SYLLABUS FOR B.Sc. (Honors) ANTHROPOLOGY THREE YEAR DEGREE COURSE SEMESTER SYSTEM (CBCS)

DEPARTMENT OF ANTHROPOLOGY

KOHIMA SCIENCE COLLLEGE (AUTONOMOUS) JOTSOMA, KOHIMA. 2021.

Course Structure

Course	Structure				
	T_	FIRST SEMESTER	1	Γ	1
Papers	Paper Number	Name of Papers	Credits	Teaching/ hrs	Marks
Core 1	ANC 1.11	Introduction to Biological Anthropology	4	60	100
	ANC 1.12	Practical	2	30	50
Core 2	ANC 1.21	Introduction to Social Anthropology	4	60	100
	ANC 1.22	Practical	2	30	50
GE1	ANG 1.11	Foundation of Anthropology	4	60	100
	ANG 1.12	Practical	2	30	50
	AEC-CE-	Communicative English	4	60	100
			22		
		SECOND SEMESTER			
Core 3	ANC 2.11	Archeological Anthropology	4	60	100
	ANC 2.12	Practical	2	30	50
Core 4	ANC 2.21	Fundamentals of Human Origin & Evolution	4	60	100
	ANC 2.22	Practical	2	30	50
GE2	ANG 2.21	Foundation of Social & cultural Anthropology	6	60	100
	AEC - ES-	Environmental Studies	4	60	100
			22		
		THIRD SEMESTER			
Core 5	ANC 3.11	Tribes and Peasants in India	4	60	100
	ANC 3.12	Practical	2	30	50
Core 6	ANC 3.21	Research methods	4	60	100
	ANC 3.22	Practical	2	30	50
Core 7	ANC 3.31	Human genetics	4	60	100
	ANC 3.32	Practical	2	30	50
GE3	ANG 3.11	Foundation of Biological Anthropology	4	60	100
	ANS 3.12	Practical	2	30	50
SEC 1	ANS 3.11	Field work	2	30	50
			26		
		FOURTH SEMESTER			
Core 8	ANC 4.11	Theories of Culture and Society	4	60	100
	ANC 4.12	Practical	2	30	50
Core 9	ANC 4.21	Human Growth and Development	4	60	100
	ANC 4.22	Practical	2	30	50

Core 10	ANC 4.31	Human Ecology: Biological & Cultural dimensions	6	60	100
SEC2	ANS 4.11	Anthropology of Disaster	2	30	50
GE4	ANG 4.11	Foundation of Archeological Anthropology	4	60	100
	ANG 4.12	Practical	2	30	50
			26		
		FIFTH SEMESTER			
Core 11	ANC 5.11	South Asian Archeology	4	60	100
	ANC 5.12	Practical	2	30	50
Core 12	ANC 5.21	Anthropology in Practice	4	60	100
	ANC 5.22	Practical	2	30	50
DSE 1	AND 5.11	a)Sports and NutritionalAnthropology orb) Biological diversity in human population	4	60	100
	AND 5.12	Practical	2	30	50
DSE 2	AND 5.21	a) Anthropology of Health orb) Tribal cultures of India	4	60	100
	AND 5.22	Practical	2	30	50
			24		
		SIXTH SEMESTER			
Core 13	ANC 6.11	Forensic Anthropology	4	60	100
	ANC 6.12	Practical	2	30	50
Core 14	ANC 6.21	Anthropology of India	4	60	100
	ANC 6.22	Practical	2	30	50
DSE 3	AND 6.11	a) Ethno-Archeology orb) Paleo-anthropology.	4	60	100
	AND 6.12	Practical	2	30	50
DSE 4	AND 6.21	Dissertation/ Project work*	6	60	150
			24		

Note: Student will opt either dissertation or project work or one paper from the elective discipline course in 6th Semester. He /She will be attached with one supervisor or guide.

FIRST SEMESTER

Core 1- ANC 1.11

Introduction to Biological Anthropology

Theory Credit: 4 Teaching hours: 60

Unit I

History of Physical Anthropology and development of Modern Biological anthropology, aim, scope and its relationship with allied disciplines. Difference in the approaches of modern and traditional Biological Anthropology, with emphasis on human evolution.

Unit II

History and development of understanding human variation and evolutionary thought. Theories of evolution. Lamarckism, Neo Lamarckism, Darwinism, Synthetic theory, Mutation and Neo-Mutation theory, Neutral theory (basic concept)

Unit III

- a) Position of Mans place in animal Kingdom,
- b) Classification and characteristics of living primates, primate locomotion.
- c) Comparative anatomy and behavior of human and non-human primates.
- d) Changes in human skeleton as a result of erect posture (skull, neck, Vertebral column, pelvis, upper & lower limbs)

Unit IV

Concept of race & racism, criteria for racial classification, Major races of the world, UNESCO Statement on Race. A comparative account of various racial classifications (Risley and Guha)

Unit V

Human Morphology: Human skeletal anatomy & functional morphology of bones as part of total skeleton, functions, classification of bones, anatomical positions, articulations of bones & their functions.

Core 1- ANC 1.12

Introduction to Biological Anthropology

Practical Credit: 2 Teaching hours: 30

- a. Anthropometric instruments: Anthropometer, Sliding & Spreading Calipers, weighing machine, measuring tape.
- b. Somatometry (Minimum five subjects): Maximum head length & breadth, Maximum bizygomatic breadth & Bi-gonial breadth, Nasal length, Nasal height, Nasal breadth, Morphological facial height & Morphological upper facial height, Head circumference, Height vertex, sitting height vertex.

- c. Indices: Cephalic, nasal, upper facial height, total facial height, bi-gonial, bizygomatic, Relative sitting height (Measurements on at least five subjects.)
- d. Somatoscopy: Skin color, Hair (form, texture, colour), Eye (form, slit, colour & eyebrows), Nose (bridge, root), malar prominence, forehead (height and shape), chin form, ear (attachment & shape).

Suggested Readings

- 1. Jurmain R., Kilgore L., Trevathan W., Ciochon R.L. (2012). Introduction to Physical Anthropology. Wadsworth Publ., USA
- 2. Krober 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.
- 5. Das, B.M & Ranjan Physical Anthropology Practical
- 6. Jannusch, J.Buettner origins of Man
- 7. Hootan, E.A up from the Ape
- 8. Comas, J Manual of Physical Anthropology
- 9. Sarkar, R.M Fundamentals of Physical Anthropology

Core 2- ANC 1.21

Introduction to Socio-cultural Anthropology

Theory Credit: 4 Teaching hours: 60

Unit I

Anthropological perspectives (holism, relativism, comparison and fieldwork); Scope and relevance of Social Anthropology; Relationship of Social Anthropology with other social sciences (Sociology, History, Economics, Psychology, Political Science, Ethnology).

Unit II

- a) Concepts of Society; Status and Role; Community, Group, Association; Social System Social Structure and Organization, Social Stratification, Social Control.
- b) Culture- concept and characteristics; Material and Non-material aspects of culture; Culture universals, cultural integration, enculturation.
- c) Concept of Social and Culture change. Factors of socio-cultural change.

Unit III Social Institutions

- a) Family (types, basic structure, functions, factors associated with the changes in joint family);
- b) Marriage (forms and functions; rule of marriage Hypergamy, Hypogamy, Endogamy and Exogamy; Ways of acquiring mates Prescribed; Proscribed; Preferential marriage and Incest);

c) Kinship (Concept, Kinship Typology, Kinship Terminological system).

Unit IV Religion

- a) Religion (concept, function, theories Animism, Animatism and Manaism, Totemism).
- b) Magic (concept, function, types and principles)
- c) Science, Religion and Magic
- d) Magico-religious practitioners- Priests, Shaman, Sorcerer and Witch.

UnitV

- a) Economic anthropology (concept, function, production-subsistence strategies, distribution), Forms of exchange; Barter, trade and market.
- b) Political anthropology (concept, function, types of political organization band, tribe, chiefdom, state, concepts of power, and authority.)

Core 2- ANC 1.22

Introduction to Socio-cultural Anthropology

Practical Credit: 2 Teaching hours: 30

Genealogy. Students will learn the basics of genealogy and how to structure genealogical ties like marriage, family and inheritance pattern.

- 1. Dash K.N. 2004. Invitation to Social and Cultural Anthroplogy. New Delhi: Atlantic Publishers and Distributors
- 2. Doshi, S.L. and Jain, P.C. 2009. Social Anthropology. Jaipur: Rawat Publications.
- 3. Ember C. R. et al. 2011. Anthropology. New Delhi: Dorling Kindersley.
- 4. Fox, Robin. 1983. Kinship and Marriage: An Anthropological Perspective. Cambridge University Press.
- 5. Haviland et. al. 2008. Anthropology. Australia: Wordsworth.
- 6. Kottak, C.P. (1996) Cultural Anthropology
- 7. Majumdar, D.N. and Madan, T.N. 1987. An Introduction to Social Anthropology. New Delhi: National Publishing House
- 8. Miller, Barbara. Cultural Anthropology.6th ed. 2011. PHI Learning Private Limited: New Delhi.
- 9. Nanda, Serena. 2006. Cultural Anthropology. USA: Cengage Learning.
- 10. Roy, Indrani Basu. 2003. Anthropology: the Study of Man. New Delhi: S.Chand& Company Ltd.
- 11. Scupin, R. 2011. Cultural Anthropology: A Global Perspective. Delhi: Pearson.
- 12. Srivastav, A.R.N. 2013. Essentials of Cultural Anthropology. New Delhi: PHI Learning Private Ltd.

13. Vaid, NK. 2013. An Introduction to Social Cultural Anthropology. Delhi: PalakaPrakashan.

SECOND SEMESTER

Core 3- ANC 2.11

Foundation of Archaeological Anthropology

Theory Credit: 4 Teaching hours: 60

- Unit I Introduction to Archaeology Definition, Aims, Scope. Relationship of archaeology with Bio-Anthropology, Zoology, Botany, Geology, Chemistry, Physics, History. Recent trends of Archaeology Public/ Community Archaeology, Indigenous Archaeology.
- Unit II Development of Archaeology Cultural Historical Approach; Antiquarian to traditional approach; Processual Archaeology Application of natural sciences; Post-Processual Archaeology; Contemporary approaches to archaeological theory. Field methods of Archaeology Exploration methods-Survey methods, Geo-Physical method, Ariel Survey.
- Unit III Excavation methods Types of trenches Test pits, Trail Trench, Step trench; Traditional Methods Box Grid, Horizontal excavation, Grid Method,. Recent trends Harris matrix. Chronology and Dating method: Absolute dating method (Radio-carbon, Potassium Argon, Thermo luminescence, Dendrochronology, Palaeo-magnetism), Relative Dating (Fluorine-Nitrogen Analysis, Stratigraphy, Typology)
- **Unit IV** Pleistocene Environment- The great Ice Age- Glacial and Inter Glacial, Pluvial and Inter Pluvial.
- **Unit V** Introduction to pre-history and its major sub-divisions (Palaeolithic, Mesolithic and Neolithic) —Technology and typology of prehistoric tools.

Core 3- ANC 2.12

Foundation of Archaeological Anthropology

Practical Credit: 2 Teaching hours: 30

- a. Identification between: Man-made tool and Natural stone.
- b. Sketching, description and identification of prehistoric tools Core tool, flake tool, blade tool and grounded and polished tools (one each).
- c. Stratigraphic drawing section drawing.

Suggested readings

- 1. Fagan, B. 1988. In the beginning: An Introduction to Archaeology. Glenview: Scott, Foresman and company.
- 2. Atkinson, R.J.C. 1953. Field Archaeology. London: Longmans.
- 3. Barker, P. 1982. Techniques of Archaeological Excavation. London: Batsford.
- 4. Crawford, O.G.S. 1953. Archaeology in the Field. London: Phoenix.
- 5. Dancey, W.S. 1985. Archaeological Field Methods: An Introduction. New Delhi: Surject Publications.
- 6. Harris, E.C. 1979. Principles of Archaeological Stratigraphy. London: Academic Press.
- 7. Schiffer, M.B. 1991. Archaeological Method and Theory, Journal of Field Archaeology 18(4): 523-526
- 8. Schiffer, M.B. 1972. Archaeological context and systemic context. American Antiquity 37(2): 156-165
- 9. Rajan, K. 2002. Archaeology: Principles and Methods. Thanjavur: Manoo Pathippakam,
- 10. Raman K. V. 1991. Principles and Methods in Archaeology. Madras: Parthajan Publication.
- 11. Agrawal, D.P. and M. G. Yadav. 1995. Dating the Human Past, Pune: ISPQS Monograph Series1
- 12. Birks, H.J.B. and Hilary, H. Birks. 1980. Quaternary Palaeoecology, London: Edward Arnold.
- 13. Brothwell, D.R. and A.M. Pollard. 2001. Handbook of Archaeological Science, New York: John Wiley and Sons Ltd.
- 14. Chazan, M. 2008. World Prehistory and Archaeology: Pathways through Time: AddisonWesley
- 15. Delson, Eric, Ian Tattersal, J. A. Van Couvering, and A. Brooks. 2000. Encyclopedia of Human Evolution and Prehistory. New York and London: Garland Publishing.
- 16. Pearsall, Deborah M. 2007. Encyclopedia of Archaeology. New York: Academic Press. Schick K. D. and N. Toth (eds), 2006. The Oldowan: Case Studies into the earliest Stone Age. Gosport: Stone Age Institute

Core 4- ANC 2.21

Fundamentals of Human Origin & Evolution

Theory Credit: 4 Teaching hours: 60

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

Unit II a) Australopithecines: Distribution, features and their phylogenetic relationships.

b) Appearance of genus Homo (Homo habilis) and related finds.

Unit III Homo erectus from Asia, Europe and Africa: Distribution, features and their phylogenetic status.

Unit IV The origin of Homo sapiens:

i)Fossil evidences of Neanderthals and Archaic Homo sapiens sapiens,

ii) Ancient DNA (scopes and basic outline)

Unit V Origin of modern humans (*Homo sapiens sapiens*): Distribution and features, Hominisation process.

Core 4- ANC 2.22

Fundamentals of Human Origin & Evolution

Practical Credit: 2 Teaching hours: 30

- 1. Osteology: Drawing and study of bones
- 2. Craniometry
- a. Linear measurements: Maximum cranial length, Maximum cranial breadth, least frontal Breadth, Maximum bizygomatic breadth, Greatest frontal breadth, Glabella-inion length, Nasion-inion length, Nasion-basion length, Bi-maxillary breadth, Nasal length, Nasal breadth, Nasion prosthion length, Bi-mastoidal breadth, orbital breadth, orbital breadth, Length of occipital foramen, Breadth of occipital foramen, Prosthion-basion length, Frontal chord Parietal Chord, Occipital chord.
- b. Curvilinear or arc measurements: Frontal arc, Parietal arc, Occipital arc, sagittal cranial arc, Horizontal circumference.
- c. Measurements on mandible: Bi-condylar breadth, Bi-gonial breadth, Length of mandible.
- d. Angular measurements: Metopic angle, Facial profile angle, Nasal profile angle, Profile angle of the nasal roof, Alveolar profile angle, Calvarial base angle, Frontal angle of Schwalbe, Bregma angle of Schwalbe, Lambda angle of Schwalbe.
- 3. Indices: Cranial index Nasal index

- 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, AldinePublishing 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 NaturalHistory of Mankind*. PHI Learning Private Limited, New Delhi.
- 8. Swindler D. R. (2009). *Introduction to the Primates*. Overseas Press India Pvt. Ltd., N.Delhi.

THIRD SEMESTER

Core 5- ANC 3.11

Tribes and Peasants in India

Theory Credit: 4 Teaching hours: 60

Unit I Anthropological concept of Tribe

- a) Definition.
- b) Features of tribes in India.
- c) Classification of Indian tribes: biogenic variables, linguistic and socio-economic characteristics, geographical distribution of tribal people.

Unit II Tribes in India

- a) The history of tribal administration (pre and post-Independence).
- b) Constitutional safeguards.
- c) Impact of Tribal development schemes and programme.

Unit III Problems of tribal peoples - land-alienation, indebtedness, lack of educational facilities, shifting-cultivation, migration, forests, tribal unemployment, health and nutrition

- Unit IV Concept and characteristics of Indian Village; Social organization; Meaning and characteristics of Caste system in India. Village study and its significance in India. Concept of peasant and peasantry.
- Unit V Ethnicity and Identity Issues: causes and types of Tribal and peasant movements (Indigo movement, Champaram Satyagraha, Naga movement and Bodo movement.)

Tribes and Peasants in India

Practical Credit: 2 Teaching hours: 30

Identification, mapping and distribution of Indian tribes

Note: As a part of the classroom practical, the students will be made to draw the map and trace the location of the tribal population in India on the basis of biogenic variability, linguistic affiliation, territorial distribution, subsistence pattern and cultural characteristics.

- 1. 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
- 2. Das, Veena (ed). 2003. The Oxford India Companion to Sociology and Social Anthropology, Delhi, OUP, 2003, 2 volumes.
- 3. Dube, SC. (1998). Indian Village. Delhi: Psychology Press.
- 4. Guha BS. (1931). The racial attributes of people of India. In: Census of India, 1931, vol I, Part III (BPO, Simla)
- 5. Hasnain, Nadeem. 1991. Tribal India. Delhi: PalakaPrakashan
- 6. Hasnain, Nadeem. 1988. Indian Anthropology. Delhi: PalakaPrakashan
- 7. Madan V. 2002. The Village in India. Oxford University Press: Delhi
- 8. Majumdar DN. (1901). Races and Culture of India. Asia Publishing House, Bombay
- 9. Majumdar, D.N. and Madan, T.N. 1987. An Introduction to Social Anthropology. New Delhi: National Publishing House
- 10. McKim Marriott (ed.) 1955. Village India. Illinois: University of Chicago Press.
- 11. NandiniSundar (ed). 2016. The Scheduled Tribes and Their India. Oxford in India Readings in Sociology and Social Anthropology.
- 12. Nathan D. 1998. Tribe-Caste Question. Simla: IIAS.
- 13. National Tribal Policy (draft). 2006. Ministry of Tribal Affairs. Government of India.
- 14. Pandey, Gaya. 2015. BhartiyaManavShastra, concept, New Delhi
- 15. Patnaik S.M. 1996. Displacement, Rehabilitation and Social change. Inter India Publication, Delhi.
- 16. Sahay, V.S. and Singh, P.K.: Indian Anthropology
- 17. Sahlins M.D. 1968. Tribesman. Prentice Hall.
- 18. Shah G. 2002. Social Movement and the State. Delhi: Sage.
- 19. Shanin T. 1987. Peasants and Peasantry. New York, Blackwell.
- 20. Srinivas, M.N. (Ed.) 1961. India's Villages. New York and Bombay: Asia Publishing House. Second revised edition.
- 21. Srivastava, Vinay Kumar. 2021. India's Tribes: Unfolding Realities. New Delhi: SAGE Publications India Pvt. Ltd.
- 22. Vidyarthi L.P. and Rai B.K. 1985. Tribal Culture in India, New Delhi, Concept Publishing Company.

- 23. vonFürer-Haimendorf, C. 1982. Tribes of India: The Struggle for Survival. Berkeley: University of California Press.
- 24. Wolf E. 1966. Peasants. NJ, Prentice Hall.

Core 6- ANC 3.21 Research Methods

Theory Credit: 4 Teaching hours: 60

Unit I Introduction to research method: Research Design, Review of literature, conceptual framework, formulation of research problem, formulation of

hypothesis.

Unit II Field work tradition in Anthropology

Ethnographic approach, ethnocentrism, etic and emic perspectives, comparative and historical methods, rapport establishment, identification of representative categories of informants, maintenance of field diary and logbook

Unit III Tools and techniques of data collection

Sampling, Concept of survey, relationship of survey method with ethnographic method, questionnaire and interview schedule, Observation and types of types of observation, Interview - Structured and unstructured, Focused Group Discussion, key informant interview , Case Study and life history, Genealogy.

Unit IV Analysis and Report Writing

- a) 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.
- b) Similarities and differences between qualitative and quantitative data analysis.

Unit V Bio-Statistics

- a) Types of variables, presentation and summarization of data (tabulation and illustration).
- b) Uses of statistics in Anthropology: Mean, Median, Mode, standard deviation, test of significance, Correlation

Core 6- ANC 3.22

Research Methods

Practical Credit: 2 Teaching hours: 30

- a. Preparation of questionnaire and schedule.
- b. Graphical and diagrammatic presentation of data (Histogram, bar diagram, pie chart, multi-bar diagram, circular diagram, line graph etc)

c. Measurements of Mean Median Mode, standard deviation and correlation on hypothetical data.

Suggested Readings

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

Core 7- ANC 3.31 Human Genetics

Theory Credit: 4 Teaching hours: 60

- **Unit I** Introduction: Definition, aims and applications of human genetics and its relevance in anthropology.
 - a) Mendelian inheritance: Mendel's law and its application to man; modes of inheritance of Mendelian traits in man—autosomal dominant, autosomal recessive; sex-linked inheritance (with reference to common examples)- X-linked dominant and recessive inheritance in man. Co-dominant inheritance, multiple allelism, polymorphism.
 - b) Alteration of Mendelian ratios: Brief introductions to—lethal alleles, incomplete dominance, epistasis, pleiotropy, sex-limited and sex-controlled traits, penetrance and expressivity, genetic heterogeneity, linkage.

c) Inheritance of complex traits: Concepts of complex traits, continuous and discontinuous traits, quantitative traits; threshold value; examples of multifactorial and polygenic traits in humans: stature and dermatoglyphics.

Unit II

a) The chromosome: Structure, size and shape of human chromosome;
histones and nonhistone, protein, Normal human karyotype. Classification of chromosomes – Denver system. Chromosome banding (brief outline)
b) Concept of DNA and RNA –Types and function of DNA and RNA, double helix, Genetic code.

Unit III

- a) Concept of Gene, function and type of genes, basic structural features of typical human gene (Hemoglobin).
- b) Chromosomal abnormalities: Concepts of Ploidy numerical abnormalities with special reference to the etiology and clinical features of Down's, Turner's, and Klinefelter's syndromes; structural abnormalities: brief introduction to translocation, deletion, inversion, duplication, ring chromosome, and isochromosome.

Unit IV

Population genetics: Mendelian population, gene pool, gene and genotype frequency, Hardy-Weinberg law and its significance in human population

Unit V

Methods of human genetics with special reference to family study, twin study. Eugenics and genetic counseling

Core 7- ANC 3.31 Human Genetics

Practical Credits: 2 Teaching hours: 30

Students should be acquainted to undertake the following tests or observations and record the results in the laboratory notebook:

- a. ABO and Rh (D) Blood groupings: Students should be taught in determining ABO and Rh (D) Blood groups of at least 5 subjects following standard technique.
- b. Testing of Colour vision (Colour blindness): Ishihara's chart (1979) should be used and tests should be demonstrated as suggested. Inference should be recorded on at least 5 subjects.

- 1. Lewis R. (2009). Human Genetics: Concepts and Applications 9th Edition. The McGraw-Hill Companies, Inc.
- 2. Cavalli-Sforza, L.L. and Bodmer, W.F (1971). The Genetics of Human Population. San Francisco: Freeman.
- 3. Snustad D. P. and Simmons M.J. (2006). Principles of Genetics, Fourth Edition, John Wiley & Sons USA, Hoboken NJ.

- 4. Vogel F. and Motulsky A.G. (1996). Human Genetics. Springer, 3rd revised edition. 21 5. Stern C. (1970). Principal of Human Genetics. Freedman, San Francisco.
- 5. Mange E. J. and Mange A. P. (1994). Basic human Genetics. Sinaurer Associates, Inc, USA. (Indian Reprint edtn by Rastogi Publications, Meerut.
- 6. Cummings M.R. (2011). Human Heredity: Principles and Issues. Ninth Edition. Brooks/Cole, Cengage Learning.
- 7. Weiner J.S. and. Lourie J.A .1981. Practical human biology, London; New York: Academic Press

FOURTH SEMESTER

Core 8- ANC 4.11 Theories of Culture and Society

Theory Credit: 4 Teaching hours: 60

Unit I Introduction to anthropological theories. Evolutionary theory, changing perspective of Evolutionism (Taylor, Morgan, Steward & White)

Unit II Diffusionism: Basic postulates of diffusionism: British, American & German school of diffusionism (Rivers, G,E, Smith, Franz Boas, A.L. Kroeber, Friedrich Ratzel, Leo Frobenius)

Unit III Durkheim and social integration, Functionalism, and Structural-Functionalism, Malinowski and R Brown

Unit IV Culture & personality (Benedict, M. Mead, Kardiner, R. Linton, Cora du bois)

Unit V Symbolic and Interpretative approach. (Clifford Geertz, Victor Turner, and Mary Douglas.)

Core 8- ANC 4.12 Theories of Culture and Society

Practical Credit: 2 Teaching hours: 30

As a part of the practical the students will be made to review any research articles.

- 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. Clifford, James and George E. Marcus 1986. Writing culture: the poetics and politics of ethnography. Berkeley: University of California Press.
- 4. Goffman, E. 1959. The Presentation of Self in Everyday Life. University of Edinburgh Social Sciences Research Centre. Anchor Books.
- 5. Harris, Marvin. 1968. Rise of Anthropological Theories: A History of theories of Culture. Routledge and Kegan Paul.
- 6. Jha, Makhan. 1994. An Introduction to Anthropological Thought. New Delhi: Vikas Publishing House Pvt.Ltd.
- 7. McGee R.J. and Warms R.L. 1996. Anthropological Theories: An Introductory History.
- 8. Moore, Jerry D. 2009. Visions of Culture: An Introduction to Anthropological Theories and Theorists. Third Edition. US: Alta Mira Press.
- 9. Moore M. and Sanders T. 2006. Anthropology in Theory: Issues in Epistemology, Malden, MA: Blackwell Publishing.
- 10. Pandey and Upadhaya. 2002. History of Anthropological Thoughts. New Delhi: Concept Publishing Company.

Core 9- ANC 4.21

Human Growth and Development

Theory Credit: 4 Teaching hours: 60

- Unit I Concept of human growth, development, differentiation and maturation. Evolutionary perspective on human growth
- Unit II Prenatal (conception till birth) and postnatal (birth till senescence) period of growth, pattern of normal growth curves, variation from normal growth (catch-up growth and catch-down growth), gender differences in growth curves, secular trend
- Unit III Bio-cultural factors (genetic, social, and ecological factors) influencing patterns of growth and variation, methods and techniques to study growth, significance/applicability of growth studies, Bio-cultural adaptation to environmental stresses- heat, cold and altitude.
- Unit IV Nutritional epidemiology-concept of balanced diet, impact of malnutrition (over and under) with special reference to obesity, Kwashiorkor and Marasmus. Assessment of nutritional status.
- Unit V Human physique and body composition models and techniques; gender and differences, Somatotyping and human physique with reference to Sheldon, Parnell, and Carter methods

Core 9- ANC 4.22

Human Growth and Development

Practical Credit: 2 Teaching hours: 30

- a. Estimation of body composition (fat percentage and muscle mass) with skinfold thickness.
- b. Assessment of nutritional status of using anthropometric measurements (stature, body weight, mid upper arm circumference, BMI, body fat %, Conicity index, body adiposity indices, regional adiposity indices: WC, WHR, WHtR, fat percentage and muscle mass, etc. (At least five subjects)

- 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. OxfordUniversity 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 Himalayan 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.

Core 10- ANC 4.31

Human Ecology: Biological & Cultural dimensions

Theory Credit: (5+1) Teaching hours: 60

Biological Dimensions

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

Unit II Methods of studying human ecology, Adaptation to various ecological stresses; Ecological rules and their applicability to human populations.

Cultural Dimensions

Unit III 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 IV** a) Impact of urbanization and industrialization on Man.
 - b) Industrial civilization and growth of urban societies

Unit V Assignment, quiz, oral test/ presentation, book readings based on the above units a prescribed by the concerned teachers.

- 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). Peasent society and culture an anthropological approach tocivilization. Chicago [u.a.]: Univ. of Chicago Press.
- 8. Symposium on Man the Hunter, Richard B. Lee, and Irven DeVore. 1969. Man thehunter. Chicago: Aldine Pub. Co.

FIFTH SEMESTER

Core 11- ANC 5.11 South Asian Archaeology

Theory Credit: 4 Teaching hours: 60

- **Unit I** Introduction Development of South Asian Archaeology from pre to post independence; Introduction to quaternary; Quaternary environments in India.
- Unit II Lower Palaeolithic: Concept of Lower Palaeolithic and Stone Age culture; Acheulian; Nature and significance of the technology; Distribution and Variation; Introduction to some important sites- Attirampakkam, Hunsgi valley, Isampur, Patne.
- Unit III Middle and upper Palaeolithic: Nature and significance of the technology; Distribution and Variation; Introduction to some important sites- Nevasa, Bhimbetka, Patne, Kurnool, Adamgarh.
- **Unit IV** Mesolithic: Nature and significance of the technology; Distribution and Variation; Introduction to some important sites- Sarai-nahar-rai, Damdama, Langhnaj, Balangoda.
- Unit V Neolithic-Megalithic: Nature and significance of the technology; Distribution and Variation; Introduction to some important sites- Burzahom, Mehergarh, Chirand, Daojali hading; Introduction to Megaliths of Vidharbha region, South India and North East India.

Core 11- ANC 5.12 South Asian Archaeology

Practical Credit: 2 Teaching hours: 30

- a. Map map out important prehistoric sites of South Asia
- b. Flow charts and tables for the sites and its important findings and context
- c. Draw one prehistoric stone tool, discuss on its technology and significance

- 1. Chakravarty, K. K., and R. G. Bednarik. 1997. Indian Rock Art in Global Context. Delhi: Motilas Banarasidass & IGRMS.
- 2. Clark, J.D. and Sharma, G.R. (Eds.) Palaeoenvironment and Prehistory in the Middle Son Valley, Madhya Pradesh, North Central India. Allahabad: Abinash Prakashan.
- 3. Corvinus, G.1983. A Survey of the Pravara River System in Western Maharashtra, India, Vol 2: The Excavations of the Acheulian Site of Chirki-on-Pravara, India. Tubingen:Institute for Urgeschichte.

- 4. Corvinus, G. 2007. Prehistoric Cultures in Nepal: From the Early Palaeolithic to the Neolithic and the Quaternary Geology of the Dang-Deokhuri Dun Valleys, Volume 1. Friedrich-Alexander-Universität Erlangen-Nürnberg. Institut für Ur- und Frühgeschichte. Harrassowitz Verlag.
- 5. de Terra, H. and T.T. Paterson Eds.1939. Studies on the Ice Age in India and Associated Human Cultures. Washington:Carnegie Institution of Washington Publication No.493.
- 6. Dennell, R. W.2009. Palaeolithic Settlement of Asia. Cambridge: Cambridge University Press.
- 7. Deraniyagala, S.U. 1992. The Prehistory of Sri Lanka. An Ecological Perspective. Sri Lanka: Memoir Volume Part I, II, III, Commissioner of Archaeology, Government of Sri Lanka.
- 8. Dhavalikar MK, 2013 editor. Prehistory of India. New Delhi: Manohar
- 9. Henke, W., T. Hardt, and I. Tattersall. Editors. 2013. Handbook of Paleoanthropology 3 Vols: Springer. Second edition
- 10. Inizan, Marie-Louise, Reduron-Ballinger, M., Roche, Helene and Tixier, Jacques 1997. Terminology of Knapped Stone. Nanterre:CREP.
- 11. Misra VD, and Pal JN, 2002 editors. Mesolithic India. Allahabad: Department of Ancient History, Culture and Archaeology, University of Allahabad.
- 12. Misra, V.N. 2007. Rajasthan: Prehistoric and Early Historic Foundations
- 13. Neumayer, E. 2010. Rock Art of India. Oxford and New Delhi: Oxford University Press.
- 14. Paddayya K. and Sushama G. Deo (Eds.) Recent Advances in Acheulian Culture Studies in India. ISPQS Monograph No.6. Available in e-format: www.manandenvironment.org
- 15. Paddayya K. and Sushama G. Deo 2017. Prehistory of South Asia (The Lower Palaeolithic or Formative Era of Hunting-Gathering), The Mythic Society, Bengaluru, pp. 152
- 16. Pandey, S. K. 1993. Indian Rock Art. Delhi: Aryan Books International.
- 17. Pant, P.C.and V. Jayaswal.1991. Paisra: The Stone Age Settlement of Bihar. Delhi: Agam Kala Prakashan.
- 18. Pappu, R. S. 2001. Acheulian culture in peninsular India: an ecological perspective. New Delhi: D.K. Printworld.
- 19. Sankalia, H.D. 1974. The Prehistory and Protohistory of India and Pakistan. Pune: Deccan College Postgraduate and Research Institute

Core 12- ANC 5.21

Anthropology in Practice

Theory Credit: 4 Teaching hours: 60

Unit I Concept of Applied Anthropology, Action Anthropology and Development anthropology.

Unit II Anthropology and Public Policy, Role of Anthropology in Need of Assessments and Community Development, Environment and Community Health.

Unit III Trends in Anthropology: Anthropology of Tourism, Anthropology in Population studies, Visual Anthropology, Anthropology and Human Rights.

Unit IV Applied Physical Anthropology: Meaning and scope, application of Physical Anthropology in Sports and Industry, Medicine, Occupational Health and Forensic science.

Unit V Applied Archaeology and Cultural Resource Management- Definition and Scope of Applied Archaeology, Relevance of Cultural Resource Management (CRM), Heritage Management, Some important Indian Legislations of Heritage Management.

Core 12- ANC 5.22 Anthropology in Practice

Practical Credit: 2 Teaching hours: 30

1. Seminar presentation.

Note: As a part of the practical the student will be made to give a presentation on the topic assigned.

- 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, Alxander M., (2000). Applied Anthropology: Tools and Prespectives 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,
- 12. Environment and Health Anthropological Prespectives. K. Sharma, R.K. Pathak, S. Mehra and Talwar I (eds.). Serials Publications, New Delhi.
- 13. Margaret AG. (2003). Applied Anthropology: A Career-Oriented Approach, Boston, MA: Allyn and Bacon.
- 14. Halbar BG and Khan CGH. (1991). Relevance of Anthropology The Indian Scenario.Rawat Publications, Jaipur.
- 15. Kapoor AK (1998). Role of NGOs in Human Development: A Domain of Anthropology. J Ind Anthrop Soc; 33:283-300.
- 16. Kapoor AK and Singh D. (1997). Rural Development through NGO's. Rawat Publications, Jaipur.
- 17. Klepinger LL (2006). Fundamentals of Forensic Anthropology. Wiley-Liss Publications
- 18. Kumar RK and Kapoor AK. (2009). Management of a Primitive Tribe: Role of Development Dynamics. Academic Excellence, Delhi.
- 19. Mehrotra N and Patnaik SM. (2008). Culture versus Coercion: The Other Side of Nirmal Gram Yojna, Economic and Political weekly. pp 25-27.
- 20. Mishra RC (2005). Human Rights in a Developing Society, Mittal Publications, Delhi.
- 21. Noaln RW. (2002). Anthropology in Practice: Building a Career outside the Academy. Publishing Lynne Reinner.
- 22. Patnaik SM (1996). Displacement, Rehabilitation & Social Change. Inter India Publications, New Delhi.
- 23. Patnaik SM (2007). Anthropology of Tourism: Insights from Nagaland. The Eastern Anthropologist. 60(3&4):455-470
- 24. Srivastav OS (1996). Demographic and Population Studies. Vikas Publishing House, India
- 25. Vidyarthi LP and BN Sahay (2001). Applied Anthropology and Development in India, National Publishing House, New Delhi.
- 26. Vidyarthi LP. (1990). Applied Anthropology in India Principles, Problems and Case Studies. Kitab Mahal, U.P.
- 27. Vidyarthi V (1981). Tribal Development and its Administration. Concept Publishing Company, New Delhi.
- 28. Cleere. Henry. (Ed) 1989. Archaeological Heritage Management in the Modern World. London Unwin-Hymen.

- 29. Fowler, Don D, 1982. Cultural Resources Management," Advances in Archaeological Methods and Theory (5): 1-50.
- 30. Guha-Thakurta Tapati, 2004. Monuments, Objects, Histories: Institutions of Art in Colonial and Postcolonial India, Delhi, Permanent Black.
- 31. Sarkar, H. 1981. Museum and Protection of Monuments and Antiquities in India. Delhi: Sundeep Prakashan

SIXTH SEMESTER

Core 13- ANC 6.11 Forensic Anthropology

Theory Credit: 4 Teaching hours: 60

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

Unit II Identification of Human and Non-Human Skeletal Remains, Ancestry, age, sex and stature estimation from bones.

Unit III Personal Identification, Complete and Partial Identification, Methods of Identification in Living Persons: Somatometry, Somatoscopy, dermatoglyphics of palm prints and Fingerprints, Deformities and Others.

Unit IV Forensic serology: Identification and Individualization of bloodstain, urine, semen and saliva. Patterns of Bloodstains.

Unit V Individualization: Forensic Odontology-Tooth Structure and Growth, Bite Marks, Facial Reconstruction, DNA Profiling.

Core 13- ANC 6.12 Forensic Anthropology

Practical Credit: 2 Teaching hours: 30

Dermatoglyphics: candidates should be trained in taking the prints of palm and fingertips of, at least 5 subjects.

- a. In case of fingerprints, pattern types should be identified and the Pattern Intensity Index (PII) is to be calculated.
- b. In case of palm prints, a, b, c, d, and t tri-radii identification and estimation of atd angle.

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.

Core 14- ANC 6.21 Anthropology of India

Theory Credit: 4 Teaching hours: 60

- Unit I Emergence and growth of Anthropology in India; Post-colonial Anthropology in India; Approaches to study of Indian society and culture (approaches-Indological, Historical, Anthropological and Structural functionalism).
- Unit II Understanding the diversity of Indian social structure- concept of varna, jati/caste. Theories of origin of caste system, Ashram and purusharathas. Changes in the caste system.
- **Unit III** Impact of culture-contact, urbanization and industrialization on rural population.
- Unit IV Basic concepts- Great tradition and little tradition, sacred complex,
 Universalization and parochialization, Sanskritization and Westernization,
 Dominant caste, Nature Man-Spirit complex.
- **Unit V** Problems of exploitation and deprivation of scheduled caste/tribe and Other Backward classes. Constitutional Provisions for the Scheduled caste and scheduled tribes.

Core 14- ANC 6.22

Anthropology of India

Theory Credit: 2 Teaching hours: 30

Drawing, identification & description of technological implements from the department collection. (Implements for food gathering, hunting, fishing & agriculture)

- 1. Ahuja, Ram. 2013. Indian Social System. Jaipur: Rawat Publications.
- 2. Bernard CS. 2000. India: The Social Anthropology of Civilization. Delhi: Oxford University Press.
- 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. Hasnain, Nadeem. 1991. Tribal India. Delhi: PalakaPrakashan
- 7. Hasnain, Nadeem. 1988. Indian Anthropology. Delhi: PalakaPrakashan
- 8. Hasnain, Nadeem. 2004. India Society and Culture: Continuity and Change. New Delhi: Jawahar Publisher and Distributors.
- 9. Karve, I. 1961. Hindu Society: An Interpretation. Poona: Deccan College
- 10. Nicholas D. 2001. Castes of Mind: Colonialism and the Making of Modern India. Princeton University Press.
- 11. Peter Berger and Frank Heidemann (eds). 2013. The Modern Anthropology of India: Ethnography, themes and theory. Routledge.
- 12. Patricia Uberoi, NandiniSundar, SatishDeshpande (eds). 2007. Anthropology in the East. Permanent Black
- 13. Peter Berger. 2012. Theory and ethnography in the modern anthropology of India. Journal of Ethnographic Theory.
- 14. SatishDeshpande. 2001. Disciplinary predicaments: sociology and anthropology in postcolonial India.
- 15. Srinivas, MN. 1962, Caste in Modern India and other essays. Asia Publishing House
- 16. Srinivas, MN. 1966. Social Change in Modern India. Orient Blackswan Private Limited.
- 17. Trautmann TR. 2011. India: Brief history of Civilization. Oxford University Press: Delhi
- 18. Xaxa, Virginia. 2008. State, Society, and Tribes: Issues in Post-Colonial India. New Delhi: Pearson Education India.

ELECTIVE COURSES DISCIPLINE SPECIFIC ELECTIVE (DSE)

DSE1 AND 5.11(a)

Sports and Nutritional Anthropology

Theory Credit: 4 Teaching hours: 60

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 Somatotyping and human physique with reference to Sheldon, Parnell, Heath and Carter methods, Body composition and athlete sports selection and monitoring.

Unit IV Human biological variability, health and nutrition; doping and performance.

Unit V Cultural constructions and physiologic implications of food across time, space and society; an integrated bio-behavioral perspective towards food preference.

DSE1 AND 5.12(a)

Sports and Nutritional Anthropology

Practical Credit: 2 Teaching hours: 30

- a. Evaluate association of nutritional status and physical performance (Step test)
- b. Blood pressure, Pulse rate

- 1. Stinson S. (1992). Nutritional Adaptation. Annual Review of Anthropology 21:143-170.
- 2. 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.
- 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. Quandt SA. (1987). Methods for Determining Dietary Intake. In Nutritional Anthropology. FE Johnston, ed. Pp. 67-84. Liss. NY.

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

DSE1 AND 5.11(b)

Biological Diversity in Human Populations

Theory Credit: 4 Teaching hours: 60

Unit I Concept of Biological Variability; Sources of Genetic Variation; Interpretation of Human 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. Biological perspectives of ageing process among different populations.

Unit V Demographic Perspective

Demographic Anthropology; Sources of Demographic Data, Demographic Processes Inbreeding and Consanguinity – Biological consequences of inbreeding, frequency of inbreeding in world populations; Methods of counseling.

DSE1 AND 5.12(b)

Biological Diversity in Human Populations

Practical Credit: 2 Teaching hours: 30

Size and Shape Measurements

- i. Stature
- ii. Sitting Height
- iii. Body Weight
- iv. Total Upper Extremity Length
- v. Total Lower Extremity Length
- vi. Nasal Breadth
- vii. Nasal Height

Size and Shape Indices

i. Body Mass Index

- ii. Ponderal Index.
- iii. Relative Sitting Height
- iv. Relative Upper Extremity Length
- v. Relative Total Lower Extremity Length
- vi. Nasal Index

- 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 kilgoreWendaTrevathan and Ciochon (2010). Introduction to
- 9. Physical Anthropology. Wadsworth Publishing, USA.
- 10. Kapoor A.K. and Satwanti Kapoor (ed) (1995). Biology of Highlanders. Jammu, Vinod Publisher & Distributor.
- 11. Kapoor A.K. and Satwanti Kapoor (eds) (2004) India's Elderly-A Multidisciplinary Dimension. Mittal Publication, New Delhi.
- 12. Klepinge L.L. (2006). Fundamentals of Forensic Anthropology. John Willey &Sons.,New Jersey.
- 13. Malhotra K.C. and B. Balakrishnan(1996) Human Population Genetics in India
- 14. Malina Robert M., Claude. Bouchard, Oded. Bar-Or. (2004) Growth, and Physical Activity. Human Kinetics.
- 15. Stanford C., Allen, S.J. and Anton, C.S. (2013): Biological Anthropology. 3rd edition, Pearson, USA.

DSE2 AND 5.21 (a)

Anthropology of Health

Theory Credit: 4 Teaching hours: 60

Unit I Introduction and overview of the Field of Anthropology and Health: Defining Health and Illness in Cross- Cultural Perspectives. Looking at 'health', 'illness' and related concepts in western culture, some important variations in the process of seeking health care.

Unit II Measuring Health: Concept of Morbidity & Mortality, Epidemiology: Meaning, scope and methods. Epidemiology of common communicable diseases: Malaria, Tuberculosis, Leprosy, Diabetes, Cardiovascular disease and Sexually Transmitted Diseases (STDs), HIV/AIDS.

Unit III Healing and Healers in Cross-Cultural Perspectives: Shamans and Shamanism, Magic and Healing, witchcraft and sorcery.

Unit IV Types of Traditional Healers: Bonesetters, Herbalists, Faith healers, Mixed Healers, Mid-wives'. Concepts of Folk/Traditional medicine, Alternative medicine and Biomedicine. Problems of evaluating the efficacy of Traditional medicine. Sources of dissatisfaction with mainstream medicine (biomedicine)

Unit V 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.

DSE2 AND 5.22 (a) Anthropology of Health

Theory Credit: 2 Teaching hours: 30

Case Studies of Traditional and Modern healers.

- 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. Chen, Lincoln C. Arthur Kleinman, and Norma C. Ware 1994. Health and Social Change in International Perspective. Harvard University Press.
- 4. Chin, James, M.D., M.P.H. (ed.) 2000. Control of Communicable Diseases Manual. 17th Edition. American Public Health Association.
- 5. Coreil, Jeannine and J. Dennis Mull (eds.) 1990. Anthropology and Primary Health Care, Boulder: Westview Press.

- 6. Society. New York: Oxford University Press.
- 7. Helman, Cecil G. 1994. Culture, Health, and Illness. 3rd ed. Oxford: Butterworth-Heinemann.
- 8. Inhorn, Marcia C. and Peter J. Brown 1997. The Anthropology of Infectious Disease. International health Perspectives. Gordon and Breach Publishers.
- 9. Joralemon, Donald. 2017. Exploring Medical Anthropology. 4th Edition. Routledge.
- 10. Koop, C. Everett, Clarence E. Pearson, and M. Roy Schwartz (eds.) 2001. Critical Issues in Global Health. San Francisco: Jossey-Bass. A Wiley Company.
- 11. Mann, Jonathon M., et al. (eds.) 1999. Health and Human Rights. New York: Routledge.
- 12. 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.
- 13. Nichter, Mark and Mimi Nichter 1996. Anthropology and International Health. Asian Case Studies. Gordon and Breach Publishers.
- 14. Paul, Benjamin D. (ed.) 1955. Health, Culture, and Community. Case Studies of Public Reactions to Health Programs.
- 15. Rajesh Khanna and A.K. Kapoor. 2007. Ethnic Groups and Health Dimensions. Discovery Publishing House, New Delhi.
- 16. Tsui, Amy O., Judith N. Wasserheit, and John G. Haaga (eds.) 1997. Reproductive Health in Developing Countries. Washington, D.C.: National Academy Press.
- 17. 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.
- 18. Womack, Mari. 2010. The Anthropology of Health and Healing. US: Alta Mira Press.

DSE 2 AND 5.21 (b)

Tribal cultures of India

Theory Credit: 4 Teaching hours: 60

- **Unit I** Concept of tribes, General characteristics of tribes, Tribes in India: historical, academic, administrative and anthropological importance, De-notified tribes.
- **Unit II** Tribe- caste continuum, Constitutional safeguard/provisions, Gender and Tribe,
- Unit III Classification of tribes based on their economy, occupation and religion,
 Racial elements among the tribes, Scheduled and non-scheduled categories of
 tribes
- Unit IV Problems of tribal development

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

DSE2 AND 5.21 (b) Tribal cultures of India

Practical Credit: 2 Teaching hours: 30

Distribution of Indian Tribes: PTG, ST/Location of different tribes on the map of India/Write an annotated bibliography on any one tribe.

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 3- AND 6.11 (a) Ethno-Archaeology

Theory Credit: 4 Teaching hours:60

Unit I Introduction - Definition, scope and methods of ethnoarchaeology; Nature and interrelationship of archaeological and ethnographic records: Role of Analogy.

Unit II Ethnoarchaeology in India - Brief review of the Ethnoarchaeological researches in India; Forager/collector model to Palaeolithic and Mesolithic societies: e.g. Andaman Islanders; Ethnoarchaeological researches on the living hunter-gatherers in central, western and southern regions of India-Pardhis, Van Vagris, Korkus, Gonds, Bastar, Birhors, Yanadis, Chenchus, and Musahars, Veddas of Sri Lanka.

Unit III Ethnoarchaeology outside India - Important Ethnoarchaeological studies of living hunter-gatherer societies outside India: Eskimos of Alaska, Bushmen of the Kalahari Desert and Australian Aborigines

- **Unit IV** Application of Ethnoarchaeology Ethnoarchaeology and reconstruction of past material culture- Settlement pattern, technology, ceramics, food processing and cultural practices.
- **Unit V** Ethnoarchaeology and Living megaliths With special reference to central and North east India.

DSE 3- AND 6.12 (a)

Ethno-Archaeology

Practical Credit: 2 Teaching hours: 30

Field based project - write a report on any material culture of Naga with the application of ethno archaeological approach.

- Allchin, B. 1985. Ethnoarchaeology in South Asia, in South Asian Archaeology 1983,
 (J. Schotsmans and M. Taddei Eds.), pp 21-33 Napels: Instituto Universitario Orientale.
- 2. Allchin, B. 1994. Living Traditions: South Asian Ethnoarchaeology. New Delhi: Oxford & IBH Co Pvt Ltd.
- 3. Ansari, S. 2000. Small game hunting Musahars: An Ethnoarchaeological Approach, Puratattva, 30: 141-150.
- 4. Ansari, S. 2005. Ethnoarchaeology of Prehistoric Settlement Pattern of South-Central Ganga Valley, Indian Society for Prehistoric and Quaternary Studies Monograph Series No. 4, Pune: Indian Society for Prehistoric and Quaternary Studies.
- 5. Arati Deshpande-Mukherjee 2000. An Ethnographic Account of Contemporary Shellfish Gathering on the Konkan Coast, Maharashtra, Man and Environment 25 (2): 79-92.
- 6. Arati Deshpande-Mukherjee 2006. Reconstructing the Past: Ethnographic Observation on Shell working at Bishnupur, in Past and Present Ethnoarchaeology in India, (Gautam Sengupta, Suchira Roychoudhury and Sujit Som Eds.), pp.383-409. Pragati Publications (New Delhi) in collaboration with Centre for Archaeological Studies and Training Eastern India (Kolkata).
- 7. Axel Steensberg. 1986. Man the Manipulator. An Ethnoarchaeological Basis for Reconstructing the Past, National Museum, Kopenhagen.
- 8. Bettinger, R.L. 1987. Archaeological Approaches to Hunter-Gatherer, Annual Review of Anthropology 16: 121-142.
- 9. Bhan Kuldeep K. 2007 Review of Ethnoarcheological Research in Western India and Future Directions, in Anthropology for Archaeology Proceedings of the Prof. Irawati Karve Birth Centenary Seminar (Walimbe, S.R. P.P. Joglekar and K.K. Basa Eds.), pp. 63-76. Pune: Deccan College.
- 10. Bichieri, M.G. 1972. Hunters and Gatherers Today. New York: Holt, Rinehart and Winston. Binford, L.R. 1978. Nunamiut Ethnoarchaeology. New York: Academic Press. Coles, J. 1973. Archaeology by Experiment. London: Hutchinson.
- 11. Cooper, Z. 1992. The Relevance of the Forger/Collector Model to Island Communities in the Bay of Bengal, Man and Environment 17(2): 111-122.
- 12. Dhavalikar, M.K. 1983. Ethnoarchaeology in India, Bulletin of the Deccan College Research Institute 42: 49-68.

- 13. Dhavalikar, M.K. 1994. Chalcolithic Architecture at Inamgaon and Walki: An Ethnoarchaeological Study, in Living Traditions (Ed.) B. Allchin, pp 35-52. New Delhi: Oxford-IBH.
- 14. David N. and C. Kramer 2001. Ethnoarchaeology in Action. Cambridge: Cambridge University Press.
- 15. Gould, R.A. 1978. Beyond Analogy in Ethnoarchaeology, Explorations in Ethnological Reasoning, and Journal of Anthropological Archaeology 1 (4): 355-81.
- 16. Gould, R.A.1980. Living Archaeology. Cambridge: Cambridge University Press. xxvii. Griffin, P.B. and W.G. Solheim II. 1990. Ethnoarchaeological Research in Asia, Asian Perspectives 28 (2): 145-161.
- 17. Grigg, D.B. 1980. The Agricultural Systems of the World. Cambridge: Cambridge University Press.
- 18. Jochim, M.A. 1976. Hunter Gatherer Subsistence and Settlement: A Predictive Model. New York: Academic Press.
- 19. Kanungo, A.K. 2004. Glass Beads in Ancient India and afurnace-Wound Beads at Purdalpur: An Ethnoarchaeological Approach, Asian Perspective, Vol 43(1): 123 150.
- 20. Kenoyer, J.M., M. Vidale and K.K. Bhan 1991. Contemporary Stone bead –Making in Khambat, India: Patterns of Craft Specialization in the Archaeological Record, World Archaeology 23 (1): 44-63.
- 21. Kramer David N. 2001. Ethnoarchaeology in Action. Cambridge: Cambridge University Press.
- 22. Lee, R.B. and I. Devore 1975. Man the Hunter. Chicago: Aldine Publishing Co.
- 23. Leshnik, L.S. And G. Sontheimer. 1975. Pastoralists and Nomads. Wiesbaden: Otto Harrassowitz.
- 24. Maheshwari, J.K. 1996. Ethnobotany in South Asia. Jodhpur: Scientific Publishers.
- 25. Miller, D. 1985. Artefacts as Categories: A Study of Ceramic Variability in Central India. Cambridge: Cambridge University Press.
- 26. Misra, V.N. 1974. Archaeological and Ethnographic Evidence for the Hafting and Use of Microliths and Related Tools, Puratattva 7: 3-12.
- 27. Misra, V.N. 1984. The Van Vagris- Lost Hunters of Thar Desert, Rajasthan, Man and Environment 15 (2) 89-108.
- 28. Mohanty, P. and J. Mishra 2002. Fifty Years of Ethnoarchaeological research in India: A Review, in Archaeology and Interactive disciplines (S. Settar and R. Korisettar Eds.), pp 169-207. Delhi: Indian Council of Historical Research
- 29. Morrison Kathleen D. and Laura L. Junker. 2002. Forager-Traders in South and Southeast Asia: Long Term Histories. Cambridge: Cambridge University Press.
- 30. Murty, M.L.K. 1981. Hunter-Gatherer Ecosystems and Archaeological Patterns of Subsistence Behaviour on the South-East Coast of India: An Ethnographic Model, World Archaeology 13: 47-58.
- 31. Nagar, M. 1975. Role of Ethnographic Evidence in the Reconstruction of Archaeological Data, Eastern Anthropologist 28 (1): 13-22.
- 32. Nagar, M. and V.N. Misra. 1993 The Pardhis: A Hunting gathering Community of Central and Western India. Man and Environment XVIII (1): 113 144.
- 33. Paddayya, K. 1998. Evidence of Neolithic Cattle Penning at Budhihal, Gulburga District, Karnataka, South Asian Studies 13: 141-54.
- 34. Panja, S. 1996. Mobility Strategies, Site Structure and Subsistence- Settlement Organizations: An Actualistic Perspective, Man and Environment 21 (1): 58-73.
- 35. Raju, D.R. 1988. Stone Age Hunter-Gatherers: Ethno- Archaeology of Cuddapah Region, South-East India. Pune: Ravish Publishers.

- 36. Sengupta, G. Suchira Roychoudhury and Sujit Som 2006. Past and Present Ethnoarchaeology in India. New Delhi: Pragati Publications and Centre for Archaeological Studies and Training Eastern India (Kolkata).
- 37. Sinopali, C.M. 1991. Seeking the Past through the Present: Recent Ethnoarchaeological Research in South Asia, Asian Perspectives 28 (2): 145-161.

DSE 3- AND 6.11 (b) Paleo-anthropology

Theory Credit: 4 Teaching hours: 60

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.

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, Dispersal of modern human.

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

Unit V Palaeopathology- Definition, aims and scopes, methods of palaeopathological studies, bioarchaeological approach of disease; effects of agriculture.

DSE3 AND 6.12 (b) Paleo-Anthropology

Practical Credit: 2 Teaching hours: 30

1. Seminar

Note: As a part of the practical the student will be made to give a presentation on the topic assigned.

- 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. 13.

DSE4 AND-6.21 DISSERTATION

Theory Credit: 6 Teaching hours: 60

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

Interdisciplinary/Generic elective Course (GE)

GE 1-ANG 1.11

Foundation of Anthropology

Theory Credit: 4 Teaching hours: 60

Unit I Anthropology- Definition, Objective, Aim & Scope; Major Branches of Anthropology— Biological, Social-Cultural, Archaeological; Relation of Anthropology with other disciplines (e.g., Life sciences, Earth Science, Medical, ergonomics, Arts (Humanities)

Unit II Biological Anthropology—Concept, Aim, Scope, Sub-Branches and its relationship with other biological sciences.

Unit III Social—Cultural Anthropology- Concept, Aim & Scope, Sub-branches, Relation with other Social Sciences.

Unit IV Introduction to Archaeology – Definition, Aims, Scope; Relationship of archaeology with Bio-Cultural Anthropology, Zoology, Botany, Geology, Chemistry, Physics, History.

Unit V a) Uniqueness of Anthropology—Holism, Comparative Method, and Fieldwork

b) Development of Anthropology (in brief), Applied and Action Anthropology

GE 1-ANG 1.12

FOUNDATION OF ANTHROPOLOGY

Practical Credit: 2 Teaching hours: 30

To Draw and identify the human bones-

Different views of

- a) Skull, Mandible; Long bones with side determination (Humerus, Radius, Ulna, Femur, Tibia, Fibula)
- b) Irregular bones: Vertebral column, Scapula, Clavicle, Hip Bone.

- 1. Jurmain R., Kilgore L., Trevathan W., Ciochon R.L. (2012). Introduction to Physical Anthropology. Wadsworth Publ., USA
- 2. Krober 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
- 5. Binford, L.R. 1972 Introduction. An Archaeological Perspective, pp. 1–14. Seminar Press, New York.
- 6. Daniel, Glyn, E. 1975. A Hundred and Fifty Years of Archaeology. London: Duckworth.
- 7. Fagan, B. 1988. In the beginning: An Introduction to Archaeology. Glenview: Scott, Foresman and company.
- 8. Flannery, K.V., and J. Marcus 1998 Cognitive Archaeology. In Reader in Archaeological Theory: Post-Processual and Cognitive Approaches, edited by D. Whitley, pp. 35–48. Routledge, London.
- 9. Gardner, A. 2009 Agency. In Handbook of Archaeological Theories, edited by R.A. Bentley, H.G. Maschner, and C. Chippindale, pp. 95–108. AltaMira Press, Lanham, MD.
- 10. Hodder, Ian. 1992. Theory and Practice in Archaeology. London: Routledge.
- 11. Hodder, I. 1995. Interpreting Archaeology: Finding Meaning in the Past. New York: Routledge.

GE 2-ANG 2.11

Fundamentals of Social Anthropology

Theory Credit: (5+1) Teaching hours: 60

Unit I

Introduction to Social- cultural Anthropology; Development of Social— Cultural Anthropology, Social-Cultural Anthropology- British and American School

Unit II

- a) Concepts of Society; Status and Role; Community, Group, Association; Social System Social Structure and Organization, Social Stratification, Social Control.
- b) Culture- concept and characteristics; Material and Non-material aspects of culture; Culture universal, cultural integration, enculturation, Acculturation, Diffusion.

Unit III Social Institutions

- a) Family (types, basic structure, functions, factors associated with the changes in joint family);
- b) Marriage (forms and functions; rule of marriage Hypergamy, Hypogamy, Endogamy and Exogamy; Ways of acquiring mates Prescribed; Proscribed; Preferential marriage and Incest);
- c) Kinship (Concept, Kinship Typology, Kinship Terminological system).

Unit IV Religion

- a) Religion (concept, function, theories Animism, Animatism and Manaism, Totemism).
- b) Magic (concept, function, types and principles)
- c) Magico-religious practitioners- Priests, Shaman, Sorcerer and Witch.

Unit V Economic anthropology (concept, function, production-subsistence strategies, distribution), Forms of exchange; Barter, trade and market.

- 1. Dash K.N. 2004. Invitation to Social and Cultural Anthroplogy. New Delhi: Atlantic Publishers and Distributors
- 2. Doshi, S.L. and Jain, P.C. 2009. Social Anthropology. Jaipur: Rawat Publications.
- 3. Ember C. R. et al. 2011. Anthropology. New Delhi: Dorling Kindersley.

- 4. Fox, Robin. 1983. Kinship and Marriage: An Anthropological Perspective. Cambridge University Press.
- 5. Havilandet. al. 2008. Anthropology. Australia: Wordsworth.
- 6. Kottak, C.P. 1996. Cultural Anthropology
- 7. Roy, IndraniBasu.2003. Anthropology: the Study of Man. New Delhi: S.Chand& Company Ltd.
- 8. Scupin, R. 2011. Cultural Anthropology: A Global Perspective. Delhi: Pearson.
- **9.** SrivastavARN. Essentails of Cultural Anthropology

GE 3-ANG 3.11

Foundation of Physical Anthropology

Theory Credit: 4 Teaching hours: 60

- Unit I Introduction to Physical Anthropology: Development of Biological Anthropology, approaches of traditional & modern physical Anthropology. Concept of evolution; different theories of evolution, factors responsible for evolution, Lamarckism, Darwinism, neo-synthetic theory.
- Unit II

 a) Fossil evidences of human evolution: Australopithecine, Pithecanthropine, Cro-magnon, Neanderthal man & Modern man
 b) Man's place in animal kingdom; order primate-classification & main characteristics, comparative anatomy of Man & apes, changes in human skeleton as a result of erect posture.
- Unit III Human genetics: concept of cell & cell division, Mendel's law of inheritance, single & multiple factor inheritance, sex-linked inheritance, ABO & Rh inheritance.
- **Unit IV** Race & Human variation: Concept of race & racism, UNESCO statement on race, factors responsible for race formation, criteria for racial classification, major races of the world.
- Unit V Concept of growth & development, factors affecting growth & development, methods, stages, nutrition, mal-nutrition & under –nutrition.

GE 3-ANG 3.12

Foundation of Physical Anthropology

Practical Credit: 2 Teaching hours: 30

a) Anthropometric Instruments: Anthropometer, Sliding & Spreading Callipers, Weighing machine, measuring tape.

- b) Somatometry: Head length and breadth, Total and upper facial height, Stature, Sitting Height vertex, Nasal length & breadth, Bi-acromial breadth, bi-gonial breadth, bi-zygomatic breath, horizontal circumference of head.
- c) Indices: Cephalic, Nasal, Total facial, Upper facial, Relative sitting height. Measurements on five subjects

d) Somatoscopy: Skin colour, Hair (form, texture, colour), Eye (form, slit, colour & eyebrows), Nose (bridge, root), malar prominence, forehead (height and shape), chin form, ear (attachment & shape).

Suggested Readings

- 1. Introduction to Physical Anthropology-B.M.DAS
- 2. Anthropology: The study of man-INDRANI BASU ROY
- 3. Man and his works-HERSKOVITS
- 4. Fundamentals of Physical Anthropology-R.M.SARKAR
- 5. Olivia. Practical Anthropology
- 6. Sen, Tulika Anthropomentry
- 7. Singh, I P and Bhasin, M.K. . Anthropometry
- 8. B.R.K. Shukla &Rastogi-physical anthropology and human genetics.
- 9. Janusch, J.Buettner-origins of man.
- 10. Das, B.M & Ranjan Physical Anthropology Practical
- 11. Nath, P Physical Anthropology
- 12. Barua, Saumitra Human Genetics : An Anthropological perspective
- 13. Ahluwalia, B.Karvita Genetics
- 14. Stern, curt Principles of Human Genetics
- 15. Winchester, M.A Genetics
- 16. Hootan, E.A up from the Ape
- 17. Comas, J Manual of Physical Anthropology

GE 4 ANG 4.11

Foundation of Archeological Anthropology

Theory Credit: 4 Teaching hours: 60

- Unit I Development of Archaeology Cultural Historical Approach; Antiquarian to traditional approach; Processual Archaeology Application of natural sciences; Post-Processual Archaeology; Contemporary approaches to archaeological theory. Recent trends of Archaeology Public/ Community Archaeology, Indigenous Archaeology.
- Unit II Field methods of Archaeology Exploration methods- Survey methods, Geo-Physical method, Aerial Survey. Excavation methods – Types of trenches -Test pits, Trail Trench, Step trench; Traditional Methods – Box Grid, Horizontal excavation, Grid Method, Recent trends – Harris matrix.
- Unit III Chronology and Dating method: Absolute dating method (Radio-carbon, Potassium Argon, Thermo luminescence, Dendrochronology, Paleomagnetism), Relative Dating (Fluorine-Nitrogen Analysis, Stratigraphy, Typology)
- **Unit IV** Pleistocene Environment: The great Ice Age- Glacial and Inter Glacial, Pluvial and Inter Pluvial.
- Unit V Introduction to pre-history and its major sub-divisions (Palaeolithic, Mesolithic and Neolithic) Technology and typology of prehistoric tools.

GE 4- ANG 4.12

Foundation of Archeological Anthropology

Practical Credit: 2 Teaching hours: 30

- a. Identification between: Man-made tool and Natural stone.
- b. Sketching, Description and identification of prehistoric tools Core tool, flake tool, blade tool and grounded and polished tools (one each).
- c. Stratigraphic Drawing section drawing.

- 1. Fagan, B. 1988. In the beginning: An Introduction to Archaeology. Glenview: Scott, Foresman and company.
- 2. Atkinson, R.J.C. 1953. Field Archaeology. London: Longmans.
- 3. Barker, P. 1982. Techniques of Archaeological Excavation. London: Batsford.
- 4. Crawford, O.G.S. 1953. Archaeology in the Field. London: Phoenix.
- 5. Dancey, W.S. 1985. Archaeological Field Methods: An Introduction. New Delhi: Surject Publications.
- 6. Harris, E.C. 1979. Principles of Archaeological Stratigraphy. London: Academic Press.
- 7. Schiffer, M.B. 1991. Archaeological Method and Theory, Journal of Field Archaeology 18(4): 523-526

- 8. Schiffer, M.B. 1972. Archaeological context and systemic context. American Antiquity 37(2): 156-165
- 9. Rajan, K. 2002. Archaeology: Principles and Methods. Thanjavur: Manoo Pathippakam,
- 10. Raman K. V. 1991. Principles and Methods in Archaeology. Madras: Parthajan Publication.
- 11. Agrawal, D.P. and M. G. Yadav. 1995. Dating the Human Past, Pune: ISPQS Monograph Series1
- 12. Birks, H.J.B. and Hilary, H. Birks. 1980. Quaternary Palaeoecology, London: Edward Arnold.
- 13. Brothwell, D.R. and A.M. Pollard. 2001. Handbook of Archaeological Science, New York: John Wiley and Sons Ltd.
- 14. Chazan, M. 2008. World Prehistory and Archaeology: Pathways through Time: AddisonWesley
- 15. Delson, Eric, Ian Tattersal, J. A. Van Couvering, and A. Brooks. 2000. Encyclopedia of Human Evolution and Prehistory. New York and London: Garland Publishing.
- 16. Pearsall, Deborah M. 2007. Encyclopedia of Archaeology. New York: Academic Press. Schick K. D. and N. Toth (eds), 2006. The Oldowan: Case Studies into the earliest Stone Age. Gosport: Stone Age Institute

SKILL ENHANCEMENT COURSE-(SEC)

SEC 1 ANS 3.11

Field work

Theory Credit: 2 Teaching hours: 30

Field Report and Viva Voce

The department shall organize a fieldwork of about one week duration. Each student will be required to submit three typed copies of a comprehensive ethnographic field report based on socio-cultural and biological aspects of a population studied during the fieldwork.

- 1. Clifford, James and George E. Marcus (1986) Writing culture: the poetics and politics of ethnography. Berkeley: University of California Press.
- 2. Geertz, Clifford (1973) The Interpretation of Cultures. New York: Basic Books.
- 3. Harris, Marvin (1997) Culture, People, Nature: An Introduction to General Anthropology (7th Edition). Boston: Allyn & Bacon
- 4. Salzmann, Zdeněk. (1993) Language, culture, and society: an introduction to linguistic anthropology. Boulder, CO: Westview Press.

- 5. Shweder, Richard A., and Robert A. LeVine, eds. (1984) Culture Theory: essays on mind, self, and emotion. Cambridge, UK: Cambridge University Pres
- 6. M.N.Srinivas, A.M. Shah, and E.A.Ramaswamy. 2002. The Fieldworker and the Field. Oxford University Press.
- 7. Vinay Kumar Srivastava (ed). 2004. Methodology and Fieldwork. Oxford in India readings in sociology and social anthropology. Oxford University Press.
- 8. H. Russell Bernard. 2006. Research Methods in Anthropology: Qualitative and Quantitative Approaches. Altamira Press.

SEC 2 ANS 4.11

Anthropology of Disaster

Credit: 2 Teaching hours: 30

- Unit I
- a) Introduction to Disaster: Definition and concept, types, vulnerability, risk, coping.
- b) Anthropological approaches to study disasters- Archaeological/ Historical, Political ecology, Socio-cultural behavioral, gendered perspective.
- **Unit II**
- a) Methods of studying disasters, health, environment, socio-economic impacts of disasters.
- b) Disaster management, Plans and National policies concerning disasters.

Note: Students are to write an assignment or a project on a recent disaster (local, state, national)

- 1. Alexander A. (1993). *Natural Disasters*. Routledge Taylor and Francesbrip.
- 2. Alexandeer D.E.(2000). *Confronting Catastrophe: New perspective on Natural Disasters*. Terra Publishing.
- 3. Bawden G & Raycraft R.M. (2000). *Environmental Disaster and the Archaeology of Human Response*. University of New Mexico Press.
- 4. Bolin R.C.(2000). The Northridge Earthquake: Vulnerability and Disasters. Stanford.
- 5. Benthal J.(1993). Disasters, Relief and the Media. IB Tauris and Company Ltd.
- 6. Bankoff J & Frerks G.(2004) Mapping Vulnerability. Earthscan.
- 7. Clarke L.B. (2003) Terrorism and Disasters: New threats, new ideas. JAI Press
- 8. David A. McEntire (2015). *Disaster Response and Recovery: Strategies and Tactics for Resilience*. Wiley.
- 9. Form .W.H and Nosow S. (1958). Community in Disaster
- 10. Handmer, John & Dovers Stephen (2013). *Handbook of Disaster Policies and Institutions*. Routledge
- 11. Norris F.H, Galea S, Friedman M.T, Watson P.J.(2006). *Methods for Disaster Mental Health Research*. Guilford Press.

- 12. Narayan, Sachindra (2001). *Anthropology of Disaster Management*. Gyan Publishing House.
- 13. Oliver Smith A & Hoffman S.M. (1999). *The Angry Earth: Disaster in Anthropological Perspectives*. Routledge
- 14. *Phenomenology of Disasters: Towards a Rhetoric of Tragedy* (2006). Pennysylvania State University Press.
- 15. Sylves, Richard (2019). Disaster Policy and Politics. CQ Press.