology:

Prehistoric Technology: Manufacturing techniques of Prehistoric tools (lithic, bone and antler/horn)

Understanding Typology & Functions of Prehistoric Tools: Terms of specifics in artifact analysis – (Artefacts, tools, industry, association, assemblage, aggregate, attribute, type and typology);

Types of Artefacts:

Core - Tortoise core, Discoid core;

Flake: side and end; Levalloisean flake, Clactonion flake, Mousterian flake;

Blades: single side, parallel side;

Tool Typology:

Pebble tools (chopper, chopping tool); Bifaces (Handaxe and cleaver);

Blade tools: (blade knife, blunted backed blade); Borer / awl; Burin;

Points: (Laurel leaf point, Willow leaf points, Shouldered points);

Denticulate; Notch Microliths: Geometric types, Non-geometric types);

Ground and polished tools: (Axe, Adze, Chisel, Shouldered celt), perforated stone / ring stone, Grinding stone.

**Semester-III: (GROUP – D: Archaeological Anthropology)**

**COURSE – 18: Palaeontology and Dating methods (ANT – E<sub>3</sub> 336 ‘D’)**

Full Marks – 100; **Credit- 4**

(Questions are to be set covering all units)

Methods of Dating in Archaeology:

Relative Dating Methods: Stratigraphy, Typological sequence, Palynology, Varve Analysis

Absolute and Calibrated Relative Dating Method: Absolute Dating Method – Radio Carbon Dating, Potassium-Argon Method, Thermoluminescence Dating, Fission Track Dating; Calibrated Relative Dating Methods – Obsidian Hydration, Amino-Acid Racemization, Cation ratio dating, Archaeomagnetic Dating.

**Semester-IV:**

**COURSE – 19: Medical Anthropology (ANT – C 341)**

Full Marks – 100, **Credit- 2**

(Questions are to be set covering all units)

**Unit-I:**

Medical Anthropology: meaning and scope; Social-cultural and Biomedical Concepts of Health, Illness and Disease; Defining Health and Illness in Cross-Cultural Perspective; Looking at “health,” “illness,” and related concepts in Western culture, (including with sociological “sick role” models); some important variations in the process of seeking health care; Theoretical approaches and Perspectives in Medical Anthropology; Bio-cultural Anthropology and its Relevance; Ethno-Biology

**Unit-II:**

Medical Systems: Ethno-medicine and ethno-pharmacology; Variations in Health Care Systems: A Comparative Perspective;

Healing and Healers in Cross-Cultural Perspectives;

A. Shamanism, Magic, and Healing.

Shaman, Magic, Witchcraft and Sorcery,

B. Folk Healers and “Alternative Medicine.”

Types of healers and healing; Problems in evaluating efficacy; Sources of dissatisfaction with mainstream medicine

Symbolic aspects of sickness and healing;

Personhood and Social body: An outline of different medical systems in India;

**Unit-III:**

Medical Genetics; Relevance of Genetics in medicine; Measuring Health: Morbidity, Mortality, and Epidemiology: Meaning, scope and methods; Epidemiology of common communicable and non-communicable diseases in India; Problems of genetic disorder and disability in Indian population;

Effect of Chronic Disease in Health, Relationship between mental health, chronic disease, and injury, Understanding Stress and its Effects Cross-Culturally, Mental Disorders and Related Phenomena, diseases associated with specific socio-cultural and environmental contexts: Kuru, osteomalacia, sickle cell anaemia. Adaptations to Health Threats: Genetic Vulnerability and Resistance & Environment, Developmental and Cultural Adaptations to adverse Conditions.

Social and ethical issues in medical genetics and new reproductive technology

**Unit-IV:**

Effects of environmental hazards on human health; stress and disease;

Health issues in human population: Disease ecology and bicultural adaptation; Determinants of health; Socio-cultural, Economic, environmental and genetic; Health repercussion of cultural contact; Health cost of modernization;

Health promotion and health care delivery programmes; Family welfare programmes; Child health and nutrition programmes; Reproductive health awareness

**Unit-V:**

National Health Policy; Nutrition Policy; Health care planning in India; Reproductive and Child Health Programme; Occupational health problems; Problems of the Aged; Gender and Health;

Legal Aspects & Future Prospects for Health

Rules and regulations of international health policy, Medico- Legal Problems in relation to health administration, International health organization / NGOs, Medical Ethics, Critical issues in global health.

**Suggested Readings**

1. Albrecht, Gary L., Ray Fitzparick, and Susan C. Scrimshaw (eds.) 2000. The Handbook of Social Studies in Health and Medicine, SAGE Publications.
2. Bannerman, Robert, J. Burton, and Ch'en Wen-Chieh (eds.) 1983. Traditional Medicine and Health Care Coverage. Geneva: World Health Organization.
3. Basch, Paul F. 1999. Textbook of International Health. New York: Oxford University Press.
4. Chen, Lincoln C. Arthur Kleinman, and Norma C. Ware 1994. Health and Social Change in International Perspective. Harvard University Press.
5. Chin, James, M.D., M.P.H. (ed.) 2000. Control of Communicable Diseases Manual. 17<sup>th</sup> Edition. American Public Health Association. *Anyone interested in field work in less developed areas should own this book for reference.*
6. Coreil, Jeannine and J. Dennis Mull (eds.) 1990. Anthropology and Primary Health Care, Boulder: Westview Press.
7. Hahn, Robert A. 1999. Anthropology in Public Health. Bridging Differences in Culture and Society. New York: Oxford University Press.

8. Helman, Cecil G. 1994. *Culture, Health, and Illness*. 3rd ed. Oxford: Butterworth-Heinemann.
9. Helman, Cecil G. 2001. *Culture, Health, and Illness*. 4th ed. London: Arnold. *This book is written for health care practitioners and clearly explains the relevance of culture to health.*
10. Inhorn, Marcia C. and Peter J. Brown 1997. *The Anthropology of Infectious Disease. International health Perspectives*. Gordon and Breach Publishers.
11. Koop, C. Everett, Clarence E. Pearson, and M. Roy Schwartz (eds.) 2001. *Critical Issues in Global Health*. San Francisco: Jossey-Bass. A Wiley Company.
12. Mann, Jonathon M., et al. (eds.) 1999. *Health and Human Rights*. New York: Routledge.
13. Mayer, Kenneth H. and H.F. Pizer (eds.) 2000. *The Emergence of AIDS. The Impact on Immunology, Microbiology, and Public Health*. Washington, D.C.: American Public Health Association.
14. Nichter, Mark and Mimi Nichter 1996. *Anthropology and International Health. Asian Case Studies*. Gordon and Breach Publishers.
15. Paul, Benjamin D. (ed.) 1955. *Health, Culture, and Community. Case Studies of Public Reactions to Health Programs*.
16. Rajesh Khanna and A.K. Kapoor. 2007. *Ethnic Groups and Health Dimensions*. Discovery Publishing House, New Delhi.
17. Tsui, Amy O., Judith N. Wasserheit, and John G. Haaga (eds.) 1997. *Reproductive Health in Developing Countries*. Washington, D.C.: National Academy Press.
18. Williams, Cicely D., Naomi Baumslag, and Derrick B. Jelliffe 1994. *Mother and Child Health. Delivering the Services*. 3rd Edition. New York: Oxford University Press

## **Semester-IV:**

### **COURSE – 20: Anthropology in Practice (ANT – C 342)**

Full Marks – 100; **Credit- 2**

#### **Unit I: Academic Anthropology**

➤ Academics and Practitioners:

- Differences, Structure, Activities, Controversies and Issues
- Applied Anthropology
- Action Anthropology
- Development Anthropology

#### **Unit II: Role of Anthropology in Development**

Anthropology and Public Policy; Need Assessment and Community Development; Anthropology of NGO's; Management 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; Anthropology in Designing and Fashion; Visual Anthropology

#### **Unit IV: Constitutional Perspective and Human Rights**

Constitutional Provisions, Evaluation, Planning and Development of Indian Populations; Human Rights, Interrelationships of rights and duties: Harmony and Conflict; Protection and enforcement of human rights and duties; National and State Human Rights Commission and other grievance redressal mechanism; Human rights of special category and marginal groups; Emerging trends of human rights respective to terrorism; environment and globalization

#### **Unit V: Biosocial anthropology in practice**

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

#### **Suggested Readings**

1. Arya A and Kapoor AK. (2012). Gender and Health Management in Afro-Indians. Global Vision Publishing House, New Delhi.

2. Basu, A. and P. Aaby (1998). *The Methods and the Uses of Anthropological Demography*. 329 pp. Oxford, Clarendon Press
3. Carter A. (1998). *Cultural Models and Demographic Behavior*. In *The Methods and the Uses of Anthropological Demography* edited by Basu A and Aaby P. Oxford: Clarendon Press. pp 246-268.
4. Census of India (2001, 2011) and National Family Health Survey (2006, 2010).
5. Ervic, Alexander M., (2000). *Applied Anthropology: Tools and Perspectives for Contemporary Practise*, Boston, MA: Allyn and Bacon.
6. Erwin A. (2004). *Applied Anthropology Tools and Practice*, Allyn and Bacon.
7. Goodale M. (2009). *Human Rights: An Anthropological Reader*. Wiley Blackwell.
8. 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.
9. Gupta S and Kapoor AK. (2009). *Human Rights among Indian Populations: Knowledge, Awareness and Practice*. Gyan Publishing House, New Delhi.
10. Halbar BG and Khan CGH. (1991). *Relevance of Anthropology – The Indian Scenario*. Rawat Publications, Jaipur.
11. Kapoor AK (1998). *Role of NGO's in Human Development : A Domain of Anthropology*. *J Ind Anthropol Soc*; 33:283-300.
12. Kapoor AK and Singh D. (1997). *Rural Development through NGO's*. Rawat Publications, Jaipur.
13. Kertzer DI and Fricke T. (1997). *Anthropological Demography*. University of Chicago Press.
14. Klepinger LL (2006). *Fundamentals of Forensic Anthropology*. Wiley-Liss Publications
15. Kumar RK and Kapoor AK. (2009). *Management of a Primitive Tribe: Role of Development Dynamics*. Academic Excellence, Delhi.
16. Margaret AG. (2003). *Applied Anthropology: A Career-Oriented Approach*, Boston, MA: Allyn and Bacon.
17. Mehrotra N and Patnaik SM. (2008). *Culture versus Coercion: The Other Side of Nirmal Gram Yojna*, *Economic and Political weekly*. pp 25-27.
18. Mishra RC (2005). *Human Rights in a Developing Society*, Mittal Publications, Delhi.
19. Noaln RW. (2002). *Anthropology in Practice: Building a Career outside the Academy*. Publishing Lynne Reinner.

20. Patnaik SM (1996). Displacement, Rehabilitation & Social Change. Inter India. Publications, New Delhi.
21. Patnaik SM (2007). Anthropology of Tourism: Insights from Nagaland. The Eastern Anthropologist. 60(3&4):455-470
22. Srivastav OS (1996). Demographic and Population Studies. Vikas Publishing House, India
23. Vidyarthi LP and BN Sahay (2001). Applied Anthropology and Development in India, National Publishing House, New Delhi.
24. Vidyarthi LP. (1990). Applied Anthropology in India – Principles, Problems and Case Studies. Kitab Mahal, U.P.
25. Vidyarthi V (1981). Tribal Development and its Administration. Concept Publishing Company, New Delhi.
26. Willen SS. (2012). Anthropology and Human Rights: Theoretical Reconsiderations and Phenomenological Explorations. Journal of Human Rights. 11:150–159.

**Semester-IV:**

**COURSE – 21: Dissertation (ANT – C 343)**

Full Marks – 100, **Credit- 4**

**Semester-IV: (GROUP – A: Physical / Biological Anthropology)**

**COURSE – 22: Population Genetics (ANT – C 344 ‘A’)**

Full Marks – 100; **Credit- 4**

(Questions are to be set covering all units)

**Unit-I:**

Definition and scope of population genetics, its relevance in Anthropology; its relationship and difference with other branches of human genetics, viz. formal genetics, developmental genetics, cytogenesis and molecular genetics.

Mating system: Random mating / pan-mixis; selective mating / Preferential mating; mate choice / sex selection; assertive mating. Mendelian population with reference to animals and Man; other concepts and definitions - statistical, geographical, demographic, ecological

**Unit-II:**

Reproductive isolates and the concept of gene pool: genetic isolates; geographic isolates; models to study gene flow - 'island' model, 'diffusion' model, 'isolation by distance model' , role of social divisions and hierarchy in genetic isolation.

Genetic structure of human population: approaches to study - Social, geographic, demographic and genetic Principles of genetic equilibrium; Hardy-Weinberg law, causes for changes in gene frequencies; Mutation, Hybridization, genetic drift and selection. Genetic polymorphisms - balanced, transient and neutral.

#### **Unit-III:**

Biological consequences of mating systems: consanguinity; inbreeding and out breeding. Inbreeding co-efficient (F ratios) inbreeding depression: heterozygous; homozygous; genetic load.

Population structure and genetic structure relationship: Population structure in India: religious groups; caste groups; other isolates. Origin of Caste - theories: Fission (Ghurye) lack of Fusion (I.Karve). Endogamous group as the ultimate unit of study in Population genetics. Genetic distance: concepts and approaches to study.

#### **Unit-IV:**

Genetic study of Populations: Natural and social boundaries; mobility, growth, age, sex, composition; fertility, mortality and morbidity, Marriage and Kinship; age at marriage; type of marriage: consanguineous, no consanguineous - comparison: ethnic, ecological, genealogical, generational, social, epidemiological.

#### **Unit-V:**

Role of population in human genetics: natural history and racial history; variation; inheritance: direct- family and pedigree correlation; recessive ratios; indirect: population frequencies; inbreeding, genetic traits. Association: environment: mutation expression, evolution. Population distance measures.

#### **Suggested Readings**

1. Brooker R.J. (2012). Genetics: analysis & principles. The McGraw-Hill Companies, Inc 4th ed.
2. Cavalli-Sforza, L.L. and Bodmer, W.F (1971). The Genetics of Human Population. San Francisco: Freeman
3. Cooper DN and Kehrer-Sawatzki H. (2008). Handbook of Human Molecular Evolution. John Wiley & Sons, volume-2.
4. Crawford MH (2007). *Anthropological Genetics Theory, Methods and Applications*. Cambridge University Press
5. Cummings M.R. (2011). Human Heredity: Principles and Issues. Ninth Edition. Brooks/Cole, Cengage Learning

6. Jobling, M.A. Hurlis M. and Tyler-Smith C. (2004). *Human Evolutionary Genetics: Origins, Peoples & Disease*. GS. NY
7. Lewis R. (2009). *Human Genetics: Concepts and Applications* 9th Edition. The McGraw–Hill Companies, Inc.
8. Patch C. (2005). *Applied Genetics in Healthcare*. Taylor & Francis Group
9. Relethford J.H. (2012). *Human Population Genetics*. Wiley-Blackwell, USA
10. Snustad .D.P. and Simmons M.J. (2006). *Principles of Genetics*, Fourth Edition, John Wiley & Sons USA, Hoboken NJ
11. Strachan T, Read A.P. (2004). *Human Molecular Genetics*. Garland Science/Taylor & Francis Group.
12. Vogel F. and Motulsky A.G. (1996). *Human Genetics*. Springer, 3rd revised edition.

**Semester-IV: (GROUP – A: Physical / Biological Anthropology)**

**COURSE – 23: Practical in Biological Anthropology - II (ANT – C 345 ‘A’)**

Full Marks – 100; **Credit- 4**

**BIOCHEMICAL GENETICS**

- (a) Estimation of pH and Molarity of given solution
- (b) Techniques of Electrophoresis using the following media: Starch, Polyacrylamide, Agarose.
- (c) Abnormal Haemoglobin typing
- (d) Tests for Sickle Cell Disease:  $\text{Na}_2\text{S}_2\text{O}_5$  Slide and Sodiumdithionate, Turbidity test.
- (e) Test for  $\text{G}_6\text{PD}$  Deficiency.
- (f) Glucose Level I Blood (5 individuals): Colorimetric
- (g) Extraction of DNA: Methodology
- (h) DNA OD value estimation, Dilution of DNA, Processing genomic DNA for PCR and DNA Sequencing analysis

**Cytogenetics**

Identification of sex chromatin (Barr Bodies) and Leukocyte drum stick, Human Chromosomes Karyotypes from Photography of Normal and Abnormal Subjects.

**Physiology**

Techniques of Measuring Vital Capacity, Body Temperature, Blood Pressure, Body Weight, Body Fat, Pulse Rate.

**Bio-Statistics:** Co-efficient of correlation, Genetic distance, Calculation of gene frequencies (*ABO*, MN), Mutation rate, Estimation of intensity of Selection, Chi-square test, T test, Heterozygosity, linkage disequilibrium

### **Instrumentation**

Students are to learn function of Instruments: P<sup>H</sup> Metre, Centrifuge, Electrophoresis, Gel-Doc imaging system, Colori-meter, Spectrophotometer, PCR (Thermal Cycler), DNA Sequencing,

**Implication of Bio-informatics tools:** NCBI, ENSEMBEL, UCSC Genome Browser, Primer3, Arliqueen, Haploveiw, SeqScap, etc.

### **Suggested Readings**

1. Green, Michael R. and Sambrook, Joseph. 2014. Molecular cloning: a laboratory manual. Cold Spring Harbor: Cold Spring Harbor Laboratory Press.

## **Semester-IV: (GROUP – A: Physical / Biological Anthropology)**

### **COURSE – 24: Human Genome: Meaning and Methods of Study (ANT – E<sub>1</sub> 346 ‘A’)**

Full Marks – 100; **Credit- 4**

(Questions are to be set covering all units)

#### **Unit-I**

The Human Genome: Nuclear Genome and Mitochondria Genome

Mapping of the Human Genome: Physical mapping and genetic mapping

Human Multigene families and Repetitive DNA

Evolution of Human Genome: The origin of genome; Patterns of acquisition of New Genes, Non-coding DNA and Genome Evolution;

#### **Unit-II**

Tools and Techniques in Human Molecular genetics: Development of Recombinant DNA technology and cloning; Restriction enzymes and RFLP; PCR; Electrophoresis; Blotting techniques; DNA sequencing; DNA Micro arrays technology and its application; Bio-informatics

#### **Unit-III**

Application of molecular tools in the study of population diversity; Genome Diversity of Indian Populations (mtDNA, Y-Chromosome, Alu, STR);

Ethical, legal, and social Issues of Human genome Sequencing; Application of Human Genome Research in Health and Medicine: Gene therapy, Proteomics, Stem-cell Therapy, and

development of diagnostics.

#### **Unit-IV**

Replication of DNA: Types and Stages; Enzymes for Manipulation: DNA Polymerases: types and functions: Nucleases, Ligases, End-modification Enzymes;

RNA polymerase: Types and Functions; Mutations: Types and mutagenic factors; Repair and Recombination of Genome.

#### **Unit- V**

Molecular basis of human gene expression: Mechanism of transcription, RNA splicing and editing, Exon Shuffling and Translation; The genetic code; Synthesis and processing of Protein; Molecular Mechanism of Gene regulation; Genetics of Cancer: Oncogenes and Tumour suppressor gene.

#### **Suggested Readings**

1. Green, Michael R. and Sambrook, Joseph. 2014. Molecular cloning: a laboratory manual. Cold Spring Harbor: Cold Spring Harbor Laboratory Press.

#### **Semester-IV: (GROUP – A: Physical / Biological Anthropology)**

#### **COURSE – 24: Forensic Anthropology – II (ANT – E<sub>2</sub> 346 ‘A’)**

Full Marks – 100; **Credit- 4**

(Questions are to be set covering all units)

#### **Unit-I**

Identification through Somatometric and Somatoscopic Observations;

Identification through Mannerism, Deformities, Scars, Occupational Marks and Handwriting, Age, Sex and Ethnic Association;

Personal Identification: through Hair (Differentiation of Animal and human hair), Body Fluids (Blood, Semen, Saliva, Urine, and Sweat)

#### **Unit-II**

Dermatoglyphic Application - Basic structure of finger & palm print; Development of latent Prints: Tracing, Lifting and Developing Techniques; Ridge counting methods and classification of patterns.

Filing and Searching of Finger Prints; Classification for Filing the Finger Prints (Henry's Fourfold Classifications); Classification for Searching Finger Prints (Single Fingerprint Classification of Battley and Bertillon)

#### **Unit-III**

Assessment of Parentage: Disputed Paternity and Different Approaches to Solve it:

Morphological, Serology, Biochemical.

Unit-IV

DNA fingerprinting & its role in detection of crime & Paternity

DNA finger printing, VNTR, Single loans, Multi loans, Mini Satellite

Unit-V

Computer applications to Forensic Anthropology: Reconstruction of facial physiognomy

**Suggested Readings:**

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

**Semester-IV: (GROUP – A: Physical / Biological Anthropology)**

**COURSE – 24: Bio - Cultural Anthropology (ANT – E<sub>3</sub> 346 ‘A’)**

Full Marks – 100; Credit- 4

(Questions are to be set covering all units)

**Unit-I:**

Meaning & Scope of Bio-Cultural Anthropology; fall of holism in Anthropology & need for integration; Primate kin & Human kinship, Humanity and animalism, Man's capacity for stages of culture and socialization process.

**Unit-II:**

Human Evolution; Biological vs Cultural; Interdependence between biological & cultural

factors in the evolution of bipedalism, tool using capacity dietary habits, Language formation and Rise in Cranial capacity, The origin and evolution of Language, Bio-Cultural dimensions of tool making & tool using behaviour, Hominid evolution vis-a-vis cultural evolution

**Unit-III:**

Adaptation & Evolution, Adaptation & Human behaviour, Adaptation as a socio-cultural process; Plasticity of human biological adaptation, Biological & cultural factor for Nutrition & Health.

**Unit-IV:**

Genetic structure vis-a-vis Social Structure; Marriage rules, incest taboo, inbreeding on genetic structure of human population; Biological consequence of inbreeding, Demo-genetic studies in India, Opportunity of Natural Selection in human population.

**Unit-V:**

Gene-culture-environment interaction, Rise of non-communicable diseases & the role of life style and genetic predisposition factors, Effect of environment pollution on human genes; Role of genetic cultural and environmental factors in the rise of diabetes, cancer, cardiovascular disease, hypertension.

**Semester-IV: (GROUP – B: Socio - Cultural Anthropology)**

**COURSE – 22: Economic Anthropology (ANT – C 344 ‘B’)**

Full Marks – 100; **Credit- 4**

(Questions are to be set covering all units)

**UNIT-I:**

Economic Anthropology and Anthropological Economics, Definition and scope, Economic field and the substantive process, Substantivism vis-a-vis formalism, Method in Economic Anthropology

**UNIT-II:**

Economic organization, Types - Hunting - Gathering, Fishing, Pastoralism, Horticulture, Shifting Cultivation, Terrace Cultivation and Settled Agriculture; Tribal Economy versus Peasant Economy;

**UNIT-III:**

Production, Consumption, Distribution, Exchange in Simple Societies

**UNIT-IV:**

Habitat, Economy and Society with special reference to Tribal Communities, Economic and

Extra - Economic Exchange, Economic aspects of reciprocity, gift, potlatch, bride - price.

**UNIT- V:**

Modernization of economics, Economic Development and Social Change, Anthropological study of Entrepreneurship, Impact of Globalization on Tribal economies

**Suggested Readings:**

1. Barbara M. (2011). Cultural Anthropology. New Jersey: Pearson Education.
2. Benedict A. (2006). Imagined Communities: Reflections on the Origin and Spread of Nationalism. Verso
3. Ellis F. (2000). A framework for livelihood analysis. In Rural Livelihoods and Diversity in Developing Countries . Oxford: Oxford University Press.
4. Ember CR. (2011). Anthropology. New Delhi: Dorling Kinderslay.
5. Frazer JG. (1978). The Illustrated Golden Bough, London: Macmillan.
6. Frick GD and Langer R. (2010). Transfer and Spaces. Harrassowitz (Germany).
7. Gledhill J. (2000). Power and Its Disguises: Anthropological Perspectives on Politics. 2nd ed. London: Pluto Press.
8. Henrich J, Boyd R, Bowles S, Camerer C, Fehr E, Gintis H, McElreath R, Alvard M et al. (2005). 'Economic Man' in cross-cultural perspective: Behavioral experiments in 15 small-scale societies. Behavior and Brain Science. 28(6):795-815;
9. 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.
10. Herskovits MJ. (1952). Economic Anthropology: A Study in Comparative Economics. New York: Alfred A Knopf Inc.
11. Polyani K. et al (1957), Trade and Market in the Early Empires. Chicago: Henry Regnery Company.

**Semester-IV: (GROUP – B: Socio - Cultural Anthropology)**

**COURSE – 23: Rural Development (ANT – C 345 'B')**

Full Marks – 100; Credit- 4

(Questions are to be set covering all units)

**UNIT - I:**

Rural Development: meaning, scope, concept and policy.

Planning: meaning, principles and methods, strategy, targets, resources - utilization, management and mobilization.

**UNIT-II:**

Rural Development in India, Anthropological and Economic perspectives, Development Theories, Paradigm Shifts, Current status

**Unit-III:**

Development Planning for Rural sector, five year plans, NES, Community Development, IRDP, Green Revolution, Land Reforms, Institutional Finance and Corporation, Sources of Funding, Infrastructure Development, Micro Finance and self Help Group (SHG), NREGP, NFFWP.

**UNIT-IV:**

Rural Poverty, Concept, Culture of Poverty, Measurement of poverty, Poverty Alleviation Programmes during Post - Independence period.

Employment Generation, Income Generation, Health Care Facilities, Educational Development, Potable Drinking Water, Minimum Need Programme.

**UNIT-V:**

Role of Panchayati Raj in Empowering people, Rural Development Administration, Role of Voluntary Organizations, NGO & NABARD, CAPART and International Funding Agencies, World Bank, DFID

Participatory and Sustainable Development, Economic Development and Socio Cultural Change

**Semester-IV: (GROUP – B: Socio - Cultural Anthropology)****COURSE – 24: Urban Anthropology (ANT – E<sub>1</sub> 346 ‘B’)**

Full Marks – 100; **Credit- 4**

(Questions are to be set covering all units)

**Unit-I:**

Concept, Meaning and Definition of Urban Anthropology; Evolution of Urban Society; Present and future of Urban Anthropology

Urban Studies in Non- Western Areas; Demographic, Environmental and Economic dimensions of Urbanism;

**Unit-II:**

Development of Urban Anthropology; History of Urbanization; Urbanism and Urbanization; Industrial Urbanism; Population and Welfare; The Process of Urbanization and its impact;

The Ecology of Urban Growth and Social Ecology

**Unit-III:**

Modern Society and Urban Culture; Evolution of Urban Community, Urban Communities, their structure and Function, Urban people and their Livelihood; Rural and Urban Confrontation: Folk-Urban Continuum, Rural-Urban Balance and Interdependence.

**Unit-IV:**

Cultural Role of the Cities; Origin & Types of Cities; Social groups and Classes in cities; Patterns of Urban life (Ethnicity & social organization, social structure, social stratification, class structure, Family organization and marriage patterns, Economic Activities, Political and Religious Activities)

**Unit-V:**

Urbanization in India: Historical Background, Types of Cities, Urbanization and Social Change, Rural-Urban interaction, Impact of Urbanization on Rural and Tribal Livelihood. Traditional Institutions in Urban life, Social Organization and Change of the Slum

**Suggested readings**

1. "Anthropological Fieldwork in Cities", "The anthropology of Cities: Some Methodological Issues".
2. Childe, V. Gordon. 1950. "Urban Revolution." Town Planning Review
3. Cities, classes and the social order. Anthony Leeds, Roger Sanjek
4. <http://www.oxfordbibliographies.com/>
5. Low Reader Part V: "The Postmodern City" in Low pp. 317-377; Dear and Flusty.

**Semester-IV: (GROUP – B: Socio - Cultural Anthropology)**

**COURSE – 24: Anthropology of Gender (ANT – E<sub>2</sub> 346 'B')**

Full Marks – 100; Credit- 4

(Questions are to be set covering all units)

**Unit- I**

Concept and Meaning: Social, Cultural, Psychological and Biological Explanations of Gender; The myth of Male dominance; Sex, Gender and Inequality, Sex ratio: Trends in India & Orissa.

**Unit-II**

Feminist Theories: Liberal Feminism, Marxist Feminism, Socialist Feminism, Radical Feminism

### **Unit-III**

Role & Status of Women: Tribal & Non-Tribal; Past & Present: Socio-economic, Political, Religious, Taboos and Restrictions.

### **Unit-IV**

Women in a Globalizing world: Rights of Women, Violence Against Women: Rape, Domestic Violence, Sati, Bride Torture, Natalty violence, Against women's Bodies (Food, Medical, Economic & Educational facilities), Empowerment of women (SHG and Entrepreneurship); Legislative Measures; Literacy and Awareness Generation among women.

### **Unit- V**

Women, Environment and Development, Eco-Feminism & Eco-feminist Movements, Women Development V s. Women and Development, Role of NGOs in Developing Awareness among women. Women and Employment

## **Semester-IV: (GROUP – B: Socio - Cultural Anthropology)**

### **COURSE – 24: Anthropology of Symbolism (ANT – E<sub>3</sub> 346 ‘B’)**

Full Marks – 100; **Credit- 4**

(Questions are to be set covering all units)

#### **Unit-I:**

Concept, Meaning and Scope; Interpretive Anthropology: Antecedents and Influences, Culture as Symbolism, Meaning Construction and Cultural Cognition

#### **Unit-II:**

Major Figures and Key Concepts; Geertz and Turner: Interpretation of symbols & Anthropological Approaches to Symbolism, Ritual Symbolism and Social order, Evolutionary Perspective, Signal and index to Symbol, Symbolic Past

#### **Unit-III:**

Ethnology and Symbolism: Symbol in Linguistic theory, Formal methodology, and Structural concordance (Levi-Strauss & Others), Symbolic meaning and derivation of meaning from signal and index to symbol.

#### **Unit-IV:**

Symbolic Anthropology in 1970s and 1990s, Cultural Pluralism, Trans-local nature of cultural Phenomena

#### **Unit-V:**

Symbols and meaning in the Society: Tribal and Non-tribal Cultural Practices; Linguistic Symbols & Ritual Symbols.

**Semester-IV: (GROUP – C: Tribal Studies)**

**COURSE – 22: Tribal Ecology and Economy (ANT – C 344 ‘C’)**

Full Marks – 100; **Credit- 4**

(Questions are to be set covering all units)

**Unit-I**

Nature, scope and relevance of Tribal Economy and Ecology; Importance of Ecology in the Tribal

Economy; Role of Women in Tribal Economy

**Unit-II**

Utilisation of Natural Resources: Land, Water and Forests, Impact of Economic Development, Mega projects, Deforestation and Over forms of Environmental Degradation, Displacement & Rehabilitation.

**Unit-III**

Role of Indigenous Knowledge in the Management of Natural Resources in Tribal Areas, Common

Property Resources, Local Resources and Customary Rights

**Unit-IV**

Livelihood Resources and Food Crisis Management - Impact of Globalisation on tribal economy,

Role of Weekly markets.

**Semester-IV: (GROUP – C: Tribal Studies)**

**COURSE – 23: Ethno-medicine (ANT – C 345 ‘C’)**

Full Marks – 100; **Credit- 4**

(Questions are to be set covering all units)

**Unit-I:**

Meaning and scope of ethno-medicine; Development of Ethno-medicine; Ethno-medicine studies: Ethno-botany and Ethno biology, Ethno-physiology, Ethno-anatomy; Definition of disease, fitness, Health and Sickness; Classification of disease

**Unit- II:**

Etiology of disease; Diagnosis of disease; Prognosis of treatment; Epidemic and treatment; Endemic Disease and Treatment

**Unit-III:**

Human Medicine; Plant Medicine; Animal Medicine; Magico- Religious Treatment; Healing Rituals; Collection, preparation and administration of ethno-medicine; Pharmacological aspects of ethno-medicines.

**Unit-IV:**

Tribal medicines; Market Potentiality of ethno-medicines; Persons involved in practicing indigenous medicine; Women involvement in Tribal medicine; Role and importance of Tribal Medicine; Acceptance of Indigenous medicine vis-a vis modern medicine

**Semester-IV: (GROUP – C: Tribal Studies)****COURSE – 24: Status and Empowerment of Tribal Women (ANT – E<sub>1</sub> 346 ‘C’)**

Full Marks – 100; **Credit- 4**

(Questions are to be set covering all units)

**Unit-I**

Women and Tribal Women: An Anthropological overview (Women in foraging and Hunting culture, upper class women, House-wives, and working women)

**Unit-II**

Roles and responsibilities of tribal women in social, economic, political and religious spheres; Violence against tribal women; Assessment of the status of tribal women;

Demographic profile of tribal women; Tribal women in education, employment and industrial economy

**Unit-III**

Rights, restrictions and taboos of tribal women at individual, family and communal levels; Eco-feminism: integrated views of nature, culture and gender issues in tribal society

**Unit-IV**

Tribal women and Development: Role in economic development in family, village, state and national levels;

**Unit-V**

Development of tribal women in five year plans; Programmes for empowerment of tribal women: through SHG, micro-finance and entrepreneurship, Role of other development programmes and media in empowerment

**Semester-IV: (GROUP – C: Tribal Studies)****COURSE – 24: National Policy on Tribals and Tribal Rights (ANT – E<sub>2</sub> 346 ‘C’)**

Full Marks – 100; **Credit- 4**

(Questions are to be set covering all units)

**Unit-I**

National policy on the Tribals: A historical background;

The final draft policy: An overview; Socio-cultural and economic dimensions of the policy;

**Unit-II**

Tribes, forest and land in the policy; Science and technology policy for Tribals

**Unit-III**

Specific and general considerations in the policy; Health, Education and Political dimensions of tribal policy; Tribal empowerment issues in the policy; Women in tribal policy; Reservation policy for the tribals

**Unit-IV**

Concept and Definition of Rights, Human Rights and Tribal Rights; Rights, Laws and Privileges compare and contrast between Human Rights and Tribal Rights;

**Unit-V**

International agency and Tribal Rights: ILO, UN Convention on indigenous people; Constitution of India and tribal rights; Violation of tribal rights (men, women and children) in Odisha

**Semester-IV: (GROUP – C: Tribal Studies)**

**COURSE – 24: Folk art and Culture (ANT – E<sub>3</sub> 346 ‘C’)**

Full Marks – 100, **Credit- 4**

(Questions are to be set covering all units)

**Unit- I**

Concept and Definitions of Folklore; Scope of Folklore Studies; Anthropological approach to folklore studies; Folklore theory and method

**Unit-II**

Folk Art: Graphic and Plastic Arts & Decorative, Representative Art, Stylized Art, Abstract Art, Art for Art's sake, Folk art and Religion

**Unit-III**

Performing Arts: Music and Dance, Ballads, Musical Instruments: Types and Operation, Folk dance, Style in Music and dance

**Unit-IV**

Folk Literature: Myths, Legends, Folk tales, Riddles: types, structure and functions, structural Analysis.

## **Unit-V**

Other forms of Folklore: Personal Adornment: Body mutilation, Body Ornaments, Costume (clothing), Tattoo; Folk games (Indoor & Outdoor, Male & Female)

## **Semester-IV: (GROUP – D: Archaeological Anthropology)**

**COURSE – 22: Theory and Methods in Archaeological Anthropology (ANT – C 344 ‘D’)**

Full Marks – 100, **Credit- 4**

(Questions are to be set covering all units)

### **Unit-I:**

Archaeological Anthropology: Meaning and Scope:

Relation with other branches of Anthropology, Life Sciences and Physical Science

### **Unit-II:**

Field Methods

Exploration: Location and identification of archaeological sites, topo sheets, aerial photography, remote sensing, earth resistivity, survey system. Types of Excavations: Vertical and Horizontal

### **Unit-III:**

Dating Methods

Radio-Carbon dating, Potassium-argon dating, dendro-chronology, Thermoluminescence dating and archeomagnetic dating

### **Unit-IV:**

Geo archaeology and Formation Process in Archaeology

Geo-archaeology: Basic Principles and Study components in Geo-Archaeology: understanding soil and regiments - Physical features, chemical features, physical weathering and types of regiments, chemical weathering and formation of main types of soil.

Archaeological site and its formation: Basic Categories of Archaeological Evidences, Types of sites and their contexts;

Theories & Methods in archaeological anthropology formation process and Natural/environmental formation process in Anthropology.

### **Unit-V:**

Theoretical issues in Archaeological Anthropology

Diffusionism, Processual (New) Archaeology and Post - Processual Archaeology Theoretical perspectives in Indian Archaeology: Differentiation, Processual and Post-Processual

Archaeology in India.

**Semester-IV: (GROUP – D: Archaeological Anthropology)**

**COURSE – 23: Ethno-archaeology (ANT – C 345 ‘D’)**

Full Marks – 100; **Credit- 4**

(Questions are to be set covering all units)

**Unit- I:**

Formation processes in Archaeology and Ethno-Archaeology: Meaning and Scope

Archaeological sites and its formation: Basic categories of Archaeological evidences; Types of sites and their contexts; Cultural formation processes and Natural / environmental formation processes in Archaeology.

**Unit-II:**

Importance of Ethno archaeology: Settlement, Subsistence, art and craft, mortuary practices, trade and exchange

**Unit-III:**

Approaches in Ethno-Archaeology

Direct-Historical Approaches; General Comparative Approaches, Examples of Ethno-Archaeology in India

**Unit-IV:**

Ethno-archaeology in India with special reference to Orissa

**Unit-V:**

Tribal Ethnography of Orissa

Tribal ethnographic Case studies of Orissa highlighting their settlement, Subsidence art and crafts, mortuary practices, trade and exchange

**Semester-IV: (GROUP – D: Archaeological Anthropology)**

**COURSE – 24: Applied Archaeological Anthropology (ANT – E<sub>1</sub> 346 ‘D’)**

Full Marks – 100; **Credit- 4**

(Questions are to be set covering all units)

Unit-I

The fundamentals of Archaeology: Definition and scope of Archaeology, History and development of Archaeology, The development of Archaeological theory in the 20<sup>th</sup> Century, Future directions of Archaeology

Chronological division of Cenozoic Era and events of the Pleistocene

#### Unit-II

Environmental Archaeology: Investigating environment in a global scale; Studying the landscape; Reconstructing plant environment; Reconstructing animal environment; Reconstructing human environment; Main factors of the human environment;

#### Unit-III

Geo-archaeology : Basic principles and study components in geo-archaeology; analytical procedures in geo-archaeology; Understanding Soil and sediments - Physical features, Chemical features, Physical weathering and types of sediments; Chemical weathering and formation of main types of soil.

#### Unit-IV

Experimental Archaeology

Field Methods in Archaeology:

Exploration : Purpose, Classes and surveying equipments; Methods of exploration – Researching maps, Ground Reconnaissance; Aerial Reconnaissance; Geophysical Prospecting Methods

Excavation : Meaning and objectives; Instruments used in excavation; Methods of Excavation – Trial Trenching, Vertical Excavation or Rectangular trenching methods, Horizontal Excavation or Grid system; Excavation of Rock shelter and caves; Recovery and recording of the evidence; Processing and classification; Preservation – Wet Preservation, Dry preservation, Cold preservation

#### Unit-V

Specialized Field Methods in Archaeological Research: Application of Remote Sensing in Archaeology; Application of Geographic Information System for spatial analysis and archaeological resource management.

**Semester-IV: (GROUP – D: Archaeological Anthropology)**

**COURSE – 24: Practical in Material Culture (ANT – E<sub>2</sub> 346 ‘D’)**

Full Marks – 100, Credit- 4

**Material Culture:**

Identification and technological description of following in respect of the simple societies:

Implements of (a) Food Gathering (b) Hunting (C) Fishing (d) Agriculture (e) Fire Making (f) Land and Water Transport (g) Musical Instruments and (h) Types of Habitations

Technological Equipment, their use, Energy Input and Output in relation to various types of Economy

**Museum Techniques**

Each student is required to learn the preservation techniques of the organic and inorganic materials of the museum along with he/she has to learn the techniques of cleaning, mending and Arrangement of Museum specimens.

**Internship and Visit**

Each student has to perform maintenance of museum specimen of department's museum in the strict supervision of concerned teacher. They also have to visit other museums and prepare a report on these museums especially regarding their specimen, method of display and technique of preservation and maintenance of different object.

**Semester-IV: (GROUP – D: Archaeological Anthropology)**

**COURSE – 24: New Archaeological Anthropology (ANT – E<sub>3</sub> 346 ‘D’)**

Full Marks – 100; Credit- 4

(Questions are to be set covering all units)

Unit-I

The New Archaeology: Before the new archaeology; Origins of new archaeology; Key points in new archaeology

Unit-II

Archaeology as a science

Middle-range theory: problems and prospective

Unit-III

Cognitive Archaeology

Post-processual and interpretative archaeologies

Unit-IV

Archaeology and gender

Archaeology and evolution

Unit-V

Archaeology and history

Archaeology in a post-modern world

Conflict and Consensus in Archaeology

**Extra Elective Courses:**

**ANT EE -301: ANTHROPOLOGY OF DISASTER  
MANAGEMENT**

Full Marks -100

(Questions are to be set covering all Units)

**Unit-I:**

Concept of crises management, Displacement placement situation, Voluntary and Involuntary, Natural and Manmade, floods, Epidemics, Crime, Droughts, Rehabilitation Policies and Programmes in Natural and Created Disasters, Strategies, Agencies and Organizational Structure.

**Unit-II:**

Human factors in Resettlement and Rehabilitation, Anthropological Perspectives

**Unit-III:**

Development and Displacement: Construction of Roads, Development of cities, Absorbing villages in cities, Defence Projects, Dam Projects, Impact of Displacement: Socio-cultural, Economic, Psychological, Environment factors.

**Unit-IV:**

Women in Resettlement, Disaster Mitigation Strategies, Government Intervention for Women Rehabilitation

**ANT EE -302: ANTHROPOLOGY OF EDUCATION**

Full Marks -100

(Questions are to be set covering all Units)

**UNIT-I:**

Meaning and scope of anthropology of education, Relationship of education with other disciplines, Education as the key input for development, world declaration on Education for All (1990).

**UNIT-II:**

Education in India through ages, Constitutional Mandate for Universalization of Elementary Education, Concerns in Primary Education with special reference to Orissa, Access,

Retention and Dropouts.

**UNIT - III:**

Literacy and Education, Role of the National Literacy Mission, Universal Literacy and Empowerment, Role of PRIs in Community Participation for School Management, Education of ST Children and their Problems and Prospects, Emphasis on Women Education, Secondary, Higher Secondary, Vocational, Technical, College and University Education.

**UNIT-IV:**

Infrastructure Development in Educational Institutions, Capacity building of pedagogue, Parents, Teachers and Pupils Interaction, Medium of Instruction, Educational Policy: Issues and options.

**ANT EE -303: PSYCHOLOGICAL AND LINGUISTIC ANTHROPOLOGY**

Full Marks -100

(Questions are to be set covering all Units)

**Unit-I:**

Concept and Scope of Psychological Anthropology; Major Approaches in Psychological Anthropology: Ethnopsychology, Psychoanalytic and Psychiatric Anthropology, Methods of Culture and Personality Research.

**Unit-II:**

Personality and Culture: Personality Formation and Determinants; Personality constructs: Basic Personality, Modal Personality and Status Personality, Swaddling, Enculturation and Socialization; Functions of Personality.

**Unit-III:**

Gestalt Psychology and Configuration of culture: Ethos, Eidos, Genius, Themes and counter-themes, Values and World view, National Character and Culture Pattern, Diachronic and Synchronic Study of Culture and Personality.

**Unit-IV:**

Concept and Scope of linguistic Anthropology; Universals of Language; Language, Dialect

and Idiolect; Ethno Linguistics, Anthro-Linguistics and Soico-Linguisites; Typological and Genelological classification; Language and Communication:

Verbal & Non-Verbal. Synchronic and Diachronic stydy of Language Phonetic, Morpho-Phonemic

**Unit-V:**

Syntactic, Sernentic and Symbolic subsystems of Language; Language and Culture; Sapis-Whorf hypothesis; Linguistic and Culture Change; Structural Analysis of Language

**ANT EE -304: POLITICAL ANTHROPOLOGY**

Full Marks -100

(Questions are to be set covering all Units)

**Unit-I:**

Concept and meaning; Power and authority, Forms of Human Behaviour (Universal, Social Idiosyncratic), Deviant Behaviour and Conformity

**Unit-II:**

History of Political Anthropology: Levels of Government, Band (Kin-based) and Segmentary tribes, Multiple-Kin Government, The Tribe, Associational Tribes (Plains Indian Tribes), Age-Grade Tribes, Tribal Confederations (League of Irogavis), Monarchy & Chiefdoms, The state.

**Unit-III:**

Approches and Units of Study, Approches of Max Ghickman, Approches of F G Bailey, Cultural Approach, Microlevel Polities Approach, Approches of Albert O. Hirschman

**Unit-IV:**

Leadership Pattern, Types of Leaders and their functions, Decision-making process - Reward and Punishment, Social Sanction.

**Unit-V:**

Law (primitive and Modem) and Warfare (War / Feuding / Raiding / Fighting) social norms, deviance and conformity, process of social control ( Norms, violation, recognition of violation, report of violation, response to violation, enforcement of response), Agencies of

Social Control (Group, Representative, Supernatural).

### **ANT EE -305: ANTHROPOLOGY OF MANAGEMENT**

Full Marks -100

(Questions are to be set covering all Units)

#### **Unit-I:**

Theories in Management Anthropology: Theories of Organizational Behaviour, Relevance of Culture for Organizational Behaviour, Organizational Dynamics, Schools of Management Thought, Technology and Management, Technological Environment in India, Appropriate Technology and Problems of Technology Transfer.

#### **Unit-II:**

Human Behaviour, Dynamics of Organizational Behaviour, Interpersonal Communication - Developing Interpersonal skills, art of listening, feedback counselling and transactional analysis

#### **Unit-III:**

Human Resource Management: Nature, Scope and Importance of Anthropology of Human Resource Management, Human Resource Planning with special reference to tribal communities in India.

#### **Unit-IV:**

Human Resource management in small undertakings, Human Resource Management in tribal and rural entrepreneurship

### **ANT EE -306: VISUAL ANTHROPOLOGY**

Full Marks -100

(Questions are to be set covering all Units)

#### **Unit-I:**

Introduction to Visual Anthropology: Concept, Definition and Scope; Visual Culture. Photographic and Digital Media: Still, Interactive and Moving.

Audio-visual Tools for the Analysis of Culture; Anthropological Film Analysis, Methods of Ethnographic Filming

#### Unit-II:

Anthropological Study of Images; Visual Communication; Photography and Visual Anthropology; Researching Still and Video images

Theory and Representation. Anthropology and Images: Ethnophotography and ethnographic films and mass media. Theories of representation, modern media and political advocacy.

#### Unit-III:

Ethnographic Photography and Film: Ethnographic Film and History, Reconstructing Cultures on Film, Feature Films as Cultural Documents, Use of Film and Television in Anthropology

Early Ethnographic Photography: Contexts and Trends. Anthropology of Art and Aesthetics: Critical reflection on the relation of images, objects and persons. Objects and images from other societies valued as 'art'.

#### Unit-IV:

Visual Anthropology in India: Perspectives and Applications, Ethnographic and Feature Films in India: Anthropological Structural Analysis; Filming in the field of Anthropology. Ethical considerations in Ethnographic film-making;

Ethnographic Photography: Conventions and Methodologies. Paradigms and Debates.

Ethnographic Films: Theoretical issues concerning ethnographic film, ethical dimensions of ethnographic film, Interdependency of technology and culture.

Cinema Studies with emphasis on key feature, documentary and ethnographic films with a focal theme - the examination of the 'language of film'.

#### **Suggested Readings**

1. Banks M. and Ruby J. (2011). *Made do Be Seen. Perspectives on the History of Visual Anthropology*. University of Chicago Press
2. Ch. 1, "Reading Pictures," pp. 1-12 [From: Banks, Marcus. 2001. *Visual Methods in Social Research*. London: Sage.]
3. David MacDougall *Transcultural Cinema*, (Princeton, 1999)
4. Ember C.R. et al (2011). *Anthropology*. New Delhi: Dorling Kindersley.
5. Grimshaw A. and Ravetz A. (2009). *Observational Cinema. Anthropology, Film, and the Exploration of Social Life*. Indiana University Press

6. Henley P. (2010). *The Adventure of the Real. Jean Rouch and the Craft of ethnographic Cinema.* Chiacago University Press
7. Marcus Banks and Howard Morphy, 1998, *Rethinking Visual Anthropology*
8. Pink S. (2010). *Doing Sensory Ethnography.* Sage Publications
9. Ruby, Jay. 1996. "Visual Anthropology." In *Encyclopedia of Cultural Anthropology,* David Levinson and Melvin Ember, editors. New York: Henry Holt and Company, vol. 4: 1345- 1351.
10. Schneider A. and Wright C. (2010) *Between Art and Anthropology: Contemporary Ethnographic Practice.* Berg Publishers

### **ANT EE -307: SPORTS AND NUTRITIONAL ANTHROPOLOGY**

Full Marks -100

(Questions are to be set covering all Units)

**Unit I:** Anthropology of sports- Physical fitness, component of physical fitness

**Unit II:** Physical conditioning, training-techniques and physiological effects, environmental effects on physical performance: effect of heat stress, cold stress and high altitude on physiological response and performance.

**Unit III:** Body composition and Athletes, sports selection and monitoring

**Unit IV:** Human biological variability, health and nutrition; doping and performance; cultural constructions and physiologic implications of food across time, space and society; an integrated bio-behavioural perspective towards food preference.

#### **Suggested Readings**

1. Brughart R. (1990). *The Cultural Context of Diet, Disease and the Body.* In *Diet and Disease in Traditional and Developing Societies.* GA Harrison and JC Waterlow, eds. P. 307-325. Cambridge University Press. Cambridge.
2. Quandt SA. (1987). *Methods for Determining Dietary Intake.* In *Nutritional Anthropology.* FE Johnston, ed. Pp. 67-84. Liss. NY.
3. Rozin P. (1987). *Psychobiological Perspectives on Food Preferences.* In *Food and Evolution: Toward a Theory of Food Habits.* M. Harris and EB Ross (eds.). Temple University Press. Philadelphia, pp. 181-205.
4. Stinson S. (1992). *Nutritional Adaptation.* *Annual Review of Anthropology* 21:143-170.

5. Ulijasek SJ and Strickland SS. (1993). Introduction. In *Nutritional Anthropology: Prospects and Perspectives*. Pp. 1-5. Smith Gordon. London.

## **ANT EE -308: NEURO ANTHROPOLOGY**

Full Marks -100

(Questions are to be set covering all Units)

Unit 1: Encultured Brain; The Basics of Neuro-anthropology; The Nature of Variation; Evolution by Natural Selection

Unit 2: Overview of Neural Systems & Their Interconnections Niche construction; Primate Social Cognition, Human Evolution and the Brain

Unit 3: Memory & Medicine; Balancing Between Cultures: Equilibrium in Capoeira, Human Capacities, Skills, and Variation

Stone Age Body Image: Male embodiment in subsistence societies

Unit 4: Overcoming Mind/Body Dualism; Addiction and Neuro-anthropology; Ritual and Emotion; War and Dislocation; Neuro-anthropological model of trauma, Autism; theory of mind and religious development; Cultural consonance, consciousness and depression

Unit 5: Neuro-constructivism and Embodied Learning; Human Development: A Bio-cultural Process; Enculturation and Memory; The Neuro-anthropology of Stress; The Neuroanthropology of PTSD (Post traumatic stress disorder); Psychiatry in Neuro-anthropological Perspective

Neurological and Anthropological Methods; Applied Neuroanthropology; Critical Neuroscience; The Social and Personal Uses of Neuroscience

### **Suggested Reading:**

1. Bonanno et al.,(2011) Weighing the Costs of Disaster: Consequences, Risks, and Resilience in Individuals, Families, and Communities. *Association for psychological science*
2. Buchowski et al.,(2011) Aerobic Exercise Training Reduces Cannabis Craving and Use in Non-Treatment Seeking Cannabis-Dependent Adults  
<http://www.plosone.org/article/info%3Adoi%2F10.1371%2Fjournal.pone.0017465>
3. Davidson & McEwen,(2012) Social Influences in Neuroplasticity: Stress and Interventions to Promote Well-Being. *J. of Nature Neuroscience*

4. Downey, (2008) Balancing between Cultures, in *The Encultured Brain. J. of Neuroanthropology*
5. Downey,(2010) 'Practice without Theory': A Neuroanthropological Perspective on Embodied Learning. *JRAI*
6. Goldin&Merrick,(2012)Neuroscience or Neurobabble, [http://www.stats.org/stories/2012/Neuroscience\\_Or\\_Neurobabble\\_jul16\\_12.html](http://www.stats.org/stories/2012/Neuroscience_Or_Neurobabble_jul16_12.html)
7. <http://jcc.sagepub.com/content/41/4/546.abstract>
8. <http://www.mc.vanderbilt.edu/news/releases.php?release=2044>
9. <http://www.nature.com/neuro/journal/v15/n5/full/nn.3093.html>
10. Kirmayer & Gold,(2012). Re-Socializing Psychiatry: Critical Neuroscience and the Limits of Reductionism, in *Critical Neuroscience*. Blackwell Reference online.
11. Lende and Downey,(2012)*The Encultured Brain: An introduction to Neuroanthropology*. Cambridge: Massachusetts Institute of Technology Press.
12. Lende, (2012)Neuroanthropology, Applied Research, and Developing Interventions.<http://blogs.plos.org/neuroanthropology/2012/05/10/neuroanthropologya-pplied-research-and-developing-interventions/>
13. Luhrmann,(2012) Beyond the Brain <http://www.wilsonquarterly.com/article.cfm?AID=2196>
14. Margulies,(2011) The Salmon of Doubt, in *Critical Neuroscience*.
15. Miller & Kinsbourne,(2011) Culture and Neuroscience in Development Psychology: Contributions and Challenges. *Child Development perspectives*. <http://onlinelibrary.wiley.com/doi/10.1111/j.1750-8606.2011.00188.x/abstract>
16. Worthman,(2010) *The Ecology of Human Development: Evolving Models for Cultural Psychology*
17. Xue et al.,(2012) A Memory Retrieval-Extinction Procedure to Prevent DrugCravingandRelaps.<http://www.sciencemag.org/content/336/6078/241.full>

## **ANT EE -309: FORENSIC DERMATOGLYPHICS**

Full Marks -100

(Questions are to be set covering all Units)

Unit-I: Introduction to Dermatoglyphics: History and Development, scope and Applications.

Unit-II: Formation of fingerprint ridges, pattern types and patterns area. Classification of Fingerprints- Henry Classification, Vucetich System, Single-Digit Classification.

Unit-III: Types of Fingerprints: Plastic, Visible and Latent Prints. Conventional and Modern methods for development of latent fingerprints- Silver Nitrate, Ninhydrin, Iodine Fuming, Powder Methods, Metal Deposition Method, Small Particle Reagent and Laser Techniques.

Unit-IV: Basis of Fingerprint Comparison: Class Characteristics and Individual Characteristics, Determination of Identity.

Unit-V: Other Dermatoglyphic Patterns: Palm Print, Sole Prints and Toe Prints.

Recent advances: Fingerprint and Palmprint Recognition, Automated Fingerprint Identification System.

### **Suggested Readings:**

1. Berry, J., & Stoney, D. A. (2001). The history and development of fingerprinting. *Advances in fingerprint Technology*, 2, 13-52.
2. Cowger, J. F. (1992). *Friction ridge skin: comparison and identification of fingerprints* (Vol. 8) CRC Press.
3. Cummins, H., & Midlo, C. (1961). *Finger prints, palms and soles: An introduction to dermatoglyphics* (Vol. 319). New York: Dover Publications.
4. Jain, A. K., Flynn, P., & Ross, A. A. (2007). *Handbook of biometrics*. Springer Science & Business Media.
5. Lee, H. C., Ramotowski, R., & Gaensslen, R. E. (Eds.). (2001). *Advances in fingerprint technology*. CRC press.
6. Mehta, M. K. (1980). Identification of thumb impression and cross examination of fingerprints. N. M. Tripathi Publication, Bombay.

## **ANT EE -310: PALEOANTHROPOLOGY**

Full Marks -100

(Questions are to be set covering all Units)

**Unit I:** Dating methods, geological time scale, taphonomy and interpretation of the paleontological and archaeological records, taxonomic and chronological problems of fossils records.

**Unit II:** Primate Speciation and extinctions: a geological perspective, adaptive primate radiation, differential rate of somatic evolution.

**Unit III:** Evolutionary biology: Origins and evolution of stone age technology (Human origins: Development, distribution and fossilized evidence of Australopithecines, Paranthropus (Zinjanthropus), Homo habilis, Homo erectus, Archaic H. sapiens, prehistoric hunter-gatherers, modern pastoral communities, emergence of prehistoric people in Africa).

**Unit IV:** Primate and Non-Primate Models for Early Hominid Behaviour; hominization process- Evolution of hominid-human bipedalism

**Unit V:** Palaeodemography- reconstruction of population patterns from skeletal analysis, determination of demographic variables in prehistoric populations and post-neolithic population growth, theory and techniques in paleodemography, methodological issues for reconstructing demographic structure, demographic models of mortality and their interpretation

**Unit VI.** Palaeopathology- bioarchaeological approach of disease; effects of agriculture, urbanization and slavery on health and disease; colonization and disease with special emphasis on the New World; dispersion of modern humans - molecular and morphological patterns of relationship

### **Suggested readings**

1. Barnes E. Diseases and Human Evolution. (2005). University of New Mexico Press.
2. Boyd R and Silk JB. (2009). How Humans Evolved. London: WW Norton.
3. Cameron DW and Colin P. Groves CP. (2004). Bone, Stones and Molecules: "Out of Africa" and Human Origins. Elsevier Inc.
4. Cela-conde CJ and Frisancho J. (2007). Human Evolution: Trails from the past. Ayala Oxford University Press.
5. Conroy GC. (2005). Reconstructing Human Origins. WW Norton and Company.
6. Hoppa RD and Vaupel JW. (2002). Paleodemography: Age Distributions from Skeletal Samples. Cambridge University Press.

7. Lansen CS, Matter RM and Gebo DL. (1998). Human Origin: The fossil Record. Waveland Press.
8. Napier JR and Napier PH. (1985). The Natural History of the Primates. Cambridge, MA: The MIT Press
9. Pinhasi R and Mays S (2008). Advances in Human Palaeopathology. Chichester: John Wiley & Sons, Inc. (PM).
10. Stringer C. (2011). The Origin of Our Species. London: Allen Lane.
11. Tattersall I. (2009). The Fossil Trail: How We Know What We Think We Know about Human Evolution. New York: Oxford University Press.
12. Waldron T. (2008): Palaeopathology. Cambridge University Press.

### **ANT EE -311: ANTHROPOLOGY OF RELIGION, POLITICS, AND ECONOMY**

Full Marks -100

(Questions are to be set covering all Units)

#### **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.

### **Suggested Readings:**

12. Balandier G. (1972). *Political Anthropology*. Middlesex: Penguin.
13. Barbara M. (2011). *Cultural Anthropology*. New Jersey: Pearson Education.
14. Benedict A. (2006). *Imagined Communities: Reflections on the Origin and Spread of Nationalism*. Verso
15. Durkheim E. (1986). *The elementary forms of the religious life, a study in religious sociology*. New York: Macmillan.
16. Eller JD. (2007). *Introducing Anthropology of Religion*. New York: Routledge.
17. Ellis F. (2000). A framework for livelihood analysis. In *Rural Livelihoods and Diversity in Developing Countries* . Oxford: Oxford University Press.
18. Ember CR. (2011). *Anthropology*. New Delhi: Dorling Kinderslay.
19. Evans-Pritchard EE. (1937). *Witchcraft, Oracles and Magic among the Azande*, Oxford: Clarendon Press.
20. Frazer JG. (1978). *The Illustrated Golden Bough*, London: Macmillan.
21. Frick GD and Langer R. (2010). *Transfer and Spaces*. Harrassowitz (Germany).
22. Glazier SD. (1997). *Anthropology of Religion: A Handbook*. Westport, CT: Greenwood Press.
23. Gledhill J. (2000). *Power and Its Disguises: Anthropological Perspectives on Politics*. 2nd ed. London: Pluto Press.
24. Henrich J, Boyd R, Bowles S, Camerer C, Fehr E, Gintis H, McElreath R, Alvard M et al. (2005). 'Economic Man' in cross-cultural perspective: Behavioral experiments in 15 small-scale societies. *Behavior and Brain Science*. 28(6):795-815;
25. 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.
26. Herskovits MJ. (1952). *Economic Anthropology: A Study in Comparative Economics*. New York: Alfred A Knopf Inc.
27. Lambek. M. (2008) *A Reader in the Anthropology of Religion*.
28. Malinowski B. (1922) *Argonauts of the Western Pacific*. London: Routledge.
29. Polyani K. et al (1957), *Trade and Market in the Early Empires*. Chicago: Henry Regnery Company.

## **ANT EE -312: INDIAN ARCHAEOLOGY**

Full Marks -100

(Questions are to be set covering all Units)

Unit I: Understanding culture

- a. Technique of tool manufacture and estimation of their relative efficiency;
- b. Classification of tools: primary and combination fabrication techniques;
- c. Typology and cultural nomenclature.

Unit II: Methods of climatic reconstruction: palynology, paleontology, soil pH estimation.

Unit III: Prehistoric India

Pleistocene chronology of India: A critical assessment

Unit IV: Character, distribution and interpretation of habitat and economy of :

- i Lower palaeolithic
- ii Middle palaeolithic
- iii Upper palaeolithic
- iv Mesolithic culture
- v Art, ritual and belief

### **Suggested reading:**

1. D. K. Bhattacharya (1996) An Outline of Indian Prehistory. Delhi, Palika Prakashan.
2. H. D. Sankalia (1974) Prehistory and Protohistory of India and Pakistan. Poona, Deccan College.
3. H. D. Sankalia (1982) Stone Tool Type and Technology. Delhi, B.R.Publication.

## **ANT EE -313: FASHION ANTHROPOLOGY**

Full Marks -100

(Questions are to be set covering all Units)

Unit-I. Introduction: Fashion, Consumption, and Anthropology: From Evolution to Compassionate Consumption, the Rise and Fall of Evolution in Dress

Unit II: Theoretical and Ethnographic Approaches to Understanding Fashion and Consumer Society

Unit III Colonialism, Dress, and Identity

Colonialism, Consumption, and Civilizing Fashion

Anti-colonial Dress, Clothing Debates in Burma and Africa

Unit IV: Race and Fashion: The 1980s "Japanese Invasion" and 1990s "Asian Chic"

## Alternative Approaches to Consumerism

Unit V: Gender, Fashion and Consumption in different Human societies, application of fashion in traditional and modern societies, role of religion in fashion.

Unit VI: Globalization and Dress, leather cosmetic relationships, relationship of tribal clans with reference to embroidery color and designs in ethnic group of India.

### **Suggested Readings**

1. Allman, Jean. *Fashioning Power: Clothing, Politics and African Identities*. Bloomington: Indiana University Press, 2004.
2. Aronson, Lisa. "Body Modification and Art", in the *Berg Encyclopedia of World Dress and Fashion, Volume 1, Africa*. Berg Fashion Library, 2010.
3. Bachu, Parmindar. *Dangerous Designs: Asian Women Fashion the Diaspora Economies*. New York: Routledge, 2004.
4. Bradley Foster, Helen, and Johnson, Donald Clay. *Wedding Dress Across Cultures*. Berg Fashion Library, 2003.
5. Eicher, Joanne B., and Roach-Higgins, Mary Ellen. "Definition and Classification of Dress: Implications for Analysis of Gender Roles." In *Dress and Gender: Making and Meaning*. Oxford: Berg, 1992, 8–28.
6. Eicher, Joanne B., and Sumberg, Barbara. "World Fashion, Ethnic and National Dress", in *Dress and Ethnicity: Change Across Space and Time*. Berg Fashion Library, 1995.
7. El Guindi, Fadwa. *Veil: Modesty, Privacy and Resistance*. Berg Fashion Library, 2003 [1999].
8. Fair, Laura. "Veiling, Fashion, and Social Mobility: A Century of Change in Zamzibar", in *Veiling in Africa*. Bloomington: Indiana University Press, 2013, 15–33.
9. Fee, Sarah. "Anthropology and Materiality." In *The Handbook of Fashion Studies*. London: Bloomsbury, 2013, 301–324.
10. Gott, Suzanne, and Loughran, Kristyne. *Contemporary African Fashion*. Bloomington: Indiana University Press, 2010.
11. Hansen, Karen Tranberg. "The World in Dress: Anthropological Perspectives on Clothing, Fashion, and Culture" in *Annual Review of Anthropology*, 34 (2004): 369–392.
12. Hansen, Karen Tranberg. *Salaula: The World of Secondhand Clothing and Zambia*. Chicago, 2000. ISBN: 0226315819

13. Hebdige, Dick. *Subculture: The Meaning of Style*. Routledge, 1979. ISBN: 0415039495
14. Mangieri, Tina. "Fashion, Transnationality, and Swahili Men", in *African Dress: Fashion, Agency, Performance*. London: Bloomsbury, 2013, 153–167.
15. Miller, Daniel and Sophie Woodward, eds. *Global Denim*. Berg, 2011. ISBN: 9781847886316
16. Rooks, Noliwe. *Hair Raising: Beauty, Culture, and African American Women*. Rutgers, 1996. ISBN: 9780813523125
17. Schneider, Jane. "The Anthropology of Cloth", in *Annual Review of Anthropology*, 16 (1987): 409–448.
18. Smith, Fred T. "Archaeological Evidence", in the *Berg Encyclopedia of World Dress and Fashion*, Volume 1, Africa. Berg Fashion Library, 2010.
19. Tarlo, Emma, and Moors, Annelies. *Islamic Fashion and Anti-Fashion: New Perspectives from Europe and America*. London: Bloomsbury, 2013.
20. Tarlo, Emma. *Clothing Matters: Dress and Identity in India*. Chicago: University of Chicago Press, 1996.
21. Tarlo, Emma. *Visibly Muslim: Fashion, Politics, Faith*. Berg Fashion Library, 2010.

### **ANT EE -314: URBAN ANTHROPOLOGY**

Full Marks -100

(Questions are to be set covering all Units)

#### **Unit 1: Emergence of urban anthropology**

Introduction, Extension of the anthropological interest in peasants and rural areas, Origins of Cities and Early Sociological Approaches, Urban planning and design

#### **Unit 2: Political economy**

Rural-urban migration, kinship in the city, problems that arise from urbanism, poverty and social stratification

#### **Unit 3: Class approach**

Culture of Poverty and the Underclass Approach, Comparison between relations function in an urban setting versus function in a rural setting, Race and Class in Urban Ethnography, Urban Dystopia

#### **Unit 4: Urban Inequality and Disasters**

Poverty, extended family for urban natives versus migrants, Global Cities and the Production of Space, Community study and urban ecology, Urban Space, Postmodern and Hypermodern City

#### **Unit 5: Global Urban Developments**

Urban ethnography research and methodology, Contemporary urban issues: Suburbs, Exurbs and Urban Decline, disciplinary perspectives

#### **Suggested readings**

6. “Anthropological Fieldwork in Cities”, “The anthropology of Cities: Some Methodological Issues”.
7. Childe, V. Gordon. 1950. “Urban Revolution.” Town Planning Review
8. Cities, classes and the social order. Anthony Leeds, Roger Sanjek
9. <http://www.oxfordbibliographies.com/>
10. Low Reader Part V: “The Postmodern City” in Low pp. 317-377; Dear and Flusty.

## **ANT EE -315: PUBLIC HEALTH AND EPIDEMIOLOGY**

Full Marks -100

(Questions are to be set covering all Units)

Unit I: Principles of Epidemiology in Public Health:

Overview of epidemiology methods used in research studies to address disease patterns in community and clinic-based populations, distribution and determinants of health-related states or events in specific populations, and strategies to control health problems

Unit II: Statistical Methods for Health Science

Analysis and interpretation of data including data cleaning, data file construction and management; implementation of analytic strategies appropriate for the type of data, study design and research hypothesis; parametric and nonparametric methods, measures of association, Linear and Logistic regression, Generalized Linear Modeling, and Survival analysis

Unit III: Environmental Health

Effects of biological, chemical, and physical agents in environment on health (water, air, food and land resources); ecological model of population health; current legal framework, policies, and practices associated with environmental health and intended to improve public health

Unit IV: Psychological, Behavioural, and Social Issues in Public Health Cultural, social, behavioural, psychological and economic factors that influence health and illness; behavioural science theory and methods to understanding and resolving public health problems; assess knowledge, attitudes, behaviours towards disease and patient compliance to treatment.

Unit V: Management of Health Care Program and Service Organizations

Techniques and procedures for monitoring achievement of a program's objectives, generating evidence of program effectiveness, assessing impacts in public health settings; evaluate framework that leads to evidence-based decision-making in public health.

Organizational principles and practices including organizational theory, managerial role, managing groups, work design, and organization design at primary, secondary, and tertiary levels of care

Unit VI: Epidemiology of disease

Contemporary methods for surveillance, assessment, prevention, and control of infectious and chronic diseases, disabilities, HIV/AIDS; understanding etiology; determining change in trend over time; implementation of control measures

### **Suggested reading**

1. Aschengrau A and Seage GR. (2008). Essentials of Epidemiology in Public Health. Boston, Massachusetts.
2. Edberg M. (2013). Essentials of Health Behavior. Social and Behavioral Theory in Public Health. Second Edition, Jones and Bartlett Publishers.
3. Gordis L. (2004). Epidemiology. Third edition. Philadelphia: Elsevier Saunders.
4. Griffith JR and White KR. (2010). The Well-Managed Healthcare Organization. Health Administration Press: Chicago, IL.
5. Kovner AR, McAlearney AS, Neuhauser D. (2013). Health Services Management: Cases, Readings, and Commentary. 10th Ed. Chicago, IL: Health Administration Press.
6. Lee LM. (2010). Principles and Practice of Public Health Surveillance. Oxford University Press
7. Merson M, Black RE, Mills A. (2006). International Public Health: Diseases, Programs, Systems and Policies. Jones & Bartlett Learning.
8. Pagano M and Gauvreau K. (2000). Principles of Biostatistics. Belmont, CA: Wadsworth.
9. Remington PL, Brownson RC, and Wegner MV. (2010). Chronic Disease Epidemiology and Control. American Public Health Association.
10. Turnock B. (2011). Essentials of Public Health. Jones & Bartlett Publishers
11. Turnock B. (2011). Public health. Jones & Bartlett Publishers.

### **ANT EE -316: BUSINESS AND CORPORATE ANTHROPOLOGY**

Full Marks -100

(Questions are to be set covering all Units)

1. Business and corporate Anthropology: History and subject matter
2. Applied anthropology in industry, application of the ethnography in business management
3. Anthropology and consumer behaviour,
4. Globalization, international trade and anthropology
5. Techniques for Conducting Fieldwork for Business Organizations

#### **Suggested Readings:**

1. Advanced reading in Business Anthropology edited by Robert Guang Tian, Daming Zhu, Alfons van Marrewijk.

2. Gardner, Burleigh B. 1978 Doing Business with Management. In Applied Anthropology in America, Elizabeth M. Eddy and William Partridge (Eds.). New York: Columbia University Press. Pp.245- 260.
3. Handbook of Anthropology in Business by Rita M Denny.
4. Jordan, Ann T. Business Anthropology. Waveland Press, Long Grove, Illinois.
5. Whyte, W.F. 1948 Incentives for Productivity: The Case of the Bundy Tubing Company Applied Anthropology 7(2):1-16

### **ANT EE -317: MEDIA ANTHROPOLOGY**

Full Marks -100

(Questions are to be set covering all Units)

Unit 1: Theoretical Foundations: Introduction to Media Anthropology; Intellectual Antecedents

Unit 2: Audiences, Consumption and Identity Formation: The Social and Material Life of Cinema; Television and the Cultural Politics of Nation; Gender and Subjectivity; the Nation and Temporality; Media as Material Objects.

Unit 3: The Cultural Work of Mass Media Production: Producing “Bollywood”.

Unit 4: The Social Sites of Film and TV Production; the Exigencies of Commercial Filmmaking; the Constraints of Public Television Production.

Unit 5: Producing Reality – Journalism and Advertising; News as Social Practice; the Local and the Global in Advertising.

Unit 6: Small Media: Materiality, Circulation, Everyday Life & Social Transformations; Indigenous Media and Cultural Activism; The Social and Material Lives of Cell Phones; Media as Social Infrastructure – The Case of Facebook; Learning from New Media; The Possibilities & Constraints of YouTube

## **Suggested readings**

1. Rothenbuhler, Eric W; Coman, Mihai. Media anthropology. 2005. California, Sage.

## **ANT EE -318: TOURISM ANTHROPOLOGY**

Full Marks -100

(Questions are to be set covering all Units)

**Unit I:** Tourism- aspects and prospects, anthropological issues and theoretical concerns, tourist as ethnographer; pilgrimage and Authenticity Issues

**Unit II:** Interconnections between tourism history and the rise of the socio-cultural study of tourism including temporary migration, colonial exploration, pilgrimage, visiting relatives, imagined and remembered journeys, and tourism

**Unit III:** understand the implications of tourism as a major mechanism of cross-cultural interaction; role of symbolism, semiotics, and the imagination in tourism; tourism and the commodification of culture or cultural degradation

**Unit IV:** understand the global and local political economy of contemporary tourism, particularly in relation to international development; explore dynamic relationships between heritage-making enterprises, revival and preservation projects, the international flow of capital; role of museums and other branches of the cultural industries" (including music, art, and food) in tourism economies; tourism and global mobility; Ecotourism and sustainable development

**Unit V:** New Directions in the Anthropology of Tourism: Globalization, Tourism and Terrorism; applied aspects of anthropology in tourism development and planning.

## **Suggested Readings**

2. Chambers E. (2000). Native Tours: The Anthropology of Travel and Tourism. Prospect Heights: Waveland.
3. Crick M. (1994). Anthropology and the Study of Tourism: Theoretical and Personal Reflections. In Crick M (eds.). Resplendent Sites, Discordant Voices: Sri Lankans and International Tourism. Chur, Switzerland: Harwood Publishers.
4. Crick M. (1995). The Anthropologist as Tourist: An Identity in Question. In Lanfant MF, Allcock JB, Bruner EM (eds.)International Tourism: Identity and Change. London: Sage. pp. 205-223.
5. Dann G. (2002). The Tourist as a Metaphor of the Social World. Wallingford: CAB International.

6. Dann GMS, Nash D and Pearce PL. (1988). Methodology in Tourism Research. *Annals of Tourism Research*. 15:1-28.
7. Gmelch SB. (2004). *Tourists and Tourism: A Reader*. Long Grove: Waveland.
8. Graburn NHH. (1977). Tourism: The Sacred Journey. Hosts and Guests: The Anthropology of Tourism. Valene L. Smith, ed. Philadelphia: University of Pennsylvania Press. Pp. 33-47.
9. Hitchcock. (1997). Cultural, Economic and Environmental Impacts of Tourism among the Kalahari. In Chambers E (eds.) *Tourism and Culture: An Applied Perspective*. SUNY Press.
10. Kirshenblatt-Gimblett B.(1998). *Destination Culture: Tourism, Museums, and Heritage*. University of California Press.
11. Lippard LR. (1999). *On the Beaten Track: Tourism, Art and Place*. New Press.
12. Nash D. (1996). *Anthropology of Tourism*. New York: Pergamon.
13. Picard M and Wood R. (1997). *Tourism, Ethnicity, and the State in Asian and Pacific Societies*. University of Hawai Press.
14. Richard B. (1992). Alternative Tourism: The Thin Edge of the Wedge. In Valene Smith and Eadington Tourism (eds.). *Alternatives: Potentials and Problems in the Development of Tourism*. University of Pennsylvania Press.
15. Wood R. (1997). Tourism and the State: Ethnic Options and the Construction of Otherness. In Picard and Wood *Tourism, Ethnicity and the State in Asian and Pacific Societies*. University of Hawai Press.