



Draft Syllabus Anthropology (Hons)

1. Introduction.....	1
2. Scheme for CBCS Curriculum	2
2.1 Credit Distribution across Courses	2
2.2 Scheme for CBCS Curriculum	3
2.3 Choices for Discipline Specific Electives	5
2.4 Choices for Skill Enhancement Courses	5
3. Core Subjects Syllabus	6
3.1 Core T1 - Introduction to Biological Anthropology.....	6
3.2 Core P1 - Introduction to Biological Anthropology Lab	8
3.3 Core T2 - Introduction to Socio-cultural Anthropology	10
3.4 Core P2 - Introduction to Socio Cultural Anthropology Lab	12
3.5 Core T3 - Archaeological Anthropology.....	13
3.6 Core P3 - Archaeological Anthropology Lab	15
3.7 Core T4 - Fundamentals of Human Origin and Evolution	16
3.8 Core P4 - Fundamentals of Human Origin and Evolution Lab	18
3.9 Core T5 - Tribes and Peasants in India	19
3.10 Core P5 - Tribes and Peasants in India Lab	21
3.11 Core T6 - Human Ecology: Biological & Cultural Dimensions	22
3.12 Core P6 - Human Ecology: Biological & Cultural Dimensions Lab	24
3.13 Core T7 - Biological Diversity in Human Populations	25
3.14 Core P7 - Biological Diversity in Human Population Lab	27
3.15 Core T8 - Theories of Culture and Society	29
3.16 Core P8 - Theories of Culture and Society Lab.....	31
3.17 Core T9 - Human Growth and Development	32
3.18 Core P9 - Human Growth and Development Lab.....	34
3.19 Core T10 - Research Methods	35
3.20 Core P10 - Research Methods Lab.....	37
3.21 Core T11 - Human Population genetics	38
3.22 Core P11 - Human Population Genetics Lab	40

3.23	Core T12 - Anthropology in Practice.....	41
3.24	Core P12 - Anthropology in Practice Lab	44
3.25	Core T13 - Forensic Anthropology.....	45
3.26	Core P13 - Forensic Anthropology Lab	47
3.27	Core T14 - Anthropology of India	48
3.28	Core P14 - Anthropology of India Lab	50
4.	Department Specific Electives Subjects Syllabus	51
4.1	DSE T1 - Physiology Anthropology	51
4.2	DSE P1- Physiology Anthropology Lab	53
4.3	DSE T2 - Kinanthropology	54
4.4	DSE P2 - Kinanthropology Lab	55
4.5	DSE T3 - Human genetics	56
4.6	DSE P3 - Human Genetics Lab.....	58
4.7	DSE T4 - Forensic Anthropology.....	59
4.8	DSE P4 - Forensic Anthropology Lab	62
4.9	DSE T5 - Paleoanthropology	63
4.10	DSE P5 - Paleoanthropology Lab	65
4.11	DSE T6 - Tribal Cultures of India.....	66
4.12	DSE P6 - Tribal cultures of India Lab	67
4.13	DSE T7 - Indian Archaeology.....	68
4.14	DSE P7 - Indian Archaeology Lab	69
4.15	DSE T8 - Visual Anthropology.....	70
4.16	DSE P8 - Visual Anthropology Lab	72
5.	Skill Enhancement Subjects Syllabus.....	73
5.1	SEC T1 - Public Health and Epidemiology	73
5.2	SEC T2 - Business and Corporate Anthropology	75
5.3	SEC T3 - Media Anthropology	76
5.4	SEC T4 - Tourism Anthropology	77
6.	Appendix I - Scheme for CBCS Curriculum for Pass Course.....	79

6.1	Credit Distribution across Courses	79
6.2	Scheme for CBCS Curriculum	80

1. Introduction

The syllabus for Anthropology at undergraduate level using the Choice Based Credit system has been framed in compliance with model syllabus given by UGC. While framing the syllabus as per the UGC guideline, the topics have been kept as generic as possible in order to provide enough freedom to the individual Universities to detail out their own syllabus as per their own infrastructure, expertise and strength.

Keeping in mind and in tune with the changing nature of the subject, adequate emphasis has been given on incorporating the basic concepts, traditional fields of study that anthropology have mastered as well as the contemporary fields of study which are getting acceptance internationally. A balance between the tradition and modern has been struck to give the final shape of the syllabus.

The syllabus has also been framed in such a way that the basic skills of subject are taught to the students, and everyone might not need to go for higher studies and the scope of securing a job after graduation will increase. This would draw more students in this relatively lesser known academic field.

There is wide deviation in the infrastructure, be it physical or in human resource, in the form of teachers' expertise and ability and aspiration of the students. Hence, University is free to choose the Electives as per their infrastructural strengths and offer at least 6 to 7 electives

Project Work may be introduced instead of the 4th Elective with a credit of 6 split into 2+4, where 2 credits will be for continuous evaluation and 4 credits reserved for the merit of the dissertation.

2. Scheme for CBCS Curriculum

2.1 Credit Distribution across Courses

		Credits	
Course Type	Total Papers	Theory + Practical	Theory*
Core Courses	14	14*4 =56 14*2 =28	14*5 =70 14*1=14
Discipline Specific Electives	4	4*4=16 4*4=2	4*5=20 4*1=4
Generic Electives	4	4*4=16 4*4=2	4*5=20 4*1=4
Ability Enhancement Language Courses	2	2*2=4	2*2=4
Skill Enhancement Courses	2	2*2=4	2*2=4
Totals	22	140	140

*Tutorials of 1 Credit will be conducted in case there is no practical component

2.2 Scheme for CBCS Curriculum

Semester	Course Name	Course Detail	Credits
I	Ability Enhancement Compulsory Course - I	English communication / Environmental Science	2
	Core course - I	Introduction to Biological Anthropology	4
	Core course - I Practical	Introduction to Biological Anthropology Lab	2
	Core course - II	Introduction to Socio-cultural Anthropology	4
	Core course - II Practical	Introduction to Socio-cultural Anthropology Lab	2
	Genetic Elective - 1	TBD	4
	Generic Elective - 1 Practical	TBD	2
II	Ability Enhancement Compulsory Course - II	English communication / Environmental Science	2
	Core course - III	Archaeological Anthropology	4
	Core course - III Practical	Archaeological Anthropology Lab	2
	Core course - IV	Fundamentals of Human Origin & Evolution	4
	Core course - IV Practical	Fundamentals of Human Origin & Evolution Lab	2
	Generic Elective - 2	TBD	4
	Generic Elective - 2 Practical	TBD	2
III	Core course - V	Tribes and Peasants in India	4
	Core course - V Practical	Tribes and Peasants in India Lab	2
	Core course - VI	Human Ecology: Biological & Cultural dimensions	4
	Core course - VI Practical	Human Ecology: Biological & Cultural dimensions Lab	2
	Core course - VII	Biological Diversity in Human Populations	4
	Core course - VII Practical	Biological Diversity in Human Populations Lab	2
	Skill Enhancement Course - 1	TBD	2

	Generic Elective - 3	TBD	4
	Generic Elective - 3 Practical	TBD	2
IV	Core course - VIII	Theories of Culture and Society	4
	Core course - VIII Practical	Theories of Culture and Society Lab	2
	Core course - IX	Human Growth and Development	4
	Core course - IX Practical	Human Growth and Development Lab	2
	Core course - X	Research Methods	4
	Core course - X Practical	Research Methods Lab	2
	Skill Enhancement Course-2	TBD	2
	Generic Elective - 4	TBD	4
	Generic Elective - 4 Practical	TBD	2
V	Core course - XI	Human Population Genetics	4
	Core course - XI Practical	Human Population Genetics Lab	2
	Core course - XII	Anthropology in Practice	4
	Core course - XII Practical	Anthropology in Practice Lab	2
	Discipline Specific Elective - 1	TBD	4
	Discipline Specific Elective - 1 Practical	TBD	2
	Discipline Specific Elective - 2	TBD	4
	Discipline Specific Elective - 2 Practical	TBD	2
VI	Core course - XIII	Forensic Anthropology	4
	Core course - XIII Practical	Forensic Anthropology Lab	2
	Core course - XIV	Anthropology of India	4
	Core course - XIV Practical	Anthropology of India Lab	2
	Discipline Specific Elective - 3	TBD	4

	Discipline Specific Elective - 3 Practical	TBD	2
	Discipline Specific Elective - 4	TBD	4
	Discipline Specific Elective - 4 Practical	TBD	2

2.3 Choices for Discipline Specific Electives

Discipline Specific Elective - 1 to Discipline Specific Elective - 4 (Choose any 4)			
Physiological Anthropology	Kinanthropology	Human Genetics	Forensic Anthropology
Paleoanthropology	Tribal Cultures of India	Indian Archaeology	Visual Anthropology
Dissertation (in Semester VI only)			

2.4 Choices for Skill Enhancement Courses

Skill Enhancement Course-1 & Skill Enhancement Course-2	
Public Health and Epidemiology	Media Anthropology
Business & Corporate Anthropology	Tourism Anthropology

3. Core Subjects Syllabus

3.1 Core T1 - Introduction to Biological Anthropology

Introduction to Biological Anthropology	
	4 Credits
Unit 1	
1. Definition, Scope and sub-disciplines of Anthropology. 2. History of Physical Anthropology and development of Modern Biological anthropology, aim, scope and its relationship with allied disciplines. 3. Difference in the approaches of modern and traditional Biological Anthropology, with emphasis on human evolution and variation. 4. Application of Biological anthropology in Human welfare and development.	
Unit 2	
History and development of understanding human variation and evolutionary thought. Theories of evolution. 1. Human variation and evolution in ancient times, pre-19th and post-19th Century. 2. Theories of evolution. Lamarckism, Neo Lamarckism, Darwinism, Modern Synthetic theory, Mutation and Neutral theory of molecular evolution.	
Unit 3	
Non-human primates in relation to human evolution 1. Classification and characteristics of living primates, with suitable examples. 2. Outlines of comparative anatomy and behaviour of human and non-human primates 3. Significance of non-human primate study in Biological Anthropology.	
Unit 4	
Great divisions of humanity 1. UNESCO Statement on Race. Racism 2. A. Outline of racial classifications: Denikar, Dixon, Haddon, Hooton, Eickstedt and Coon-Garn-Birdsell	

B. Indian context: Risley, Guha and Sarkar

Reference Books

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

3.2 Core P1 - Introduction to Biological Anthropology Lab

Introduction to Biological Anthropology	
	2 Credits
Anthropometry	
1. Maximum head length 2. Maximum head breadth 3. Minimum frontal breadth 4. Maximum bizygomatic breadth 5. Bigonial breadth 6. Nasal height 7. Nasal length 8. Nasal breadth 9. Physiognomic facial height 10. Morphological facial height 11. Physiognomic upper facial height 12. Morphological upper facial height 13. Head circumference 14. Stature 15. Sitting height 16. Body weight	
Anthroposcopy	
1. Head form 2. Hair form 3. Facial form 4. Eye form 5. Nose form 6. Hair colour 7. Eye colour 8. Skin colour	
Evolutionary Biology	

Identification of Ape Cranium (Drawing and characteristics features) - Gibbon, Orangutan, Chimpanzee, Gorilla

3.3 Core T2 - Introduction to Socio-cultural Anthropology

Introduction to Socio-cultural Anthropology	
	4 Credits
Unit 1	
Aim and Objectives of Social-Cultural Anthropology. Scope and relevance of Social-Cultural Anthropology. Relationship of Social-Cultural Anthropology with other disciplines. History of nomenclature.	
Unit 2	
Concepts and definitions of society and culture. Different types of Groups and Institutions. Society and community.	
Unit 3	
A study of Social Facts; Social System and Institution; Social Action, Social Stratification and Conflict.	
Unit 4	
Basic units of Society: Family; Marriage; Kinship system; Economic Organization; Political Organization; Religious practices.	
Reference Books	
▶ Beattie J. (1964). Other Cultures. London: Cohen & West Limited. ▶ Bernard H.R. (1940). Research Methods in Cultural Anthropology. Newbury Park: Sage Publications. ▶ Davis K. (1981). Human Society. New Delhi: Surjeet Publications. ▶ Delaney C. (2004). 'Orientation and disorientation' In Investigating Culture: An Experiential Introduction to Anthropology. Wiley-Blackwell. ▶ Ember C. R. et al. (2011). Anthropology. New Delhi: Dorling Kindersley. ▶ Ferraro G. and Andreatta S. (2008). In Cultural Anthropology: An Applied Perspective. Belmont: Wadsworth. ▶ Karen O'reilly. (2012). 'Practical Issues in Interviewing' Ethnographic Methods. Abingdon: Routledge	

- ▶ Lang G. (1956). 'Concept of Status and Role in Anthropology: Their Definitions and Use. The American Catholic Sociological Review.17(3): 206-218
- ▶ O'reilly K. (2012). Ethnographic Methods. Abingdon: Routledge.
- ▶ Parsons T. (1968). The Structure of Social Action. New York: Free Press
- ▶ Rapport N. and Overing J. (2004). Key Concepts in Social and Cultural Anthropology. London: Routledge.
- ▶ Royal Anthropological Institute of Great Britain and Ireland (1971). 'Methods' In Notes and Queries on Anthropology. London: Routledge & Kegan Paul Ltd.

3.4 Core P2 - Introduction to Socio Cultural Anthropology Lab

Introduction to Socio Cultural Anthropology	
	2 Credits
Methods and Techniques of Social Anthropology	
The practical will include the following principal methods and techniques in collection of data in Social Anthropology. 1. Observation 2. Interview 3. Questionnaire and Schedule 4. Case study 5. Life history	

3.5 Core T3 - Archaeological Anthropology

Archaeological Anthropology	
	4 Credits
Introduction to Archaeological Anthropology	
1. Definition and scope of archaeological anthropology 2. Relation with other disciplines 3. Methods of studying archaeological anthropology	
Methods of Estimation of Time and Reconstruction of the Past	
1. Absolute dating methods (c14, K-Ar, TL, Dendrochronology, Palaeomagnetism) 2. Relative dating methods (Stratigraphy, FUN estimation) 3. Methods of climatic reconstruction: palynology, paleontology, soil pH estimation.	
Geochronology of Pleistocene Epoch	
1. Glacial and Interglacial 2. Pluviation and Inter Pluviation 3. Different types of geoclimatic events	
Understanding Culture	
1. Technique of tool manufacture and estimation of their relative efficiency 2. Classification of tools: primary and combination fabrication techniques 3. Typology and cultural nomenclature 4. Palaeolithic, Mesolithic and Neolithic Culture of Europe and India.	
Earliest Evidence of Culture in the World	
1. Konso, Olorgesailie, Olduvai Gorge, Stellenbosch. 2. Pirro Nord, Dmanisi, Alpuerca, Patjitanian, Choukoutien, Anyathian. 3. Soan, Kortalayer Valley, Narmada, Bhimbetka.	
Reference Books	
► Allchin and Allchin (1993). The Rise of Civilization of India and Pakistan. Cambridge University Press	

- ▶ Bhattacharya D.K. (1978). Emergence of Culture in Europe, Delhi, B.R. Publication.
- ▶ Bhattacharya D.K. (1979). Old Stone Age Tools and Techniques. Calcutta, K.P. Bagchi Company
- ▶ Bhattacharya D.K. (1996). Palaeolithic Europe. Netherlands, Humanities Press.
- ▶ Butzer, K. (1971). Environmental Archaeology.
- ▶ Champion et al. (1984). Prehistoric Europe. New York, Academic Press.
- ▶ Clark, G. (1962). World Prehistory.
- ▶ Fagan B.M. (1983). People of Earth: An Introduction. Boston, Little, Brown & Company.
- ▶ Leaky, L.S.B (1936). Stone Age Africa. Oxford.
- ▶ Leaky, L.S.B (1953). Adam's Ancestor, London.
- ▶ Movious, H.L. (1948). The Lower Palaeolithic Culture of Southern & Eastern Asia. Trans. Amer. Phil.Soc. n.s. XXXVIII, Part 4, Philadelphia.
- ▶ Phillipson D. W. (2005). African Archaeology. Cambridge, Cambridge University Press.
- ▶ Sankalia H.D. (1964). Stone Age Tools. Poona Deccan College

3.6 Core P3 - Archaeological Anthropology Lab

Archaeological Anthropology	
	2 Credits
Typo-technological Analysis of Prehistoric Tools	
Identification, Interpretation and Drawings of the tool Types 1. Core Tool Types - any three Chopper, Hand axe, Cleaver. 2. Flake Tool Types - any two Scrapers, Points. 3. Blade Tool Types - any two Knife, Blade, Burin. 4. Microlithic Tool Type - any two Triangle, Lunate, Trapeze. 5. Neolithic Tool Type - any two Axe, Adze, Chissel, Ringstone. 6. Bone Tools - Barbed Harpoon, Lance point, Baton-de-commandment.	

3.7 Core T4 - Fundamentals of Human Origin and Evolution

Fundamentals of Human Origin and Evolution	
	4 Credits
Unit 1	
Primate origins and radiation with special reference to: Parapithecus, Ramapithecus, Dryopithecus, Sivapithecus and their distribution, features with their phylogenetic relationships	
Unit 2	
1. Australopithecines: distribution, features and their phylogenetic relationships. 2. Appearance of genus Homo (Homo habilis) and related finds.	
Unit 3	
The origin of Homo sapiens: Fossil evidences of Neanderthals and Archaic Homo sapiens	
Unit 4	
The origin of Homo sapiens: Fossil evidences of Neanderthals and Archaic Homo sapiens	
Unit 5	
Origin of anatomically modern humans (Homo sapiens sapiens): Distribution and features Brief outline of the models of human origin: Out-of-Africa and Replacement model	
Unit 6	
Hominisation process, Biology and culture co-evolution	
Reference Books	
▶ Buettner-Janusch, J. (1966). Origins of Man: Physical Anthropology. John Wiley & Sons, Inc., New York, London, Sydney. ▶ Conroy, G.C. (1997). Reconstructing Human Origins: A Modern Synthesis. W. W. Norton & Company, New York, London. ▶ Howell F.C. (1977). Horizons of Anthropology. Eds. S. Tax and L.G. Freeman, Aldine Publishing House, Chicago.	

- ▶ Nystrom P. and Ashmore P. (2011). The Life of Primates. PHI Learning Private Limited, New Delhi.
- ▶ Seth P. K. and Seth S. (1986). the Primates. Northern Book Centre, New Delhi, Allahabad.
- ▶ Singh I. P. and Bhasin M.K. (1989). Anthropometry: A Laboratory Manual on Biological Anthropology. Kamla-Raj Enterprises, Chawri Bazar, Delhi.
- ▶ Standford C.; Allen J.S. and Anton S.C. (2012). Biological Anthropology: The Natural History of Mankind. PHI Learning Private Limited, New Delhi.
- ▶ Swindler D. R. (2009). Introduction to the Primates. Overseas Press India Pvt. Ltd., New Delhi.

3.8 Core P4 - Fundamentals of Human Origin and Evolution Lab

Fundamentals of Human Origin and Evolution	
	2 Credits
List of Practical	
1. Craniometry a. Maximum Cranial length and breadth b. Maximum bizygomatic breadth c. Maximum frontal breadth d. Minimum frontal breadth e. Nasal height and breadth f. Bi-Mastoid Breadth g. Greatest occipital breadth h. Upper facial height i. Cranial index j. Nasal index k. Osteometry: Measurements of long and flat bones: (Any three) 2. Lengths, minimum/least circumference and caliber index 3. Identification of casts of fossils of family hominidae: Drawing and comparison of characteristics	

3.9 Core T5 - Tribes and Peasants in India

Tribes and Peasants in India	
	4 Credits
Anthropological Concept of Tribes	
1. Problems of nomenclature, definition and classification. 2. Characteristics of Tribal Societies of the world in general. Features of tribes in India	
Tribes and Wider world	
1. The history of tribal administration; Constitutional safeguards 2. Draft National Tribal Policy, Issues of acculturation assimilation and integration. Impact of development schemes and programme on tribal life	
Anthropological Concept of Village	
1. The concept of peasantry. 2. Approaches to the study of peasants - economic, political and cultural. 3. Characteristics of Indian village: social organization; economy and changes. 4. Caste system and changes.	
Ethnicity and Identity Issues	
Ethnicity issues: Concepts of Ethnicity and Ethnic Identity; Tribal and peasant movements; Identity issues	
Reference Books	
▶ Gupta D. (1991). Social Stratification. Oxford University Press: Delhi. ▶ Madan V. (2002). The Village in India. Oxford University Press: Delhi. ▶ Nathan D. (1998). Tribe-Caste Question. Simla: IAS. ▶ National Tribal Policy (draft). (2006). Ministry of Tribal Affairs. Government of India. ▶ Patnaik S.M. (1996). Displacement, Rehabilitation and Social change. Inter India Publication, Delhi. ▶ Shah G. (2002). Social Movement and the State. Delhi: Sage. ▶ Shanin T. (1987). Peasants and Peasantry. New York, Blackwell.	

- ▶ Vidyarthi L.P. and Rai B.K. (1985) Tribal Culture in India, New Delhi, Concept Publishing Company.
- ▶ Wolf E. (1966). Peasants. NJ, Prentice Hall.

3.10 Core P5 - Tribes and Peasants in India Lab

Tribes and Peasants in India	
	2 Credits
Reading of Ethnography	
Students are required to read and analyse any two of the ethnographies (as listed in the reference section) 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.	

3.11 Core T6 - Human Ecology: Biological & Cultural Dimensions

Human Ecology: Biological & Cultural Dimensions	
	4 Credits
Biological Dimensions	
1. Concepts in Ecology: Definition, eco-sensitivity adaptation, acclimation, acclimatization, biotic and abiotic component. 2. Methods of studying human ecology. 3. Adaptation to various ecological stresses; Ecological rules and their applicability to human populations. 4. Impact of urbanization and industrialization on Man	
Cultural Dimensions	
1. Culture as a tool of adaptation; various modes of human adaptation in pre-state societies. a. Hunting and food gathering b. Pastoralism c. Shifting cultivation 2. Ecological themes of state formation: a. Post Pleistocene Cultural Adaptation (Mesolithic) b. Neolithic revolution, c. Indus Valley Civilization, Egyptian Civilization. 3. Agriculture and peasantry; Civilization and growth of urban and industrial societies	
Reference Books	
▶ Allchin & Allchin (1993). The Rise of Civilization in India & Pakistan. Cambridge University Press. ▶ Childe, V.G. (1936). Man Makes Himself. Collins. ▶ Childe, V.G. (1952). New Light on the Most Ancient East. London. ▶ Cohen, Yehudi A. 1968. Man in adaptation; the cultural present. Chicago: Aldine Pub. Co. ▶ Human ecology: biocultural adaptation in human communities. (2006) Schutkowski, H. Berlin. Springer Verlag. ▶ Human ecology and cognitive style: comparative studies in cultural and physical adaptation. (1976).Berry, J.B. New York: John Wiley. ▶ Human ecology. (1964) Stapledon. Faber & Faber.	

- ▶ Studies in Human Ecology. (1961) Theodorson, G.A. Row, Peterson & Company Elmsford, New York.
- ▶ Human ecology: (1973) Problems and Solutions. Paul R. Ehrlich, Anne H. Ehrlich and John P. Holdress. W.H. Freeman & Company, San Francisco.
- ▶ Cohen, Yehudi A. 1968. Man in adaptation; the cultural present. Chicago: Aldine Pub. Co.
- ▶ Redfield, Robert. (1965). Peasant society and culture an anthropological approach to civilization. Chicago [u.a.]: Univ. of Chicago Press.
- ▶ Symposium on Man the Hunter, Richard B. Lee, and Irven DeVore. 1969. Man the hunter. Chicago: Aldine Pub. Co

3.12 Core P6 - Human Ecology: Biological & Cultural Dimensions Lab

Human Ecology: Biological & Cultural Dimensions	
	2 Credits
Biological Dimension - Size and Shape measurements	
1. Stature 2. Sitting Height 3. Body Weight 4. Total upper extremity length 5. Total lower extremity length 6. Nasal breadth 7. Nasal height 8. Bi acromian diameter 9. Bi-Iliac diameter	
Biological Dimension - 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	
Research Project on Biological and Culture aspects with reference to any environmental issues.	

3.13 Core T7 - Biological Diversity in Human Populations

Biological Diversity in Human Populations	
	4 Credits
Unit 1	
1. Concept of Biological Variability: Race/Ethnic Groups 2. Hardy-Weinberg equilibrium. Major evolutionary forces for Genetic Variation Genetic Polymorphism (Serological, Biochemical and Molecular markers - Out line); 3. Concept of Human Adaptation and Acclimatization (Outline). Examples from High Altitude and Cold Adaption. Concept of Allen's, Bergman's and Glaser's rule	
Unit 2	
Contribution of Risley, Guha, and Sarkar towards understanding ethnic elements in the Indian populations and its criticism.	
Unit 3	
1. Pre and Proto historic racial / ethnic elements in India. 2. Linguistic classification of Indian population (Outline)	
Unit 4	
1. Role of Bio-cultural Factors 2. Cultural Biology; Bio-cultural factors influencing the diseases and nutritional status. Evolution of Human diet, biological perspectives of ageing process among different populations.	
Unit 5	
1. Demographic Perspective 2. Concept of Demographic Anthropology; 3. Sources of Demographic Data, 4. Demographic Processes, 5. Demographic profile of Indian populations and its growth structure; 6. Concept of Inbreeding and Consanguinity - Biological consequences of inbreeding	

Unit 6

Genetic diversity among Indian Population

Reference Books

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

3.14 Core P7 - Biological Diversity in Human Population Lab

Biological Diversity in Human Population	
	2 Credits
List of Practical	
Quantitative traits: Anthropometric measurements 1. Stature 2. Sitting Height 3. Body Weight 4. Total upper extremity length 5. Total lower extremity length 6. Nasal breadth 7. Nasal height 8. Bi acromian diameter 9. Bi-Iliac diameter Calculation of following 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 Polymorphic trait/Markers: ABO Blood Group (as natural antigens), RhD Blood groups (as immune antigens) at least ten participants (using standard techniques). Concept of ABO blood group subtypes and Rh Blood group haplotypes Polygenic trait Concept of Dermatoglyphics in Population Variation. Collection of Finger Prints (Five Participants)	

Analysis and interpretation of basic finger pattern types [Whorl, Loop (Ulnar and Radial) and Arch]

Indices: Dankmeijer Index, Furuhashi's Index and Pattern Intensity index (basic comparison)

Collection and interpretation (Fertility Rate, Mortality Rate) of demographic data obtained from primary or secondary sources.

3.15 Core T8 - Theories of Culture and Society

Theories of Culture and Society	
	4 Credits
Unit 1	
Emergence of Anthropology: Interface of Enlightenment with evolutionary Biology, Society and Colonialism. changing perspectives on Evolutionism, Diffusionism and Culture area theories	
Unit 2	
Emergence of fieldwork tradition: Evolutionism, Diffusionism and Historical Particularism, American Cultural Tradition	
Unit 3	
Making Anthropology a Science: Durkheim and Social Solidarity, Functionalism, Structural-functionalism and British Social Anthropology. Concepts of Social Structure and Social Organization.	
Unit 4	
Anthropology's Cognitive Adventure: Structuralism	
Unit 5	
Symbolic and Interpretative approaches	
Unit 6	
Cultural Relativism and Ethnocentrism	
Reference Books	
▶ Applebaum H.A. (1987) Perspectives in Cultural Anthropology. Albany: State University of New York. ▶ Barnard A. (2000). History and Theory in Anthropology. Cambridge: Cambridge University. ▶ McGee R.J. and Warms R.L. (1996) Anthropological Theories: An Introductory History.	

- ▶ Moore M. and Sanders T. (2006). *Anthropology in Theory: Issues in Epistemology*, Malden, MA: Blackwell Publishing.

3.16 Core P8 - Theories of Culture and Society Lab

Theories of Culture and Society	
	2 Credits
List of Practical	
As a part of the practical following exercises will be undertaken by the students so as to enable them to connect the theories they learn with things of everyday living. 1. To identify a topic relating to contemporary issue and formulate research questions and clearly identify the theoretical perspectives from which they are derived. 2. Identification of variables of a study. 3. Various types of hypotheses. 4. Formulation of hypothesis. 5. Distinction between hypothesis testing and exploratory research. 6. Identification of universe and unit of study with justifications. 7. Choice of appropriate research technique and method in the context of theoretical framework. 8. Data collection and analysis	

3.17 Core T9 - Human Growth and Development

Human Growth and Development	
	4 Credits
Unit 1	
Concept of human growth, development, differentiation and maturation.	
Unit 2	
Outlines of Prenatal and postnatal growth. Concepts of general growth curve (Scammon's growth curve), Concepts of Growth curve (Distance and acceleration). Ethnic and Sex differences in growth, Concept of secular trend	
Unit 3	
1. Concept of Methodology of growth study: Longitudinal, Cross section and mixed longitudinal 2. Concept of factors affecting growth: genetic, social, and ecological factors 3. Significance/ applicability of growth studies (Outline)	
Unit 4	
1. Nutritional epidemiology-concept of Food, Nutrition and Diet 2. Concept of under nutrition and over nutrition with reference to Kwashiorkor Marasmus and obesity 3. Concept of Stunting and Wasting 4. Assessment of nutritional status (Outline of the utilization of Anthropometry)	
Unit 5	
Concept of Human physique and body composition - models and techniques; gender and ethnic differences	
Unit 6	

Concept of Somatotyping and interpretation of human physique with reference to Sheldon, Heath and Carter methods

Unit 7

Bio-cultural adaptation to environmental stresses: Concepts of Homeostasis and thermoregulation, ecological rules and their applicability among human beings

Reference Books

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

3.18 Core P9 - Human Growth and Development Lab

Human Growth and Potential	
	2 Credits
List of Practical	
1. Evaluation of Growth status: Anthropometry (stature, body weight, mid upper arm circumference, chest circumference, head circumference), assessment of chronological age, percentile, z-score, height for age, weight for age, BMI for age 2. Obesity assessment: General obesity: BMI, Conicity index. Regional adiposity: WC, HC, WHR, WHtR) 3. Estimation of body composition : Percent body fat skinfold thickness and bioelectric impedance analysis 4. Nutritional assessment through dietary pattern and anthropometric indices	

3.19 Core T10 - Research Methods

	4 Credits
Research Design	
Types of Researches in Anthropology - Quantitative, Qualitative, and Mixed. Review of literature, conceptual framework, formulation of research problem, formulation of hypothesis, 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.	
Field work tradition in Anthropology	
Ethnographic approach, contribution of Malinowski, Boas and other pioneers; cultural relativism, ethnocentrism, etic and emic perspectives, comparative and historical methods, techniques of rapport establishment identification of representative categories of informants, maintenance of field diary and logbook Tools and techniques of data collection Concept of survey, relationship of survey method with ethnographic method, construction of questionnaire and interview schedule, validation and internal consistency of questionnaire Observation - Direct, Indirect, Participant, Non-participant, Controlled Interview - Structured and unstructured, Focussed Group Discussion, key informant interview Case Study and life history Genealogy - Technique and application	
Ethics and Politics of Research	
1. Identify, define, and analyze ethical issues in the context of human subject research. 2. Reasons for conducting ethical review of research, Ethical importance of consent, privacy and confidentiality in research 3. Ethical importance of consent, privacy and confidentiality in research 4. Issues of academic fraud and plagiarism, conflicts of interest, authorship and publication	

Analysis and Writing Up

1. Chapterization, preparing a text for submission and publication, concepts of preface, notes (end and footnotes), glossary, prologue and epilogue, appendix, bibliography (annotated) and references cited, review and index.
2. Similarities and differences between qualitative and quantitative data analysis; introduction of software for data analysis.

Bio-Statistics

1. Types of variables, presentation and summarization of data (tabulation and illustration).
2. Descriptive statistics- Measurers of Central Tendency, Measure of Variation, Skewness and Kurtosis, Variance and standard deviation, Normal and binomial distribution.
3. Tests of Inference- Variance ratio test, Student's 't' tests, Chi-square test and measures of association, Analysis of variance, Estimation of confidence interval, Correlation, Regression Analysis, Study design issues: Sample size and Power,
4. Pedigree Analysis- Importance and implication.

Reference Books

- ▶ 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.

3.20 Core P10 - Research Methods Lab

Research Methods	
	2 Credits
List of Practical	
1. Construction of Genealogy. 2. Observation: Direct, Indirect, Participant, Non-participant, Controlled 3. Questionnaire and Schedule, Interview- Unstructured, Structured, Key informant interview, Focussed Group Discussion, and Free listing, pile sorting 4. Case study and life history 5. Project report writing: preparation of research problem, study design, data collection techniques, analysis and report writing based on somatometric, dermatoglyphic and serological data or any contemporary social problem.	

3.21 Core T11 - Human Population genetics

	4 Credits
Basic Genetics	
1. Outline of the landmarks in the history of genetics, 2. Principles in human genetics, 3. Mendelian Laws: Mendelian inheritance in man. Penetrance and expressivity 4. Outline of Quantitative genetics, quantitative/complex inheritance, multifactorial and polygenic inheritance, Multiple alleles, Co-dominance. 5. Outline of the methodology human genetics: Family method, Twin Method, Cytogenetics, Population genetics 6. Exceptions to Mendelian Inheritance: Outline: Linkage (Sex linkage and sex influenced traits), Epistasis and genomic imprinting	
Ecological Genetics and Polymorphism	
1. Concept of Phenotype and Genotype 2. Genetic Polymorphism: transient polymorphism and balanced polymorphisms (Sickle cell trait and Malaria) Association of Polymorphism: Relationship of Communicable disease and non-communicable disease with Blood groups.	
Equilibrium of allele frequency: Hardy-Weinberg principle	
1. Genotype and allele frequencies, 2. Concept of Hardy-Weinberg equilibrium, its applications and alternation in evolutionary perspective	
Dynamics of Allele Frequency: Evolutionary Forces	
Mutation, selection (pattern and mechanism), Genetic drift (bottle neck and founder effect), Gene flow/migration, inbreeding (inbreeding co-efficient and its genetic consequences)	
Population structure and admixture in human populations	
1. Concept of Random and non-random mating (positive and negative assortative mating),	

2. heritability, linkage disequilibrium,
3. Concept of genetic markers utility: heterozygosity (Polymorphism Information Content), Forensic Anthropology, Disease association.

Human evolutionary genetics

Concept of Evolutionary Development (Evo-Devo), Outline of Evolutionary Biology. From Mendel to molecules: A brief history of evolutionary genetics. Human-Ape comparisons.

Reference Books

- ▶ Brooker R.J. (2012). Genetics: analysis & principles. The McGraw-Hill Companies, Inc 4th ed.
- ▶ Cavalli-Sforza, L.L. and Bodmer, W.F (1971). The Genetics of Human Population. San Francisco: Freeman
- ▶ Cooper DN and Kehrer-Sawatzki H. (2008). Handbook of Human Molecular Evolution. John Wiley & Sons, volume-2.
- ▶ Crawford MH (2007). Anthropological Genetics Theory, Methods and Applications. Cambridge University Press
- ▶ Ganguly Sourav, Sarkar Pranabesh, Chatterjee Diptendu and Bandyopadhyay Arup R. 2016. Association of ABO Blood Group Polymorphism and Tuberculosis: A study on Bengalee Hindu Caste Population, West Bengal India. Indian Journal of Tuberculosis (published online <http://dx.doi.org/10.1016/j.ijtb.2016.09.014>)
- ▶ Cummings M.R. (2011). Human Heredity: Principles and Issues. Ninth Edition. Brooks/Cole, Cengage Learning
- ▶ Ghosh JR and Bandyopadhyay Arup R. 2005. ABO blood group and cancer in a Bengalee Population. Indian Journal of Physical Anthropology and Human Genetics. 24(1):69-73
- ▶ Jobling, M.A. Hurlis M. and Tyler-Smith C. (2004). Human Evolutionary Genetics: Origins, Peoples & Disease. GS. NY
- ▶ Lewis R. (2009). Human Genetics: Concepts and Applications 9th Edition. The McGraw-Hill Companies, Inc.
- ▶ Patch C. (2005). Applied Genetics in Healthcare. Taylor & Francis Group
- ▶ Relethford J.H. (2012). Human Population Genetics. Wiley-Blackwell, USA
- ▶ Snustad .D.P. and Simmons M.J. (2006). Principles of Genetics, Fourth Edition, John Wiley & Sons USA, Hoboken NJ
- ▶ Strachan T, Read A.P. (2004). Human Molecular Genetics. Garland Science/Taylor & Francis Group.
- ▶ Vogel F. and Motulsky A.G. (1996). Human Genetics. Springer, 3rd revised edition.

3.22 Core P11 - Human Population Genetics Lab

Human Population Genetics	
	2 Credits
List of Practical	
1. Blood group typing- ABO blood group (A1, A2, B, O), MN Blood Group and Rh (D) (At least 10 participants. Allele frequency estimation. Heterozygosity score. Testing of Hardy Weinberg equilibrium. 2. Color Blindness: Deutan and Protan type. Estimation of carriers. Estimation of male female ratio (at least 20 participants) 3. Identification of Sex Chromatin (Inactivated X Chromosomes): one male and one female, 50 cells each 4. PTC taste testing ability: At least 20 participants. Allele frequency estimation.	

3.23 Core T12 - Anthropology in Practice

Anthropology in Practice	
	4 Credits
Academic Anthropology	
Academics and Practitioners: Differences, Structure, Activities, Controversies and Issues: Applied Anthropology, Action Anthropology and Development Anthropology.	
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	
Future Dynamics in Anthropology	
Trends in Anthropology: Anthropology of Tourism, Anthropology In Census operation; Designing And Fashion, Visual Anthropology	
Constitutional Perspective and Human Rights	
Constitutional Provisions, Evaluation, Planning and Development of Indian Populations; Human Rights, Interrelationships of rights and duties: Harmony and Conflict, Protection and enforcement of human rights and duties, National and State Human Rights Commission and other grievance redressal mechanism, Human rights of special category and marginal groups, Emerging trends of human rights respective to terrorism, environment and globalization	
Biosocial anthropology in practice	
Bio-social elements of human development at national and international level, application of conceptual framework of Forensic Anthropology in judicial settings both criminal and civil, Population Dynamics and relationship between population growth and various aspects of culture such as means of subsistence, kinship, social complexity, social stratification and political organization, Bio-social counselling of an individual or population	
Reference Books	

- ▶ Arya A and Kapoor AK. (2012). Gender and Health Management in Afro-Indians. Global Vision Publishing House, New Delhi.
- ▶ Kertzer DI and Fricke T. (1997). Anthropological Demography. University of Chicago Press.
- ▶ Basu, A. and P. Aaby (1998). The Methods and the Uses of Anthropological Demography. 329 pp. Oxford, Clarendon Press
- ▶ 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.
- ▶ Census of India (2001, 2011) and National Family Health Survey (2006-2010).
- ▶ Ervic, Alexander M., (2000). Applied Anthropology: Tools and Perspectives for Contemporary Practice, Boston, MA: Allyn and Bacon.
- ▶ Erwin A. (2004). Applied Anthropology Tools and Practice, Allyn and Bacon.
- ▶ Gupta S and Kapoor AK. (2009). Human Rights among Indian Populations: Knowledge, Awareness and Practice. Gyan Publishing House, New Delhi.
- ▶ Willen SS. (2012). Anthropology and Human Rights: Theoretical Reconsiderations and Phenomenological Explorations. Journal of Human Rights. 11:150-159.
- ▶ Goodale M. (2009). Human Rights: An Anthropological Reader. Wiley Blackwell.
- ▶ Gupta S and Kapoor AK. (2007). Human Rights, Development and Tribe. In: Genes, Environment and Health - Anthropological Perspectives. K. Sharma, R.K. Pathak, S. Mehra and Talwar I (eds.). Serials Publications, New Delhi.
- ▶ Margaret AG. (2003). Applied Anthropology: A Career-Oriented Approach, Boston, MA: Allyn and Bacon.
- ▶ Halbar BG and Khan CGH. (1991). Relevance of Anthropology - The Indian Scenario. Rawat Publications, Jaipur.
- ▶ Kapoor AK (1998). Role of NGO's in Human Development: A Domain of Anthropology. J Ind Anthropol Soc; 33:283-300.
- ▶ Kapoor AK and Singh D. (1997). Rural Development through NGO's. Rawat Publications, Jaipur.
- ▶ Klepinger LL (2006). Fundamentals of Forensic Anthropology. Wiley-Liss Publications
- ▶ Kumar RK and Kapoor AK. (2009). Management of a Primitive Tribe: Role of Development Dynamics. Academic Excellence, Delhi.
- ▶ Mehrotra N and Patnaik SM. (2008). Culture versus Coercion: The Other Side of Nirmal Gram Yojna, Economic and Political weekly. pp 25-27.
- ▶ Mishra RC (2005). Human Rights in a Developing Society, Mittal Publications, Delhi.
- ▶ Noaln RW. (2002). Anthropology in Practice: Building a Career outside the Academy. Publishing Lynne Reinner.

- ▶ Patnaik SM (1996). Displacement, Rehabilitation & Social Change. Inter India Publications, New Delhi.
- ▶ 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
- ▶ Vidyarthi LP and BN Sahay (2001). Applied Anthropology and Development in India, National Publishing House, New Delhi.
- ▶ Vidyarthi LP. (1990). Applied Anthropology in India - Principles, Problems and Case Studies. Kitab Mahal, U.P.
- ▶ Vidyarthi V (1981). Tribal Development and its Administration. Concept Publishing Company, New Delhi.

3.24 Core P12 - Anthropology in Practice Lab

Anthropology in Practice	
	2 Credits
List of Practical	
1. Write a project on constitutional provisions or evaluation of any development project/report. 2. Write a project on Religious Tourism / Tribal Tourism / Health Tourism / Fashion / Human Rights / Ecotourism. 3. Write a project on the demographic profile from secondary data. 4. Collect data on bio-social problem and design counselling and give the analysis and interpretation.	

3.25 Core T13 - Forensic Anthropology

Forensic Anthropology	
	4 Credits
Unit 1	
Introduction to Forensic Anthropology: Definition, Brief History, Scope, Applications and Integration of Forensic Anthropology.	
Unit 2	
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 3	
Personal Identification, Complete and Partial Identification, Methods of Identification in Living Persons: Anthropometry, Anthroposcopy, Occupational Marks, Scars, Bite Marks, Tattoo Marks, Fingerprints, Footprints, Lip Prints, Nails, Handwriting, Deformities and Others.	
Unit 4	
Serology: Outline concept of identification and personal identification of bloodstain, urine, semen and saliva. Interpretation of patterns of bloodstains (concept only)	
Unit 5	
Individualization: Forensic Odontology-Tooth Structure and Growth, Bite Marks, Facial Reconstruction, DNA Profiling.	
Reference Books	
▶ Bass W.M. (1971). Human Osteology: A Laboratory and Field manual of the Human Skeleton. Columbia: Special Publications Missouri Archaeological Society. ▶ Black S. and Ferguson E. (2011). Forensic Anthropology 2000 to 2010. CRC Press, London.	

- ▶ Byers, S. N. (2008). Forensic Anthropology. Boston: Pearson Education LTD.
- ▶ Gunn A. (2009) Essential Forensic Biology (2nd ed). Chichester: Wiley-Blackwell
- ▶ Modi, R. B. J. P. (2013). A Textbook of Medical Jurisprudence and Toxicology. Elsevier.
- ▶ Reddy V. R. (1985). Dental Anthropology, Inter-India Publication, New Delhi.
- ▶ Spencer, C. (2004). Genetic Testimony: A Guide to Forensic DNA Profiling, Pearson, New Delhi.
- ▶ Vats Y., Dhall J.K. and Kapoor A.K. (2011). Gender Variation in Morphological Patterns of Lip Prints among some North Indian Population. J. Forensic Odontology, 4: 11-15.
- ▶ Wilkinson, C. (2004). Forensic facial reconstruction. Cambridge University Press.

3.26 Core P13 - Forensic Anthropology Lab

Forensic Anthropology	
	2 Credits
List of Practical	
1. Study of Human. Estimation of age, sex and stature from bones: Concept on Skull, long bones and pelvic girdle 2. Anthropometry and Anthroposcopy Observation on living persons. 3. Identification of bloodstain, urine, semen and saliva. 4. Examination of Fingerprints: Concept of Latent Print identification. Finger Print matching (Concept of minutiae)	

3.27 Core T14 - Anthropology of India

Anthropology of India	
	4 Credits
Unit 1	
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 2	
1. Critical appraisal of contribution of Risley, Guha and Sarkar towards understanding ethnic distinctness in the Indian populations 2. Contribution of contemporary biological, social and archaeological anthropologists in India.	
Unit 3	
1. Aspects of Indian Village -social organisation, agriculture and impact of market economy on villages 2. Tribal situation in India- biogenetic variability, linguistic and socio-economic characteristics; Problems of tribal peoples, land-alienation, indebtedness, lack of educational facilities, shifting-cultivation, migration, forests and tribal unemployment, health and nutrition, tribal movement and quest for identity 3. Developmental projects- tribal displacements and rehabilitation problem 4. Impact of culture-contact, urbanization and industrialization on tribal and rural population 5. 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 4

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

Reference Books

- ▶ Nicholas D. (2001). Castes of Mind: Colonialism and the Making of Modern India. Princeton University Press.
- ▶ Bernard CS. (2000). India: The Social Anthropology of Civilization. Delhi: Oxford University Press.
- ▶ 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
- ▶ Lopez DS. (1995). Religions of India in Practice. Princeton University Press
- ▶ Gupta D. Social Stratification. Delhi: Oxford University Press.
- ▶ Karve I. (1961). Hindu Society: An Interpretation. Poona : Deccan College
- ▶ Guha BS. (1931). The racial attributes of people of India. In: Census of India, 1931, vol I, Part III (BPO, Simla)
- ▶ Trautmann TR (2011). India: Brief history of Civilization. Oxford University Press : Delhi
- ▶ Vidyarthi LP and Rai BK. (1976). The tribal culture of India. Concept Publishing Co, Delhi.
- ▶ Haddon AC. (1929). Races of man. Cambridge University, London.
- ▶ Kapoor A.K. (1992). Genetic Diversity among Himalayan Human Populations. M/S Vinod Publishers, Jammu
- ▶ Majumdar DN. (1901). Races and Culture of India. Asia Publishing House, Bombay
- ▶ Dube SC. (1992). Indian Society. National Book Trust, India: New Delhi.
- ▶ Dumont L. (1980). Homo Hierarchicus. University of Chicago Press.
- ▶ Guha B.S. (1931). The racial attributes of people of India. In : Census of India, 1931, vol I, Part III (BPO, Simla)
- ▶ Malhotra K.C. (1978). Morphological Composition of people of India. J. Human Evolution.

3.28 Core P14 - Anthropology of India Lab

Anthropology of India	
	2 Credits
List of Practical	
1. Identify various traits/variables which can be used in racial classification and comment on its relevance. 2. Review a book/edited volume on Indian social structure such as caste, religion, tribe or rural population and give its salient features. 3. Explore the biological diversity of any population group considering a minimum of five genetic traits. 4. Highlight the contributions of any two contemporary Indian anthropologists	

4. Department Specific Electives Subjects Syllabus

4.1 DSE T1 - Physiology Anthropology

Physiology Anthropology	
	4 Credits
Unit 1	
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 2	
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 3	
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	
Impact of smoking, alcohol, drug, pollution and occupation on cardio-respiratory functions; physical performance and environmental stress, chronic diseases, malnutrition, lifestyle disease	
Unit 4	
Factors affecting physical performance and capacity, relation between physique, body composition, nutrition and performance.	
General and Regional Distribution of Body fat.	
Unit 5	
Ageing and health related aspects of exercise	

Reference Books

- ▶ McArdle WD, Katch FI and Katch VL. (2010). Exercise Physiology: Nutrition, Energy, and Human Performance. Lippincott Williams & Wilkins.
- ▶ Powers SK and Howley ET. (2007). Exercise Physiology: Theory and Application to Fitness and Performance. McGraw-Hill.
- ▶ Ghosh Jyoti Ratan and Bandyopadhyay Arup R. 2013. Central adiposity and the risk of hypertension in Asian Indian girls. World Journal of Pediatrics. 9(3):256-260.
- ▶ Sherwood L. (2008). Human Physiology: From Cells to Systems. Brooks Cole.
- ▶ Case RM. (1985). Variations in Human Physiology. Manchester University Press.
- ▶ Vander AJ, Sherman JH and Dorothys L. (1978). Human Physiology: The Mechanisms of Body Functions. Mc Graw-Hill Education.
- ▶ Nageswari KS and Sharma S. (2006) Practical workbook of Human Physiology. Jaypee Brothers, Medical Publisher.
- ▶ Wildmaier EP, Raff H, Strang KT. (2014). Vander's Human Physiology: The Mechanisms of Body. Mc Graw Hill Education.
- ▶ Hale T. (2003). Exercise Physiology. England :John Wiley & Sons Inc.

4.2 DSE P1- Physiology Anthropology Lab

Physiology Anthropology	
	2 Credits
List of 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 4. Measurement of Human Body Composition: general obesity, regional obesity	

4.3 DSE T2 - Kinanthropology

Kinanthropology	
	4 Credits
Unit 1	
Anthropology of sports- Physical fitness, component of physical fitness	
Unit 2	
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 3	
Body composition and Athletes, sports selection and monitoring	
Unit 4	
Human biological variability, health and nutrition; doping and performance; cultural constructions and physiologic implications of food across time, space and society; an integrated bio-behavioural perspective towards food preference.	
Reference Books	
▶ Stinson S. (1992). Nutritional Adaptation. Annual Review of Anthropology 21:143- 170. ▶ 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. ▶ 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. ▶ Quandt SA. (1987). Methods for Determining Dietary Intake. In Nutritional Anthropology. FE Johnston, ed. Pp. 67-84. Liss. NY. ▶ Ulijasek SJ and Strickland SS. (1993). Introduction. In Nutritional Anthropology: Prospects and Perspectives. Pp. 1-5. Smith Gordon. London.	

4.4 DSE P2 - Kinanthropology Lab

Kinanthropology	
	2 Credits
List of Practical	
1. Assessment of daily nutrient intake 2. Evaluate association of nutritional status and physical performance 3. Somatotyping of different sports person 4. Demonstrate cultural perspective for preference of specific food of a population	

4.5 DSE T3 - Human genetics

Human Genetics	
	4 Credits
Unit 1	
1. History of Genetics. Paradigms of Human Genetics: Mendelian Genetics and Biometry 2. human genome organisation: Nuclear genome and Mitochondrial genome - gene, 3. DNA and RNA structure and DNA replication, DNA repair and recombination, gene expression, coding and non-coding region	
Unit 2	
1. Expression of genetic information: from Transcription to Translation - the relationship between genes and protein, transcriptions; transcription and RNA processing, encoding genetic information, decoding the codons: the role of transfer RNAs. 2. Outline concept of epigenetics in human genetics	
Unit 3	
Genomic Variation: Genomic Polymorphisms (RFLPs, , VNTR, STRs, SNPs etc); haplotypes and haplogroups; genotype and phenotype expression	
Unit 4	
Methodology of Human Genetics: Cytogenetics: Concept of Karyotype, banding (G banding) and high resolution FISH. Chromosomal aberration: Aneuploidy (Autosomal and sex chromosomal: Down's syndrome, Patau's syndrome, Klienefelter's syndrome, Turner's Syndrome). Structural aberrations: Translocation, deletion and Insertion (Indel). Concept of point mutation: Synonymous, non-synonymous mutation and its relation to Human evolution and genetic disorder (FOXP2 gene and Hemoglobinopathy: HbS, HbE, HbC, HbE) Family study: Pedigree analysis, concept of dominant, recessive and co dominant inheritance. Penetrance and expressivity; Linkage and Mapping: Genetic Mapping. LOD score. Sex linkage (Dominant and recessive) and sex influenced traits (2D;4D ratio)	
Unit 5	

1. Electrophoresis, PCR technology and sequencing (Concept and outline)
2. Genomic Diversity and Human Evolution
3. Peopling of the Indian Subcontinent: Evidence from mtDNA and Y-chromosome; evolutionary genetics; Molecular evolution; DNA sequence variation and human origins

Reference Books

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

4.6 DSE P3 - Human Genetics Lab

Human Genetics	
	2 Credits
List of Practical	
1. Blood Collection, preservation transportation and storage 2. Serogenetics: ABO, Rh and MNSs Blood group. HLA typing 3. DNA Extraction from whole blood, Buccal swab, Mouth wash 4. PCR and electrophoresis: concepts of probe and primer 5. Gel Documentation and interpretation. Concept of gene sequencing	

4.7 DSE T4 - Forensic Anthropology

	4 Credits
Unit 1	
Forensic anthropology and its relationship with forensic science. Application of Forensic anthropology.	
Unit 2	
1. Introduction to Dermatoglyphics: History and Development, scope and Applications. 2. Formation of fingerprint ridges, pattern types and patterns area. Classification of Fingerprints- Henry Classification, Vucetich System, Single-Digit Classification. Other Dermatoglyphic Patterns: Palm Print, Sole Prints and Toe Prints. 3. Concept of Hair features in Forensic Anthropology	
Unit 3	
1. 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. 2. Basis of Fingerprint Comparison: Class Characteristics and Individual Characteristics, Determination of Identity. 3. Recent advances: Fingerprint and Palmprint Recognition, Automated Fingerprint Identification System.	
Unit 4	
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. Personal Identification, Complete and Partial Identification, Methods of Identification in Living Persons: Somatometry, Somatoscopy, Occupational Marks, Scars, Bite Marks, Tattoo Marks, Fingerprints, Footprints, Lip Prints, Nails, Handwriting, Deformities and Others.	

Unit 5

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

Unit 6

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

Reference Books

- ▶ 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.
- ▶ Chatterjee M and Bandyopadhyay Arup R. 2012. A Study on Nutritional Status and Dental Caries in Permanent Teeth among School Going Girl of Bengalee Population, India. *Advances in Anthropology*. 2 (3): 112-116
- ▶ Ghosh Jyoti Ratan, Guin Rimpa and Bandyopadhyay Arup R. 2015. Estimation of stature from Foot measurements. *Indian Journal of Research in Anthropology*. 1 (1): 25-30
- ▶ Ghosh Jyoti Ratan and Bandyopadhyay Arup R. 2014. Estimation of Stature from Index and Ring Finger Lengths. *Indian Journal of Physical Anthropology & Human Genetics*. 33 (1): 23-29
- ▶ Mistry Sanchita, Chatterjee Madhumati, Ghosh Jyoti Ratan, Chakrabarti N.K., Bandyopadhyay Arup R 2012. Variations of Scalp, Pubic and Axial hair. *Anthropologischer Anzeiger* 69(1) 117-125
- ▶ 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*. CRC press.
- ▶ Chakrabarti N. K., Bandyopadhyay Arup R. Das P. 2012. Use of Forensic Techniques of Polygraphy, Narcoanalysis and Brain Mapping under Indian Legal regime: A Review of Supreme Court Decision on Selvi case in Human Rights Perspectives. *Indian Human Rights and Law Review*. 3:13-27
- ▶ Mistry Sanchita, Bandyopadhyay Arup R., Chakrabarti N.K., Chatterjee Madhumati, Roy Tapadar Jayita., Ghosh Jyoti Ratan 2010. Histomorphological and quantitative study on black and gray hair in Bengalee Population. *Journal of Indian Academy of Forensic Sciences* 42(1&2): 32-40
- ▶ Bandyopadhyay Arup R. 1999. Haptoglobin groups in paternity diagnosis. *Journal of Indian Academy of Forensic Sciences*. 38: 1&2: 44 - 48.

- ▶ 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.

4.8 DSE P4 - Forensic Anthropology Lab

Forensic Anthropology	
	2 Credits
List of 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 4. Development of latent fingerprints using different chemical and powder methods.	

4.9 DSE T5 - Paleoanthropology

Paleoanthropology	
	4 Credits
Unit 1	
Dating methods, geological time scale, taphonomy and interpretation of the paleontological and archaeological records, taxonomic and chronological problems of fossils records.	
Unit 2	
Primate speciation and extinctions: a geological perspective, adaptive primate radiation, differential rate of somatic evolution.	
Unit 3	
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 4	
Primate and Non-Primate Models for Early Hominid Behaviour; hominization process- Evolution of hominid-human bipedalism	
Unit 5	
Palaeodemography- reconstruction of population patterns from skeletal analysis, determination of demographic variables in prehistoric populations and post-neolithic population growth, theory and techniques in paleodemography, methodological issues for reconstructing demographic structure, demographic models of mortality and their interpretation	
Unit 6	

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

Reference Books

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

4.10 DSE P5 - Paleoanthropology Lab

Paleoanthropology	
	2 Credits
List of Practical	
1. Comparative primate osteology 2. Description and identification of the disarticulated skeleton of non-human primates 3. Identification and description of fossil casts 4. Fieldwork for seven days for collection of fossil material and surface findings and analysis: Report to be submitted	

4.11 DSE T6 - Tribal Cultures of India

Tribal Cultures of India	
	4 Credits
Unit 1	
Concept of tribe and its problematic nature. Characteristics of Tribal Society. Tribes in India: Antiquity, historical, academic, administrative and anthropological importance, Denotified tribes.	
Unit 2	
Tribes: Nomenclature - emic and etic differences. Distribution of Tribes in India. Classification of Tribes on the basis of Geographical regions and Economy. Racial elements among tribes. Scheduled and non-scheduled categories of tribes. Tribe and Gender issues	
Unit 3	
Constitutional Safeguards and Provisions for the Tribes. Forest policies and tribes. Migration and occupational shift. Tribal arts and aesthetics. Displacement, rehabilitation and social change among tribes.	
Unit 4	
Tribal movements. Problems of tribal development	
Reference Books	
▶ Behera, D.K and Georg pfeffer. Contemporary Society Tribal Studies, Volume I to VII. New Delhi: Concept Publishing Company ▶ Georg Pfeffer. Hunters, Tribes and Peasant: Cultural Crisis and Comparison. Bhubaneswar: Niswas. ▶ Vidarthy, L.P. and Rai. Applied Anthropology in India. ▶ Vidarrthy.L.P. and B.N. Sahay. Applied Anthropology and Development in India. New Delhi: National Publishing House	

4.12 DSE P6 - Tribal cultures of India Lab

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

4.13 DSE T7 - Indian Archaeology

Indian Archaeology	
	4 Credits
Understanding culture	
1. Technique of tool manufacture and estimation of their relative efficiency; 2. Classification of tools: primary and combination fabrication techniques; 3. Typology and cultural nomenclature.	
Methods of climatic reconstruction:	
Palynology, paleontology, soil pH estimation.	
Prehistoric India	
Pleistocene chronology of India: A critical assessment	
Character, distribution and interpretation of habitat and economy	
1. Lower Palaeolithic 2. Middle palaeolithic 3. Upper palaeolithic 4. Mesolithic culture 5. Art, ritual and belief	
Reference Books	
▶ D. K. Bhattacharya (1996) An Outline of Indian Prehistory. Delhi, Palika Prakashan. ▶ H. D. Sankalia (1974) Prehistory and Protohistory of India and Pakistan. Poona, Deccan College. ▶ H. D. Sankalia (1982) Stone Tool Type and Technology. Delhi, B.R.Publication.	

4.14 DSE P7 - Indian Archaeology Lab

Indian Archaeology	
	2 Credits
List of Practical	
1. Identification of tools: a. Handaxe varieties, chopper/chopping tools b. End scrapers c. Cleaver varieties d. Borers e. Side scraper varieties f. Microlithic tools g. Knives h. Bone tools i. Burins 2. Identification of lithic technology.	

4.15 DSE T8 - Visual Anthropology

Visual Anthropology	
	4 Credits
Unit 1	
Introduction to Visual Anthropology. Visual Culture. Photographic and Digital Media: Still, Interactive and Moving.	
Unit 2	
Anthropology and Images: Ethnophotography and ethnographic films and mass media. Theories of representation, modern media and political advocacy.	
Unit 3	
Early Ethnographic Photography: Contexts and Trends. Anthropology of Art and Aesthetics: Critical reflection on the relation of images, objects and persons. Objects and images from other societies valued as 'art'.	
Unit 4	
Ethnographic Photography: Conventions and Methodologies. Paradigms and Debates.	
Unit 5	
Ethnographic Films: Theoretical issues concerning ethnographic film, ethical dimensions of ethnographic film, Interdependency of technology and culture.	
Unit 6	
Cinema Studies with emphasis on key feature, documentary and ethnographic films with a focal theme - the examination of the 'language of film'.	
Reference Books	
▶ Marcus Banks and Howard Morphy, 1998, Rethinking Visual Anthropology ▶ David MacDougall Transcultural Cinema, (Princeton, 1999)	

- ▶ Ruby, Jay. 1996. "Visual Anthropology." In Encyclopedia of Cultural Anthropology, David Levinson and Melvin Ember, editors. New York: Henry Holt and Company, vol. 4: 1345-1351.
- ▶ Ch. 1, "Reading Pictures," pp. 1-12 [From: Banks, Marcus. 2001. Visual Methods in Social Research. London: Sage.]
- ▶ Ember C.R. et al (2011). Anthropology. New Delhi: Dorling Kinderslay. [Unit II, III, IV (Page: 282-321, 430-438, 464, 469-471)]
- ▶ Banks M. and Ruby J. (2011). Made do Be Seen. Perspectives on the History of Visual Anthropology. University of Chicago Press [Practical]
- ▶ Schneider A. and Wright C. (2010) Between Art and Anthropology: Contemporary Ethnographic Practice. Berg Publishers [Practical]
- ▶ Henley P. (2010). The Adventure of the Real. Jean Rouch and the Craft of ethnographic Cinema. Chicago University Press [Practical]
- ▶ Pink S. (2010). Doing Sensory Ethnography. Sage Publications [Practical]
- ▶ Grimshaw A. and Ravetz A. (2009). Observational Cinema. Anthropology, Film, and the Exploration of Social Life. Indiana University Press [Practical]

4.16 DSE P8 - Visual Anthropology Lab

Visual Anthropology	
	2 Credits
List of Practical	
The students are required to prepare projects on the following exercises: 1. Basic principles of producing ethnographic films: text and its focus, camera angles, lighting and decision making behind the camera. 2. Analysis of visuals produced during colonial and postcolonial times. 3. Hypertext and multimedia as analytic end points. 4. Collection, reporting and analysis of photo-ethnographic data.	

5.Skill Enhancement Subjects Syllabus

5.1 SEC T1 - Public Health and Epidemiology

Public Health and Epidemiology	
	2 Credits
Principles of Epidemiology in Public Health	
Overview of the concept of epidemiology and 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. Strategies to control health problems	
Statistical Methods for Health Science	
Analysis and interpretation of data including data collection, data file construction and management. Implementation of analytic strategies appropriate for the type of data. Study design and research hypothesis. Parametric and nonparametric methods, measures of association, Linear and Logistic regression, Generalized Linear Modeling, and Survival analysis.	
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 condition and improvement of public health	
Psychological, Behavioural, and Social Issues in Public Health	
Cultural, social, psychological and economic factors that influence health and illness. Behavioural science theory and methods to understanding and resolving public health problems. Assessment of knowledge, attitudes, behaviours towards disease and patient compliance to treatment.	
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

Epidemiology of disease

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

Reference Books

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

5.2 SEC T2 - Business and Corporate Anthropology

Business and Corporate Anthropology	
	2 Credits
Concepts in Theory	
1. Business and corporate Anthropology: History and subject matter 2. Applied anthropology in industry. Application of the ethnography in business management 3. Anthropology and consumer behaviour, 4. Globalization, international trade and anthropology 5. Techniques for Conducting Fieldwork for Business Organizations	
Reference Books	
▶ Jordan, Ann T. Business Anthropology. Waveland Press, Long Grove, Illinois. ▶ Whyte, W.F. 1948 Incentives for Productivity: The Case of the Bundy Tubing Company Applied Anthropology 7(2):1-16 ▶ Gardner, Burleigh B. 1978 Doing Business with Management. In Applied Anthropology in America, Elizabeth M. Eddy and William Partridge (Eds.).New York: Columbia University Press. Pp.245- 260. ▶ Handbook of Anthropology in Business by Rita M Denny. ▶ Advanced reading in Business Anthropology edited by Robert Guang Tian, Daming Zhu, Alfons van Marrewijk	

5.3 SEC T3 - Media Anthropology

Media Anthropology	
	2 Credits
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" / "Tollywood"	
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	
Reference Books	
► Rothenbuhler, Eric W; Coman, Mihai. Media anthropology. 2005. California, Sage	

5.4 SEC T4 - Tourism Anthropology

Tourism Anthropology	
	2 Credits
Unit 1	
Tourism - different aspects, types and prospects. Anthropological issues and theoretical concerns. Tourist as ethnographer, pilgrimage and authenticity issues	
Unit 2	
Interconnections between tourism history and the rise of the socio-cultural study of tourism including temporary migration, colonial exploration, pilgrimage, visiting relatives, visiting hospitals, imagined and remembered journeys, and tourism. Role of anthropology in tourism development and planning	
Unit 3	
Implications of tourism as a major mechanism of cross-cultural interaction. Role of symbolism, semiotics, and the imagination in tourism. Tourism and the commodification of culture or cultural degradation	
Unit 4	
Global and local political economy of contemporary tourism, particularly in relation to international development. Exploring dynamic relationships between heritage-making enterprises, revival and preservation projects, the international flow of capital. Role of museums and other branches of the "cultural industries" (including music, art, and food) in tourism economies. Tourism and global mobility. Ecotourism and sustainable development	
Reference Books	
▶ Chambers E. (2000). Native Tours: The Anthropology of Travel and Tourism. Prospect Heights: Waveland. ▶ 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.	

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

6. Appendix I - Scheme for CBCS Curriculum for Pass Course

6.1 Credit Distribution across Courses

Credits				
Course Type		Total Papers	Theory + Practical	Theory*+Tutorials
Core Courses	4 papers each from 3 disciplines of choice	12	12*4 =48	12*5 =60
			12*2 =24	12*1=12
Elective Courses	2 papers each from 3 discipline of choice including interdisciplinary papers	6	6*4=24	6*5=30
			6*2=12	6*1=6
Ability Enhancement Language Courses		2	2*2=4	2*2=4
Skill Enhancement Courses		4	4*2=8	4*2=8
Totals		24	120	120

*Tutorials of 1 Credit will be conducted in case there is no practical component

- All Pass courses will have 3 subjects/disciplines of interest. Student will select 4 core courses each from discipline of choice including Anthropology as one of the disciplines. The details for core courses available in Anthropology have been detailed in Section 3 of this document
- Student will select 2 core courses each from discipline of choice including Anthropology as one of the disciplines. The details for elective courses available in Anthropology have been detailed in Section 4 of this document
- Student may also chose Skill Enhancement courses in Anthropology. The details for skill enhancement courses available in Anthropology have been detailed in Section 5 of this document

6.2 Scheme for CBCS Curriculum

Semester	Course Name	Course Detail	Credits
I	Ability Enhancement Compulsory Course-I	English communication / Environmental Science	2
	Core course-I	Core Course 1A from Anthropology	4
	Core course-I Practical	Core Course 1A Practical from Anthropology	2
	Core course-II	Core Course 2A from other chosen discipline	4
	Core course-II Practical	Core Course 2A Practical from other chosen discipline	2
	Core course - III	Core Course 3A from other chosen discipline	4
	Core course - III Practical	Core Course 3A Practical from other chosen discipline	2
II	Ability Enhancement Compulsory Course-II	English communication / Environmental Science	2
	Core course-IV	Core Course 1B from Anthropology	4
	Core course-IV Practical	Core Course 1B Practical from Anthropology	2
	Core course-V	Core Course 2B from other chosen discipline	4
	Core course- V Practical	Core Course 2B Practical from other chosen discipline	2
	Core course - VI	Core Course 3B from other chosen discipline	4
	Core course - VI Practical	Core Course 3B Practical from other chosen discipline	2
III	Core course VII	Core Course 1C from Anthropology	4
	Core course-VII Practical	Core Course 1C Practical from Anthropology	2
	Core course - VIII	Core Course 2C from other chosen discipline	4
	Core course - VIII Practical	Core Course 2C Practical from other chosen discipline	2
	Core course-IX	Core Course 3C from other chosen discipline	4
	Core course-IX Practical	Core Course 3C Practical from other chosen discipline	2
	Skill Enhancement Course-1	TBD	2

IV	Core course-X	Core Course 1D from Anthropology	4
	Core course - X Practical	Core Course 1D Practical from Anthropology	2
	Core course-XI	Core Course 2D from other chosen discipline	4
	Core course-XI Practical	Core Course 2D Practical from other chosen discipline	2
	Core course-XII	Core Course 3D from other chosen discipline	4
	Core course-XII Practical	Core Course 3D Practical from other chosen discipline	2
	Skill Enhancement Course-2	TBD	2
V	Skill Enhancement Course - 3	TBD	2
	Discipline Specific Elective 1	DSE 1A from Anthropology	4
	Discipline Specific Elective 1 Practical	DSE 1A Practical from Anthropology	2
	Discipline Specific Elective 2	DSE 2A from other chosen discipline	4
	Discipline Specific Elective 2 Practical	DSE 2A Practical from other chosen discipline	2
	Discipline Specific Elective 3	DSE 3A from other chosen discipline	4
	Discipline Specific Elective 3 Practical	DSE 3A Practical from other chosen discipline	2
VI	Skill Enhancement Course - 4	TBD	2
	Discipline Specific Elective 4	DSE 1B from Anthropology	4
	Discipline Specific Elective 4 Practical	DSE 1B Practical from Anthropology	2
	Discipline Specific Elective 5	DSE 2B from other chosen discipline	4
	Discipline Specific Elective 5 Practical	DSE 2B Practical from other chosen discipline	2
	Discipline Specific Elective 6	DSE 3B from other chosen discipline	4
	Discipline Specific Elective 6 Practical	DSE 3B Practical from other chosen discipline	2

