

**ANTHROPOLOGY  
(HONOURS)  
UNDER GRADUATE  
CURRICULUM  
UNDER  
CHOICE BASED CREDIT SYSTEM  
2019**

## OVERVIEW OF CURRICULUM

### I. Core course

Year	Semester	Paper No.	Title of Paper
First	I	ANTH-101	Introduction to Biological Anthropology
		ANTH-102	Introduction to Socio-cultural Anthropology
	II	ANTH-201	Archaeological Anthropology
		ANTH-202	Fundamentals of Human Origin & Evolution
Second	III	ANTH-301	Tribes and Peasants in India
		ANTH-302	Human Ecology: Biological & Cultural dimensions
		ANTH-303	Biological Diversity in Human Populations
	IV	ANTH-401	Theories of Culture and Society
		ANTH-402	Human Growth and Development
		ANTH-403	Research Methods
Third	V	ANTH-501	Human Population Genetics
		ANTH-502	Anthropology in Practice
	VI	ANTH-601	Forensic Anthropology
		ANTH-602	Anthropology of India

### II. Elective Course

A. Discipline Specific	B. Generic Elective/Interdisciplinary
<p>Two each in Semester V and VI. To be chosen from the following.</p> <p>DSE-1: Physiological Anthropology</p> <p>DSE-2: Human Genetics</p> <p>DSE-3: Neuro Anthropology</p> <p>DSE-4: Forensic Dermatoglyphics</p> <p>DSE-5: Paleoanthropology</p> <p>DSE-6: Anthropology of Religion, Politics and economy</p> <p>DSE-7: Tribal Cultures of India</p> <p>DSE-8: Indian Archaeology</p> <p>DSE-9: Demographic Anthropology</p> <p>DSE-10: Urban Anthropology</p> <p>DSE-11: Anthropology of Health</p> <p>DSE-12: Dissertation (in Semester VI only)</p>	<p>One each in Semester I, II, III and IV. To be chosen from the following.</p> <p>GE-1: Health science</p> <p>GE-2: Home science</p> <p>GE-3: Biotechnology</p> <p>GE-4: Psychology</p> <p>GE-5: Animation and Visual Graphics</p> <p>GE-6: Interior Design</p> <p>GE-7: Economics</p> <p>GE-8: Fashion Design</p> <p>GE-9: Food Technology</p> <p>GE-10: Forestry</p> <p>GE-11: Physical Education</p> <p>GE-12: Tourism Administration</p> <p>GE-13: Insurance and Banking</p> <p>GE-14: Journalism and Mass Communication</p> <p>GE-15: Hotel Management</p> <p>GE-16: BBA (Health Care Management)</p> <p>GE-17: Marine Science</p>

### III. Ability Enhancement Course

1.Ability Enhancement Compulsory	2. Ability Enhancement Elective (Skill Based)
One each in Semester I and II. AECC-1:Environmental Science AECC-2:English/MIL Communication	One each in Semester III and IV. To be chosen from the following. AEEC-1: Public Health and Epidemiology AEEC-2:Media Anthropology AEEC-3:Tourism Anthropology

*The college will have an option to take either of the two papers in a particular Semester (I or II), while the students have to appear in both the papers.*

## CORE PAPRES

Credits: Papers X (Theory +Practical) = 14 X (4+2) =84

### ANTH-101: Introduction to Biological Anthropology

#### Theory

Credit- 4

**Unit I:** History and development of understanding human variation and evolutionary thought. Theories of evolution.

1. Human variation and evolution in ancient times pre-19<sup>th</sup> and post-19<sup>th</sup> Century.
2. Theories of evolution. Lamarckism, Neo Lamarckism, Darwinism, Synthetic theory, Mutation and Neo-Mutation theory.

**Unit II:** History of Physical Anthropology and development of Modern Biological anthropology, aim, scope and its relationship with allied disciplines.

1. Difference in the approaches of modern and traditional Biological Anthropology, with emphasis on human evolution.

**Unit III:** Non human primates in relation to human evolution

1. Classification and characteristics of living primates.
2. Comparative anatomy and behaviour of human and non-human primates.
3. Significance of non-human primate study in Biological Anthropology.

**Unit IV:** Great divisions of humanity

1. A comparative account of various racial classifications (Hooton, Deniker, Risley and Guha)
2. UNESCO Statement on Race.

#### Practical

Credit-2

##### 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 |

#### Suggested Readings

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

## ANTH-102 Introduction to Socio-cultural Anthropology

### Theory

Credit- 4

#### Unit I:

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

#### Unit II:

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

#### Unit III:

Social fact; social action; social conflict; social system

#### Unit IV:

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

### Practical

Credit- 2

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

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

### Suggested Readings

1. Beattie J. (1964). *Other Cultures*. London: Cohen & West Limited.
2. Bernard H.R. (1940). *Research Methods in Cultural Anthropology*. Newbury Park: Sage Publications.
3. Davis K. (1981). *Human Society*. New Delhi: Surjeet Publications.
4. Delaney C. (2004). 'Orientation and disorientation' In *Investigating Culture: An Experiential Introduction to Anthropology*. Wiley-Blackwell.
5. Ember C. R. et al. (2011). *Anthropology*. New Delhi: Dorling Kindersley.
6. Ferraro G. and Andreatta S. (2008). In *Cultural Anthropology: An Applied Perspective*. Belmont: Wadsworth.
7. 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.

## ANTH-201 Archaeological Anthropology

### Theory

Credit- 4

#### Unit I: Introduction

- Definition and scope of archaeological anthropology
  - Relation with other disciplines
  - Methods of studying archaeological anthropology

#### Unit II: Methods of Estimation of Time and Reconstruction of the Past

- Absolute dating methods
- Relative dating methods
- Methods of climatic reconstruction: palynology, paleontology, soil pH estimation.

#### Unit III: Geochronology of Pleistocene Epoch

- Glacial and Interglacial
- Pluviation and Inter Pluviation
- Different types of geoclimatic events

#### Unit IV: Understanding Culture

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

#### Unit V: Earliest Evidence of Culture in the World

- Olduvai Gorge
- Attirampakkam,

### Practical

Credit- 2

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

#### 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

### **ANTH-202 Fundamentals of Human Origin & Evolution**

#### **Theory**

**Credit- 4**

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

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

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

1. Australopithecines: distribution, features and their phylogenetic relationships.
2. Appearance of genus Homo (*Homo habilis*).

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

*Homo erectus* from Asia, Distribution, features and their phylogenetic status.

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

The origin of *Homo sapiens*: Fossil evidences of Neanderthals

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

Origin of modern humans (*Homo sapiens sapiens*): Distribution and features

#### **Unit-VI:**

Hominisation process

#### **Practical**

**Credit- 2**

1. Craniometry:
 

Maximum cranial length	Maximum cranial breadth
Maximum bizygomatic breadth	Maximum frontal
breadth Minimum frontal breadth	Nasal height
Nasal breadth	Bi-mastoid
breadth Greatest occipital breadth	Upper
facial height Cranial index	
Nasal index	
2. Osteometry: Measurements of long bones: lengths, minimum/least circumference.

#### **Suggested Readings**

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

## **ANTH-301 Tribes and Peasants in India**

### **Theory**

**Credit- 4**

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

1. Problems of nomenclature, definition and classification.
2. Features of tribes in India.

#### **Unit II:** Tribes and Wider world.

1. Constitutional safeguards
2. Issues of acculturation assimilation and integration.

#### **Unit III:** Anthropological Concept of Village

1. Characteristics of Indian village: social organization; economy and changes.
2. Peasant & Caste system

#### **Unit IV**

Tribal and peasant, movements;

### **Practical**

**Credit- 2**

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

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

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

- 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.
- Dube S.C. (1955). *Indian Village*. London: Routledge and Kegan Paul Ltd.
- Berreman G.D. (1963). *Hindus of the Himalayas*. Berkeley: California University Press.

## **Suggested Readings**

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

## **ANTH-302 Human Ecology: Biological & Cultural dimensions**

### **Theory**

**Credit- 4**

### **Biological Dimensions**

Unit 1: Concepts in Ecology: Definition, ecosensitivity adaptation, acclimation, acclimatization, biotic and abiotic component.

Unit II: Methods of studying human ecology.

Unit III: Adaptation to various ecological stresses; Ecological rules and their applicability to human populations.

Unit IV: Impact of urbanization and industrialization on Man.

### **Cultural Dimensions**

Unit V: Culture as a tool of adaptation; Various modes of human adaptation in pre-state societies.

- i. Hunting and food gathering
- ii. Pastoralism
- iii. Shifting cultivation

Unit VI: Ecological themes of state formation: i. Neolithic Revolution,

### **Practical**

**Credit- 2**

Biological Dimensions

*Size and Shape Measurements*

1. Stature
2. Sitting Height
5. Total Lower Extremity Length
6. Nasal Breadth

3. Body Weight
4. Total Upper Extremity Length

7. Nasal Height

*Size and Shape Indices*

1. Body Mass Index
2. Ponderal Index
3. Relative Sitting Height

4. Relative Upper Extremity Length
5. Relative Total Lower Extremity Length
6. Nasal Index

**Cultural Dimensions**

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

**Suggested Reading**

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

**ANTH-303 Biological Diversity in Human Populations**

**Theory**

**Credit- 4**

Unit I: Concept of Biological Variability; Race; Hardy-Weinberg Law; Sources of Genetic Variation; Genetic Polymorphism (Serological, Biochemical and DNA Markers); Human Adaptability – Adaptive Mechanisms determining the types of adaptation.

Unit II: A critical appraisal of contribution of Risley, Guha, and Sarkar towards understanding ethnic elements in the Indian populations.

Unit III: Pre and Proto historic racial elements in India. Linguistic classification of Indian population.

Unit IV: Role of Bio-cultural Factors

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

Unit V: Demographic Perspective

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

**Practical**

**Credit- 2**

1. Craniometric Measurements (Skull & Mandible)
2. Determination of ABO and Rh (Test with five Anti-Rh sera) blood groups of ten subjects.

3. Analysis and interpretation of finger ball pattern types, Indices: Dankmeijer index, Furuhashi index and pattern intensity index (Ten Subjects)
4. Collection of demographic data from secondary sources.

**Suggested readings:**

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

**ANTH-401 Theories of Culture and Society**

**Theory**

**Credit- 4**

Unit I: Emergence of Anthropology: changing concepts on Evolutionism, Diffusionism and Culture area theories

Unit II: Emergence of fieldwork tradition, Tradition

Unit III: Durkheim and social integration, Functionalism and Structural-functionalism and British Social Anthropology

Unit IV: Structuralism: Claude Levi-Strauss and Edmund Leach

**Practical****Credit- 2**

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

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

**Suggested Readings**

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

**ANTH-402 Human Growth and Development****Theory****Credit- 4**

**Unit I:** Concept of human growth, development, differentiation and maturation.

**Unit II:** Prenatal (conception till birth) and postnatal (birth till senescence) period of growth, pattern of normal growth curves, variation from normal growth (canalization, catch-up growth and catch-down growth),

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

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

**Unit V:** Bio-cultural adaptation to environmental stresses- heat, cold and altitude. Homeostasis and thermoregulation.

**Practical****Credit- 2**

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

**Suggested Readings**

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

## **ANTH-403 Research methods**

### **Theory**

**Credit- 4**

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

##### Design

sampling, tools and techniques of data collection, data analysis and reporting, guiding ideals and critical evaluation of major approaches in research methods, basic tenets of qualitative research and its relationship with quantitative research

#### **Unit II:** Field work tradition in Anthropology

Ethnographic approach, contribution of Malinowski, Boas and other pioneers; cultural relativism, ethnocentrism, etic and emic perspectives, maintenance of field diary 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, Observation Method

##### Interview Method,

Case Study and life history

Genealogy - Technique and application

**Unit IV:** Ethics and Politics of research

Ethical issues in the context of human subject research.

**Unit V:** 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.

**Unit VI:**

**BioStatistics**

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.

**Practical**

**Credit- 2**

Project report writing- preparation of research problem, study design, data collection techniques, analysis and report writing based on somatometric, dermatoglyphic and serological data or social problem.

**Suggested Readings**

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

- Pelto PJ and Pelto GH. Anthropological Research, The Structure of Inquiry. Cambridge: Cambridge University Press. 1978.
- Sarantakos S. Social Research. London: Macmillan Press. 1998.

## **ANTH-501 Human Population Genetics**

### **Theory**

**Credit- 4**

#### **Unit I.** Essentials of Genetics

Landmarks in the history of genetics, principles in human genetics, single locus (Mendelian) versus multilocus (quantitative/complex) inheritance, chromosome theory of inheritance (segregation and independent assortment) Mendelian inheritance (single factor and multifactorial inheritance, polygenic inheritance), Non- Mendelian inheritance (multiple allelism, Co-dominance; sex linked, epistasis; penetrance and expressivity; Cytoplasmic inheritance).

#### **Unit II:** Hardy-Weinberg principle

Genotypic and allelic frequencies, assumptions of Hardy-Weinberg equilibrium, its applications and exceptions

#### **Unit III:** Mechanism for dynamics in Gene Frequency

mutation, selection (pattern and mechanism), Genetic drift (bottle neck and founder effect), Gene flow/migration, inbreeding (inbreeding co-efficient and its genetic consequences)

### **Practical**

**Credit- 2**

1. Blood group typing-A1, ABO and Rh (D) blood groups
2. Color Blindness
3. PTC tasting ability

### **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. Hurls 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, 3<sup>rd</sup> revised edition.

### **ANTH-502 Anthropology in Practice**

#### **Theory**

**Credit- 4**

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

Applied Anthropology, Action Anthropology and Development Anthropology.

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

Anthropology and Public Policy, Need Assessment and Community Development, Anthropology of NGO's, Management Anthropology, Environment and Community Health, Social and economic sustainability, Cultural resource management

#### **Unit III:** Future Dynamics in Anthropology

Trends in Anthropology: Anthropology In Census; Visual Anthropology

#### **Practical**

**Credit- 2**

1. The students will visit a NGO or corporate office or census office in Delhi and its adjoining areas and write principal observations on the same.
2. Write a project on constitutional provisions or evaluation of any development project/report.
3. Write a project on Tribal Tourism / Human Rights.
4. Write a project on the demographic profile from secondary data.

#### **Suggested Readings**

1. Arya A and Kapoor AK. (2012). Gender and Health Management in Afro-Indians. Global Vision Publishing House, New Delhi.
2. Kertzer DI and Fricke T. (1997). Anthropological Demography. University of Chicago Press.
3. Basu, A. and P. Aaby (1998). The Methods and the Uses of Anthropological Demography. 329 pp. Oxford, Clarendon Press
4. Carter A. (1998). Cultural Models and Demographic Behavior. In The Methods and the Uses of Anthropological Demography edited by Basu A and Aaby P. Oxford: Clarendon Press. pp 246-268.
5. Census of India (2001, 2011) and National Family Health Survey (2006,2010).
6. Ervic, Alexander M., (2000). Applied Anthropology: Tools and Perspectives for Contemporary Practise, Boston, MA: Allyn and Bacon.
7. Erwin A. (2004). Applied Anthropology Tools and Practice, Allyn and Bacon.
8. Gupta S and Kapoor AK. (2009). Human Rights among Indian Populations: Knowledge, Awareness and Practice. Gyan Publishing House, New Delhi.
9. Willen SS. (2012). Anthropology and Human Rights: Theoretical Reconsiderations and Phenomenological Explorations. Journal of Human Rights. 11:150–159.
10. Goodale M. (2009). Human Rights: An Anthropological Reader. Wiley Blackwell.

11. Gupta S and Kapoor AK. (2007). Human Rights, Development and Tribe. In : Genes, Environment and Health – Anthropological Perspectives. K. Sharma, R.K. Pathak, S. Mehra and Talwar I (eds.). Serials Publications, New Delhi.
12. Margaret AG. (2003). Applied Anthropology: A Career-Oriented Approach, Boston, MA: Allyn and Bacon.
13. Halbar BG and Khan CGH. (1991). Relevance of Anthropology – The Indian Scenario. Rawat Publications, Jaipur.
14. Kapoor AK (1998). Role of NGO's in Human Development : A Domain of Anthropology. J Ind Anthropol Soc; 33:283-300.
15. Kapoor AK and Singh D. (1997). Rural Development through NGO's. Rawat Publications, Jaipur.
16. Klepinger LL (2006). Fundamentals of Forensic Anthropology. Wiley-Liss Publications
17. Kumar RK and Kapoor AK. (2009). Management of a Primitive Tribe: Role of Development Dynamics. Academic Excellence, Delhi.
18. Mehrotra N and Patnaik SM. (2008). Culture versus Coercion: The Other Side of Nirmal Gram Yojna, Economic and Political weekly. pp 25-27.
19. Mishra RC (2005). Human Rights in a Developing Society, Mittal Publications, Delhi.
20. Noaln RW. (2002). Anthropology in Practice: Building a Career outside the Academy. Publishing Lynne Reinner.
21. Patnaik SM (1996). Displacement, Rehabilitation & Social Change. Inter India Publications, New Delhi.
22. Patnaik SM (2007). Anthropology of Tourism: Insights from Nagaland. The Eastern Anthropologist. 60(3&4):455-470
23. Srivastav OS (1996). Demographic and Population Studies. Vikas Publishing House, India
24. Vidyarthi LP and BN Sahay (2001). Applied Anthropology and Development in India, National Publishing House, New Delhi.
25. Vidyarthi LP. (1990). Applied Anthropology in India – Principles, Problems and Case Studies. Kitab Mahal, U.P.
26. Vidyarthi V (1981). Tribal Development and its Administration. Concept Publishing Company, New Delhi.

## **ANTH-601 Forensic anthropology**

### **Theory**

**Credit- 4**

### **Unit-I**

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

Integration of Forensic Anthropology.

## **Unit-II**

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

## **Unit-III**

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

## **Practical**

**Credit- 2**

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

## **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.

## **ANTH-602 Anthropology of India**

### **Theory**

**Credit- 4**

#### **Unit I:**

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

#### **Unit II:**

1. Critical appraisal of contribution of Risley, Guha, Rickstett and Sarkar towards understanding ethnic distinctness in the Indian populations

2. Contribution of conetemporary biological, social and archaeological anthropologists in India.

**Unit III:**

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

**Unit IV:**

1. Problems of exploitation and deprivation of scheduled caste/ tribe and Other Backward Classes.
2. Constitutional safeguards for the Scheduled caste and scheduled tribes.

**Practical**

**Credit- 2**

1. Review a book/edited volume on Indian social structure such as caste, religion, tribe or rural population and give its salient features.
2. Highlight the contributions of any two contemporary Indian anthropologists.

**Suggested Reading**

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

## ELECTIVE COURSES

**Credits: Any four papers = Theory +Practical = (4+2)\*4 = 24**

### DSE-1: Physiological Anthropology

#### Theory

**Unit I:** Fundamentals of work physiology- homeostasis; metabolism and energy and systems; exercise, respiratory system and haemodynamics (blood pressure, pulse rate, heart rate and oxygen- transporting system, blood flow ,Hb, heamatocrit etc)

**Unit II:** Acute physiological adjustments during transition from resting homeostasis to

sub-maximal and maximal exercise; chronic physiological adaptations to exercise training; age, sex and population variation in the physiological characteristics

**Unit III:** Cardio-vascular and respiratory endurance, physical working capacity and physical fitness- evaluation of response and assessment; relationship of body measurements with cardio-vascular and respiratory functions, aerobic and anaerobic exercise training, health related fitness in gender and ethnic group. Principles of effective physical conditioning techniques

**Unit IV:** Impact of smoking, alcohol, drug, pollution and occupation on cardio-respiratory

functions; physical performance and environmental stress, chronic diseases, malnutrition, lifestyle disease

**Unit V:** Factors affecting physical performance and capacity, relation between physique, body composition, nutrition and performance.

#### Practical

1. Cardiovascular function (Blood pressure, heart rate, pulse rate)
2. Respiratory function (Tidal volume, vital capacity, forced vital capacity, minute ventilation etc.)
3. Haemoglobin estimation

#### Suggested Readings:

1. McArdle WD, Katch FI and Katch VL. (2010). Exercise Physiology: Nutrition, Energy, and Human Performance. Lippincott Williams & Wilkins.
2. Powers SK and Howley ET. (2007). Exercise Physiology: Theory and Application to Fitness and Performance. McGraw-Hill.
3. Sherwood L. (2008). Human Physiology: From Cells to Systems. Brooks Cole.
4. Case RM. (1985). Variations in Human Physiology. Manchester University Press.
5. Vander AJ, Sherman JH ad Dorothys L. (1978). Human Physiology: The Mechanisms of Body Functions. Mc Graw-Hill Education.
6. Nageswari KS and Sharma S. (2006). Practical workbook of Human Physiology. Jaypee Brothers, Medical Publisher.

7. Wildmaier EP, Raff H, Strang KT. (2014). Vander's Human Physiology: The Mechanisms of Body. Mc Graw Hill Education.
8. Hale T. (2003). Exercise Physiology. England :John Wiley & Sons Inc.

## **DSE-2. Human Genetics**

### **Theory**

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

**Unit II:** Expression of genetic information: from Transcription to Translation - transcriptions; transcription and RNA processing, encoding genetic information, decoding the codons: the role of transfer RNAs

**Unit III:** Genomic Variation: Genomic Polymorphisms (SNPs, VNTR, CNVs, etc);

haplotypes and haplogroups; genotype-phenotype correlations, epigenetics

**Unit IV:** Methods of Genetic Study in Human: Pedigree analysis ; Chromosomal Basis of Genetic Disorders (Karyotypes and identification of chromosome variation; Nucleic Acid Hybridization Assays, cytogenetic mapping), Genetic mapping (Microsatellite and other DNA polymorphisms).

### **Suggested Readings:**

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

### **DSE-3. Neuro Anthropology**

#### **Theory**

- Unit 1: Encultured Brain
  - The Basics of Neuroanthropology
  - The Nature of Variation
    - Evolution by Natural Selection
- Unit 2: Overview of Neural Systems & Their Interconnections
  - Niche construction
  - Primate Social Cognition, Human Evolution
  - Evolution and the Brain
- Unit 3: Memory & Medicine; Balancing Between Cultures
  - 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 Neuroanthropology
  - Ritual and Emotion
    - War and Dislocation: Neuroanthropological model of trauma
    - Autism,theory of mind and religious development
    - Cultural consonance, consciousness and depression
- Unit 5: Neuroconstructivism and Embodied Learning
  - Human Development: A Biocultural Process Enculturation and Memory
    - The Neuroanthropology of Stress
    - The Neuroanthropology of PTSD(Post traumatic stress disorder) Psychiatry in Neuroanthropological Perspective
- Unit 6: Neurological and Anthropological Methods
  - Neuroanthropology Applied
  - Critical Neuroscience
  - The Social and Personal Uses of Neuroscience

#### **Practical:**

- Case Studies on Human behavior, Capacities, Skills, and Variation
- Prepare a report on socio-cultural and biological perspective of human behavior and inter-individual variation.
- Somatometric measurements of human skull and relation with neural activity.
- Class blog participation :Once every week, each student will be responsible for finding one source in the popular/lay press that's related to the topic for that week (e.g., from newspapers, news magazines, science magazines), and introducing a brief online discussion about what it says and why it's relevant

#### **Suggested Reading:**

1. Downey,(2008) Balancing between Cultures, in The Encultured Brain.J.of Neuroanthropoloy

2. Downey,(2010) ‘Practice without Theory’: A Neuroanthropological Perspective on Embodied Learning.JRAI
3. Miller & Kinsbourne,(2011) Culture and Neuroscience in Development Psychology: Contributions and Challenges.Child Development perspectives.<http://onlinelibrary.wiley.com/doi/10.1111/j.17508606.2011.00188.x/abstract>
4. Worthman,(2010) The Ecology of Human Development: Evolving Models for Cultural Psychology [Required for 500 level, optional for 400 level] <http://jcc.sagepub.com/content/41/4/546.abstract>
5. Davidson & McEwen,(2012) Social Influences in Neuroplasticity: Stress and Interventions to Promote Well-Being.J.of Nature Neuroscience <http://www.nature.com/neuro/journal/v15/n5/full/nn.3093.html>
6. Bonanno et al.,(2011) Weighing the Costs of Disaster: Consequences, Risks, and Resilience in Individuals, Families, and Communities. Association for psychological science
7. Luhrmann,(2012) Beyond the Brain <http://www.wilsonquarterly.com/article.cfm?AID=2196>
8. Kirmayer & Gold,(2012). Re-Socializing Psychiatry: Critical Neuroscience and the Limits of Reductionism, in Critical Neuroscience. Blackwell Reference online.
9. Lende and Downey,(2012)The Encultured Brain: An introduction to Neuroanthropology.Cambridge:Massachusetts Institute of Technology Press.
10. 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)
11. Margulies,(2011) The Salmon of Doubt, in Critical Neuroscience.
12. Lende, (2012)Neuroanthropology, Applied Research, and DevelopingInterventions.<http://blogs.plos.org/neuroanthropology/2012/05/10/neuroanthropology-applied-research-and-developing-interventions/>
13. 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> <http://www.mc.vanderbilt.edu/news/releases.php?release=2044>
14. Xue et al.,(2012) A Memory Retrieval-Extinction Procedure to Prevent DrugCravingandRelaps.<http://www.sciencemag.org/content/336/6078/241.full>

#### **DSE-4. Forensic Dermatoglyphics**

##### **Theory**

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

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

### **Practical**

1. Recording and Study of Finger and Palm Prints
2. Determination of palmar main line formula, Ridge count and indices
3. Comparison of Fingerprints and Palmprints on the basis of class and individual ridge Characteristics

### **Suggested Readings:**

Cowger, J. F. (1992). *Friction ridge skin: comparison and identification of fingerprints*

(Vol. 8) CRC Press.

Cummins, H., & Midlo, C. (1961). *Finger prints, palms and soles: An introduction to dermatoglyphics* (Vol. 319). New York: Dover Publications.

Jain, A. K., Flynn, P., & Ross, A. A. (2007). *Handbook of biometrics*. Springer Science & Business Media.

Lee, H. C., Ramotowski, R., & Gaensslen, R. E. (Eds.). (2001). *Advances in fingerprint technology*

technology. CRC press.

Berry, J., & Stoney, D. A. (2001). The history and development of fingerprinting.

*Advances in fingerprint Technology*, 2, 13-52.

Mehta, M. K. (1980). Identification of thumb impression and cross examination of fingerprints. N. M. Tripathi Publication, Bombay **DSE-5. Paleoanthropology**

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

radiation, differential rate of somatic evolution.

**Unit II:** 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 III:** Primate and Non-Primate Models for Early Hominid Behaviour;

hominization process- Evolution of hominid-human bipedalism

### **Practical**

1. Comparative primate osteology
2. Identification and description of fossil casts

## **Suggested readings**

1. Napier JR and Napier PH. (1985). The Natural History of the Primates. Cambridge, MA: The MIT Press
2. Boyd R and Silk JB. (2009). How Humans Evolved. London: WW Norton.
3. Tattersall I. (2009). The Fossil Trail: How We Know What We Think We Know about Human Evolution. New York: Oxford University Press.
4. Waldron T. (2008): Palaeopathology. Cambridge University Press.
5. Cela-conde CJ and Frisancho J. (2007). Human Evolution: Trails from the past. Ayala Oxford University Press.
6. Barnes E. Diseases and Human Evolution. (2005). University of New Mexico Press.
7. Pinhasi R and Mays S (2008). Advances in Human Palaeopathology. Chichester: John Wiley & Sons, Inc. (PM).
8. Hoppa RD and Vaupel JW. (2002). Paleodemography: Age Distributions from Skeletal Samples. Cambridge University Press.
9. Lansen CS, Matter RM and Gebo DL. (1998). Human Origin: The fossil Record. Waveland Press.
10. Cameron DW and Colin P. Groves CP. (2004). Bone, Stones and Molecules: “Out of Africa” and Human Origins. Elsevier Inc.
11. Stringer C. (2011). The Origin of Our Species. London: Allen Lane.
12. Conroy GC. (2005). Reconstructing Human Origins. WW Norton and Company.

## **DSE-6. Anthropology of Religion, Politics and Economy**

### **Unit I:**

Religion- magic, animism, animatism, totemism, naturism; witchcraft and sorcery; Religious specialists: shaman, priests, mystics;

### **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 origins of modern politics, its institutions, and cultures,

### **Unit IV:**

Interrelationship between religion, politics and economy; religious conversion

## **Practical**

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

## **Suggested Readings:**

2. Durkheim E. (1986). *The elementary forms of the religious life, a study in religious sociology*. New York:Macmillan.
3. Benedict A. (2006). *Imagined Communities: Reflections on the Origin and Spread of Nationalism*. Verso
4. Gledhill J. (2000). *Power and Its Disguises: Anthropological Perspectives on Politics*. 2nd ed. London: Pluto Press.
5. Ellis F. (2000). A framework for livelihood analysis. In *Rural Livelihoods and Diversity in Developing Countries* . Oxford: Oxford University Press.
6. 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;
7. 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.
8. Lambek. M. (2008) *A Reader in the Anthropology of Religion*.
9. Eller JD. (2007). *Introducing Anthropology of Religion*. New York: Routledge.
10. Glazier SD. (1997). *Anthropology of Religion: A Handbook*. Westport, CT: Greenwood Press.
11. Frick GD and Langer R. (2010). *Transfer and Spaces*. Harrassowitz (Germany).
12. Evans-Pritchard EE. (1937). *Witchcraft, Oracles and Magic among the Azande*, Oxford: Clarendon Press.
13. Frazer JG. (1978). *The Illustrated Golden Bough*, London: Macmillan.
14. Barbara M. (2011). *Cultural Anthropology*. New Jersey: Pearson Education.
15. Ember CR. (2011). *Anthropology*. New Delhi: Dorling Kinderslay.
16. Herskovits MJ. (1952). *Economic Anthropology: A Study in Comparative Economics*. New York: Alfred A Knopf Inc.
17. Malinowski B. (1922) *Argonauts of the Western Pacific*. London: Routledge.
18. Polanyi K. et al (1957), *Trade and Market in the Early Empires*. Chicago: Henry Regnery Company.
19. Balandier G. (1972). *Political Anthropology*. Middlesex: Penguin.

## **DSE-7. Tribal cultures of India**

Unit I: Concept of tribes and its problematic nature, General and specific characteristics of tribes, Tribes in India: Denotified tribes.

Unit II: Constitutional safeguard/provisions, Distribution of tribes in India

Unit III: Tribes: Nomenclature- emic and etic differences, Classification of tribes based on their economy, occupation and religion, Racial elements among the tribes,

Unit IV: Tribal movements, Tribal monographs,

Unit V: Tribal Displacement, rehabilitation and social change.

### **Practical**

Distribution of Indian Tribes: PVTG, ST

Location of different tribes on the map of India

tribe Write the social structure of any one tribe of India

### **Suggested**

#### **Readings:**

1. Behera, D.K and Georg pfeffer. Contemporary Society Tribal Studies, Volume I to VII. New Delhi: Concept Publishing Company

2. Georg Pfeffer. Hunters, Tribes and Peasant: Cultural Crisis and Comparison.

Bhubaneswar:

Niswas.

3. Vidarthy, L.P. and Rai. Applied Anthropology in India.

4. Vidarrthy.L.P. and B.N. Sahay . Applied Anthropology and Development in India. New

Delhi: National Publishing

House

### **DSE-8. Indian Archaeology**

Unit I: Understanding culture

a. Technique of tool manufacture and estimation of their relative efficiency;

b. Classification of tools:

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

## **Practical**

1. Identification of tools:
  - (a) Handaxe varieties, chopper/chopping tools scrapers
  - (b) Cleaver varieties
  - (c) Side scraper varieties
  - (d) Knives
  - (e) Burins
  - (f) End
  - (g) Borer
  - (h) Microlithic
  - (i) Bone tool

2. Identification of lithic technology.

## **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.

## **DSE-9. Demographic Anthropology**

### **Theory**

#### **Unit I:** Demographic Anthropology

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

#### **Unit II:** Population Theories

2. Thomas R. Malthus
3. Biological theory of population
4. Theory of demographic transition

#### **Unit III:** Tools of Demographic Data

1. Measures of population composition, distribution and growth
2. Measures of fertility
3. Measures of mortality
4. Measures of migration

#### **Unit IV:** Population of India

1. Sources of demographic data in India
2. Growth of Indian population

## 5. Impact of urbanization on the migration of tribal groups

### Unit V: National policies

#### 1. National Population Policy

##### Practical

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

##### Suggested Readings

1. Bhende A. and Kaniikar, T. (2006) *Principles of Population Studies. Himalaya Publishing House. Mumbai* (All Units, It covers most topics)
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. Kshatriya G.K. (2000). Ecology and health with special reference to Indian tribes. *Human Ecology special volume 9:229-245*.
7. Kshatriya G.K., Rajesh,G. and Kapoor , A.K. (2010) *Population Characteristics of Desert Ecology*.VDM Verlag Dr. Muller Gmbh and Co., Germany.
8. Misra BD (1982). *An introduction to the study of population. South Asia publ. ltd. New Delhi*.
9. National Population Policy <http://populationcommission.nic.in/npp.htm>
10. Park K. (2000) *Text book of Preventive and Social Medicine*. Banarsidas Bhanot, Jabalpur.
11. Patra P.K. and Kapoor, A.K. (2009) *Demography And Development Dynamics in a Primitive Tribe of Himalayas*. International Book Distributors, Dehradun
12. 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
13. Sharma A.K. (1979) Demographic transition: A Determinant of Urbanization. *Social Change* 9: 13-17.
14. Srivastava O.S. (1996) *Demographic and Population Studies*. Vikas Publishing House, India
15. Zubrow E.B.W. (1976) *Demographic anthropology. Quantitative approaches*. University of New Mexico Press, Albuquerque.
- 16.<http://humannature.com/dm/chap3.html>
- 17.<http://biography.yourdictionary.com/john-graunt>
- 18.<http://www.marathon.uwc.edu/geography/demotrans/demtran.htm>

## **DSE-10. Urban Anthropology**

### **Theory**

#### **Unit1: Emergence of urban anthropology**

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

#### **Unit-2: Politicaleconomy**

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

#### **Unit3: Class approach**

Culture of Poverty and the Underclass Approach, Comparison between relations function in an urban setting versus function in a rural setting,

#### **Unit4: Urban Inequality and**

#### **Disasters**

Poverty, extended family for urban natives versus migrants ,

### **Practical**

- (i) Visit city life among business community and appreciate the role of culture with politics and economics.
- (ii) Media-popular culture behaviour
- (iii) Photo shoot in any city life, Creating captions and texts relating to urban anthropology findings.

### **Suggested readings**

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

## **DSE-11. Anthropology of Health**

### **Unit-1: Introduction and Overview of the Field of Anthropology & Health.**

#### **A. Health Anthropology within the Context of Anthropology.**

- Anthropology and its subfields
- The unique place of Health anthropology in anthropology
- Competing perspectives on the study of anthropology of health.

### **B. Defining Health and Illness in Cross-Cultural Perspective.**

Looking at “health,” “illness,” and related concepts in Western culture, including sociological “sick role” models, Some important variations in the process of seeking health care.

### **Unit – 2: Women’s Health, Sex, Family Planning, and Maternal-Infant Health.**

Reproductive life, child Birth, Family planning adoption, male dominance, Nursing and early nurture, hyper-menstruation and its corollaries. Population variation and its relation to health and disease.

### **Unit – 3: Variations in Health Care Systems: A Comparative Perspective.**

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

### **Unit – 4: 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.

### **Unit – 5: Health and Human Rights**

Introduction to Human rights, Development of a Human Rights Impact Assessment for the Formulation and Evaluation of Public Health Policies.

### **Practical**

1. Make a Schedule on Health and Demography.
2. Identification and Characteristics of Various diseases.
3. Case Studies of Traditional and Modern healers.

### **Suggested Readings**

- Rajesh Khanna and A.K. Kapoor. 2007. Ethnic Groups and Health Dimensions. Discovery Publishing House, New Delhi.
- Chin, James, M.D., M.P.H. (ed.) 2000. Control of Communicable Diseases Manual. 17th Edition. American Public Health Association. *Anyone interested in field work in less developed areas should own this book for reference.*
- 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.*

- Mann, Jonathon M., et al. (eds.) 1999. Health and Human Rights. New York: Routledge.
- Albrecht, Gary L., Ray Fitzparick, and Susan C. Scrimshaw (eds.) 2000. The Handbook of Social Studies in Health and Medicine, SAGE Publications.
- Bannerman, Robert, J. Burton, and Ch'en Wen-Chieh (eds.) 1983. Traditional Medicine and Health Care Coverage. Geneva: World Health Organization.
- Chen, Lincoln C. Arthur Kleinman, and Norma C. Ware 1994. Health and Social Change in International Perspective. Harvard University Press.
- Coreil, Jeannine and J. Dennis Mull (eds.) 1990. Anthropology and Primary Health Care, Boulder: Westview Press.
- Hahn, Robert A. 1999. Anthropology in Public Health. Bridging Differences in Culture and Society. New York: Oxford University Press.
- Helman, Cecil G. 1994. Culture, Health, and Illness. 3rd ed. Oxford: Butterworth-Heinemann.
- Inhorn, Marcia C. and Peter J. Brown 1997. The Anthropology of Infectious Disease. International health Perspectives. Gordon and Breach Publishers.
- Koop, C. Everett, Clarence E. Pearson, and M. Roy Schwartz (eds.) 2001. Critical Issues in Global Health. San Francisco: Jossey-Bass. A Wiley Company.
- 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.
- Nichter, Mark and Mimi Nichter 1996. Anthropology and International Health. Asian Case Studies. Gordon and Breach Publishers.
- Paul, Benjamin D. (ed.) 1955. Health, Culture, and Community. Case Studies of Public Reactions to Health Programs.
- Williams, Cicely D., Naomi Baumslag, and Derrick B. Jelliffe 1994. Mother and Child Health. Delivering the Services. 3rd Edition. New York: Oxford University Press
- Basch, Paul F. Textbook of International Health 1999. New York: Oxford University Press.
- Tsui, Amy O., Judith N. Wasserheit, and John G. Haaga (eds.) 1997. Reproductive Health in Developing Countries. Washington, D.C.: National Academy Press.

**DSE-12. Dissertation**

Student will opt either dissertation or project work or one paper from the elective discipline course in 6<sup>th</sup> Semester. He/she will be attached with one supervisor or guide.

### **Interdisciplinary/Generic elective Course**

**Credits: Any four papers = Theory +Practical = (4+2)\*4 = 24**

GE-1 Health science	GE-12 Neuro Science
GE-2 Home science	GE-13 Physical Education
GE-3 Biotechnology	GE-14 Tourism Administration
GE-4 Psychology	GE-15 Insurance and Banking
GE-5 Animation and Visual Graphics	GE-16 Journalism and Mass Communication
GE-6 Interior Design	GE-17
BCA GE-7 Economics	GE-
18 BBA	
GE-8 Environmental Science	GE-19 Hotel Management
GE-9 Fashion Design	GE-20 BBA (Health Care
Management) GE-10 Food Technology	GE-21 Marine Science
GE-11 Forestry	

## **Ability enhancement Compulsory Course**

**Credits: Two Papers =2\*2=4**

AECC-1:Environmental Science

AECC-2: English/MIL Communication

*The college will have an option to take either of the two papers in a particular Semester (I or II), while the students have to appear in both the papers.*

## **Ability enhancement elective (skill based) Course**

**Credits: Any two papers = 2\*2=4**

### **AEEC-1. Public health and epidemiology**

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

**AEEC-2. Media Anthropology**

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**

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

### **AEEC-3. Tourism Anthropology**

**Unit I:** Tourism- aspects and prospects, anthropological 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 global and local political economy of contemporary tourism, particularly in relation to international development; explore dynamic relationships between heritage-making enterprises, 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 IV:** Anthropology of Tourism: Globalization, applied aspects of anthropology in tourism development and planning.

### **Suggested Readings**

1. Chambers E. (2000). Native Tours: The Anthropology of Travel and Tourism. Prospect Heights: Waveland.
2. 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.
3. Dann GMS, Nash D and Pearce PL. (1988). Methodology in Tourism Research. Annals of Tourism Research. 15:1-28.
4. Gmelch SB. (2004). Tourists and Tourism: A Reader. Long Grove: Waveland.
5. 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.
6. Dann G. (2002). The Tourist as a Metaphor of the Social World. Wallingford: CAB International.
7. Nash D. (1996). Anthropology of Tourism. New York: Pergamon.
8. Kirshenblatt-Gimblett B. (1998). Destination Culture: Tourism, Museums, and Heritage. University of California Press.
9. Lippard LR. (1999). On the Beaten Track: Tourism, Art and Place. New Press.
10. Picard M and Wood R. (1997). Tourism, Ethnicity, and the State in Asian and Pacific Societies. University of Hawai Press.
11. 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.
12. 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.
13. 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.
  14. Hitchcock. (1997). Cultural, Economic and Environmental Impacts of Tourism among the Kalahari. In Chambers E (eds.) Tourism and Culture: An Applied Perspective. SUNY Press.