

# VIDYASAGAR UNIVERSITY



## Curriculum for 3-Year BSc (HONOURS) in Anthropology

Under Choice Based Credit System (CBCS)  
w.e.f 2017-2018

# VIDYASAGAR UNIVERSITY

## B Sc (Honours) in Anthropology

[Choice Based Credit System]

Year	Semester	Course Type	Course Code	Course Title	Credit	L-T-P	Marks			
							CA	ESE	TOTAL	
<b>Semester-I</b>										
1	I	Core-1		CT1: Introduction to Biological anthropology	6	4-0-0	15	60	75	
				CP1: Introduction to Biological anthropology-Lab		0-0-4				
		Core-2		CT2: Introduction to Socio-cultural Anthropology	6	4-0-0	15	60	75	
				CP2: Introduction to Socio-cultural Anthropology-Lab		0-0-4				
		GE-1		TBD	6	4/5	15	60	75	
				TBD		2/1				
	AECC-1		English/MIL	2	1-1-0	10	40	50		
	<b>Semester -I: total</b>					<b>20</b>			<b>275</b>	
	<b>Semester-II</b>									
	II	Core-3		CT3: Archaeological Anthropology	6	4-0-0	15	60	75	
			CP3: Archaeological Anthropology-Lab	0-0-4						
Core-4			CT4: Fundamentals of Human Origin and Evolution	6	4-0-0	15	60	75		
			CP4: Fundamentals of Human Origin and Evolution-Lab		0-0-4					
GE-2			TBD	6	4/5	15	60	75		
			TBD		2/1					
AECC-2			ENVS	4		20	80	100		
<b>Semester-II : total</b>					<b>22</b>			<b>325</b>		

Year	Semester	Course Type	Course Code	Course Title	Credit	L-T-P	Marks			
							CA	ESE	TOTAL	
<b>Semester-III</b>										
2	III	Core-5		CT5: Tribes and Peasants in India	6	4-0-0	15	60	75	
				CP5: Tribes and Peasants in India-Lab		0-0-4				
		Core-6		CT6: Human Ecology : Biological & Cultural Dimensions	6	4-0-0	15	60	75	
				CP6: Human Ecology : Biological & Cultural Dimensions-Lab		0-0-4				
		Core-7		CT7: Biological Diversity in Human Populations	6	4-0-0	15	60	75	
				CP7: Biological Diversity in Human Populations-Lab		0-0-4				
	GE-3		TBD	6	4/5	15	60	75		
					2/1					
	SEC-1		TBD	2	1-1-0	10	40	50		
	<b>Semester – III : total</b>					<b>26</b>				<b>350</b>
	<b>Semester-IV</b>									
	IV	Core-8		CT8: Theories of Culture and Society	6	4-0-0	15	60	75	
			CP8: Theories of Culture and Society-Lab	0-0-4						
Core-9			CT9: Human Growth and Development	6	4-0-0	15	60	75		
			CP9: Human Growth and Development-Lab		0-0-4					
Core-10			CT10: Research Methods	6	4-0-0	15	60	75		
			CP10: Research Methods-Lab		0-0-4					
GE-4			TBD	6	4/5	15	60	75		
					2/1					
SEC-2			TBD	2	1-1-0	10	40	50		
<b>Semester – IV : total</b>					<b>26</b>				<b>350</b>	

Year	Semester	Course Type	Course Code	Course Title	Credit	L-T-P	Marks				
							CA	ESE	TOTAL		
<b>Semester-V</b>											
<b>3</b>	<b>V</b>	Core-11		CT11: Human Population Genetics	6	4-0-0	15	60	75		
				CP11: Human Population Genetics-Lab		0-0-4					
		Core-12		CT12: Anthropology in Practice	6	4-0-0	15	60	75		
				CP12: Anthropology in Practice-Lab		0-0-4					
		DSE-1		TBD	6	4-0-0	15	60	75		
						0-0-4					
		DSE-2		TBD	6	4-0-0	15	60	75		
						0-0-4					
		<b>Semester –V : total</b>					<b>24</b>				<b>300</b>
		<b>Semester-VI</b>									
<b>3</b>	<b>VI</b>	Core-13		CT13: Forensic Anthropology	6	4-0-0	15	60	75		
				CP13: Forensic Anthropology-Lab		0-0-4					
		Core-14		CT14: Anthropology of India	6	4-0-0	15	60	75		
				CP14: Anthropology of India-Lab		0-0-4					
		DSE-3		TBD	6	4-0-0	15	60	75		
						0-0-4					
		DSE-4		TBD	6	4-0-0	15	60	75		
						0-0-4					
		<b>Semester – VI : total</b>					<b>24</b>				<b>300</b>
		<b>Total in all semester:</b>					<b>142</b>				<b>1900</b>

**CC** = Core Course , **AECC** = Ability Enhancement Compulsory Course , **GE** = Generic Elective , **SEC** = Skill Enhancement Course , **DSE** = Discipline Specific Elective , **CA**= Continuous Assessment , **ESE**= End Semester Examination , **TBD**=To be decided , **CT** = Core Theory, **CP**=Core Practical , **L** = Lecture, **T** = Tutorial , **P** = Practical , **MIL** = Modern Indian Language , **ENVS** = Environmental Studies ,

### **List of Core Course (CC)**

- CC-1:** Introduction to Biological Anthropology
- CC-2:** Introduction to Socio-cultural Anthropology
- CC-3:** Archaeological Anthropology
- CC-4:** Fundamentals of Human Origin and Evolution
- CC-5:** Tribes and Peasants in India
- CC-6:** Human Ecology: Biological & Cultural Dimensions
- CC-7:** Biological Diversity in Human Populations
- CC-8:** Theories of Culture and Society
- CC-9:** Human Growth and Development
- CC-10:** Research Methods
- CC-11:** Human Population genetics
- CC-12:** Anthropology in Practice
- CC-13:** Forensic Anthropology
- CC-14:** Anthropology of India

### **Discipline Specific Electives (DSE)**

- DSE-1:** Physiological Anthropology
- Or**
- DSE-1:** Sports and Nutritional Anthropology
- DSE-2:** Paleoanthropology
- Or**
- DSE-2:** Fashion Anthropology
- Or**
- DSE-2:** Anthropology of Health
- DSE-3:** Tribal cultures of India
- OR**
- DSE-3:** Neuro Anthropology
- Or**
- DSE-3:** Demographic Anthropology
- DSE-4:** Urban Anthropology
- Or**
- DSE-4:** Visual Anthropology
- Or**
- DSE-4:** Project Work

### **Skill Enhancement Course (SEC)**

- SEC-1:** Public health and epidemiology
- Or**
- SEC-1:** Business and Corporate Anthropology
- SEC-2:** Media Anthropology
- Or**
- SEC-2:** Tourism Anthropology

### **Generic Electives (GE)**

- GE-1:** Nutrition and Health
- GE -2:** Research Methodology
- GE-3:** Tribes and Culture
- GE-4:** Introduction to prehistoric Anthropology

## Core Courses

**CC-1: Introduction to Biological Anthropology** **Credits 06**

**C1T :Introduction to Biological Anthropology** **Credits 04**

### **Unit 1**

Definition, Scope and sub-disciplines of Anthropology. 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 and variation. 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: pre-19th and post-19th Century.
2. Theories of evolution. Lamarckism, Neo Lamarckism, Darwinism, Modern Synthetic theory, 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. Outline of racial classifications: (a) World Context : Deniker, 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.

**C1P: Introduction to Biological Anthropology Lab** **Credits 02**

### **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, Orang, Chimpanzee, Gorilla

**CC-2: Introduction to Socio-cultural Anthropology****Credits 06****C2T: Introduction to Socio-cultural Anthropology****Credits 04****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.

**C2P: Introduction to Socio Cultural Anthropology Lab****Credits 02****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

**CC- 3 : Archaeological Anthropology**

**Credits 06**

**C3 T: Archaeological Anthropology**

**Credits 04**

**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 (c<sup>14</sup>, 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, Ologesailie, 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

**C3 P : Archaeological Anthropology (Lab)**

**Credits 02**

**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-commandmen

**CC-4: Fundamentals of Human Origin and Evolution****Credits 06****C4 T: Fundamentals of Human Origin and Evolution****Credits 04****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.

**C4 P : Fundamentals of Human Origin and Evolution (Lab)****Credits 02****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

2. Osteometry: Measurements of long and flat bones: (Any three)  
Lengths, minimum/least circumference and caliber index

3. Identification of casts of fossils of family hominidae: Drawing and comparison of characteristics

**CC-5: Tribes and Peasants in India**

**Credits 06**

**C5T: Tribes and Peasants in India**

**Credits 04**

**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.

**C5P: Tribes and Peasants in India Lab**

**Credits 02**

**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.

**CC-6: Human Ecology: Biological & Cultural Dimensions**

**Credits 06**

**C6T: Human Ecology: Biological & Cultural Dimensions**

**Credits 04**

**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

**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.

**CC-7: Biological Diversity in Human Populations**

**Credits 06**

**C7T: Biological Diversity in Human Populations**

**Credits 04**

**Unit 1**

Concept of Biological Variability: Race/Ethnic Groups  
Hardy-Weinberg equilibrium. Major evolutionary forces for Genetic Variation Genetic Polymorphism (Serological, Biochemical and Molecular markers – Out line);  
Concept of Human Adaptation and Acclimatization (Out line). 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**

Pre and Proto historic racial / ethnic elements in India.  
Linguistic classification of Indian population (Out line)

**Unit 4**

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

**Unit 5**

Demographic Perspective  
Concept of Demographic Anthropology;  
Sources of Demographic Data,  
Demographic Processes,  
Demographic profile of Indian populations and its growth structure;  
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 kilgoreWendaTrevathan 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.
- Klepinger 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.

## **C7P: Biological Diversity in Human Population Lab**

**Credits 02**

### **List of Practical**

#### **Quantitative traits: Anthropometric measurements**

- |                                 |                                          |
|---------------------------------|------------------------------------------|
| 1. Stature                      |                                          |
| 2. Sitting Height               |                                          |
| 3. Body Weight                  | 1. Body Mass Index                       |
| 4. Total upper extremity length | 2. Ponderal Index                        |
| 5. Total lower extremity length | 3. Relative sitting height               |
| 6. Nasal breadth                | 4. Relative upper extremity length       |
| 7. Nasal height                 | 5. Relative total lower extremity length |
| 8. Bi acromian diameter         | 6. Nasal index                           |
| 9. Bi-Iliac diameter            |                                          |

#### **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.

**CC-8: Theories of Culture and Society****Credits 06****C8T: Theories of Culture and Society****Credits 04****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.

**C8 P: Theories of Culture and Society Lab****Credits 02****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

**CC-9: Human Growth and Development****Credits 06****C9T: Human Growth and Development****Credits 04****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**

Concept of Methodology of growth study: Longitudinal, Cross section and mixed longitudinal

Concept of factors affecting growth: genetic, social, and ecological factors

Significance/ applicability of growth studies (Outline)

**Unit 4**

Nutritional epidemiology-concept of Food, Nutrition and Diet

Concept of under nutrition and over nutrition with reference to Kwashiorkor Marasmus and obesity

Concept of Stunting and Wasting

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 Himalyan 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

### **C9P: Human Growth and Development Lab**

**Credits 02**

#### **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

**CC-10: Research Methods**

**Credits 06**

**C10T: Research Methods**

**Credits 04**

### **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- Measures 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.

#### C10P: Research Methods Lab

Credits 02

#### 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.

**CC-11: Human Population genetics**

**Credits 06**

**CC11T: Human Population genetics**

**Credits 04**

### **Basic Genetics**

Outline of the landmarks in the history of genetics,

Principles in human genetics,

Mendelian Laws: Mendelian inheritance in man. Penetrance and expressivity

Outline of Quantitative genetics, quantitative/complex inheritance, multifactorial and polygenic inheritance, Multiple alleles, Co-dominance.

Outline of the methodology human genetics: Family method, Twin Method, Cytogenetics, Population genetics

Exceptions to Mendelian Inheritance: Outline: Linkage (Sex linkage and sex influenced traits), Epistasis and genomic imprinting

### **Ecological Genetics and Polymorphism**

Concept of Phenotype and Genotype

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**

Genotype and allele frequencies,

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**

Concept of Random and non-random mating (positive and negative assortative mating), heritability, linkage disequilibrium,

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 4<sup>th</sup> ed.
- Cavalli-Sforza, L.L. and Bodmer, W.F (1971). The Genetics of Human Population. San Francisco: Freeman
- Cooper DN and Kehler-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. Hurlst 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.

## **C11P: Human Population Genetics Lab**

**Credits 02**

### **List of Practical**

1. Blood group typing- ABO blood group (A<sub>1</sub>, A<sub>2</sub>, 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.

**CC-12 :Anthropology in Practice**

**Credits 06**

**C12T: Anthropology in Practice**

**Credits 04**

**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 Practise, 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 IndAnthropSoc*; 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.

## **C12 P: Anthropology in Practice Lab**

**Credits 02**

### **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.

**CC-13: Forensic Anthropology**

**Credits 06**

**C13T: Forensic Anthropology**

**Credits 04**

**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.

**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)

**CC- 14: Anthropology of India****Credits 06****C14T: Anthropology of India****Credits 04****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 Hierachicus. University of Chicagon 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.

### **C14P: Anthropology of India Lab**

**Credits 02**

#### **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

## Discipline Specific Electives (DSE)

**DSE-1: Physiological Anthropology**

**Credits 06**

**DSET1: Physiological Anthropology**

**Credits 04**

### **Theory**

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

**Unit II:** Acute physiological adjustments during transition from resting homeostasis to sub-maximal and maximal exercise; chronic physiological adaptations to exercise training; age, sex and population variation in the physiological characteristics

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

**Unit IV:** Impact of smoking, alcohol, drug, pollution and occupation on cardio-respiratory functions; physical performance and environmental stress, chronic diseases, malnutrition, lifestyle disease

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

**Unit VI:** Ageing and health related aspects of exercise

**DSE1P: Physiological Anthropology Practical**

**Credits 02**

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. Step-test
5. Treadmill test

### **Suggested Readings:**

- 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.
- 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 ad 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.

**OR**

**DSE-1. Sports and Nutritional Anthropology**

**Credits 06**

**DSET1. Sports and Nutritional Anthropology**

**Credits 04**

**Theory**

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

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

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

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

**DSE1P: Sports and Nutritional Anthropology Practical Credits 02**

1. Assessment of daily nutrient intake
2. Evaluate association of nutritional status and physical performance
3. Demonstrate cultural perspective for preference of specific food of a population

**Suggested Readings**

- 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.

**DSE-2: Paleoanthropology****Credits 06****DSET2. Paleoanthropology****Credits 04**

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

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

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

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

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

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

**DSE2P: Paleoanthropology (Practical)****Credits 02**

1. Comparative primate osteology
2. Description and identification of the disarticulated skeleton of non-human primates
3. Identification and description of fossil casts
4. Excursion to a site for seven days for collection of fossil material and its report

**Suggested Readings:**

1. Napier JR and Napier PH. (1985). The Natural History of the Primates. Cambridge, MA: The MIT Press
2. Boyd R and Silk JB. (2009). How Humans Evolved. London: WW Norton.
3. Tattersall I. (2009). The Fossil Trail: How We Know What We Think We Know about Human Evolution. New York: Oxford University Press.
4. Waldron T. (2008): Palaeopathology. Cambridge University Press.
5. Cela-conde CJ and Frisancho J. (2007). Human Evolution: Trails from the past. Ayala Oxford University Press.
6. Barnes E. Diseases and Human Evolution. (2005). University of New Mexico Press.

7. Pinhasi R and Mays S (2008). Advances in Human Palaeopathology. Chichester: John Wiley & Sons, Inc. (PM).
8. Hoppa RD and Vaupel JW. (2002). Paleodemography: Age Distributions from Skeletal Samples. Cambridge University Press.
9. Lansen CS, Matter RM and Gebo DL. (1998). Human Origin: The fossil Record. Waveland Press.
10. Cameron DW and Colin P. Groves CP. (2004). Bone, Stones and Molecules: "Out of Africa" and Human Origins. Elsevier Inc.
11. Stringer C. (2011). The Origin of Our Species. London: Allen Lane.
12. Conroy GC. (2005). Reconstructing Human Origins. WW Norton and Company.

**OR**

**DSE-2. Fashion Anthropology**

**Credits 06**

**DSE2T: Fashion Anthropology**

**Credits 04**

### **Theory**

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

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

**Unit III :** Colonialism, Dress, and Identity Colonialism, Consumption, and Civilizing Fashion Anti-colonial Dress, Clothing Debates in Burma and Africa

**Unit IV:** Race and Fashion: The 1980s "Japanese Invasion" and 1990s "Asian Chic" Alternative Approaches to Consumerism

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

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

**DSE2P: Fashion Anthropology (Practical)**

**Credits 02**

1. Identification of Pattern making Garment construction and color dynamics.
2. Sewing and Clothing manufacture practical.
3. Surface ornamentation, Textile crafts and Accessories Design in different ethnic group
4. A comparison of Computer aided design versus traditional designs

### **Suggested Readings**

1. Allman, Jean. Fashioning Power: Clothing, Politics and African Identities. Bloomington: Indiana University Press, 2004.
2. Aronson, Lisa. "Body Modification and Art", in the Berg Encyclopedia of World Dress

- and Fashion, Volume 1, Africa. Berg Fashion Library, 2010.
3. Bachu, Parmindar. *Dangerous Designs: Asian Women Fashion the Diaspora Economies*. New York: Routledge, 2004.
  4. Bradley Foster, Helen, and Johnson, Donald Clay. *Wedding Dress Across Cultures*. Berg Fashion Library, 2003.
  4. Eicher, Joanne B., and Roach-Higgins, Mary Ellen. "Definition and Classification of Dress: Implications for Analysis of Gender Roles." In *Dress and Gender: Making and Meaning*. Oxford: Berg, 1992, 8–28.
  5. Eicher, Joanne B., and Sumberg, Barbara. "World Fashion, Ethnic and National Dress", in *Dress and Ethnicity: Change Across Space and Time*. Berg Fashion Library, 1995.
  6. El Guindi, Fadwa. *Veil: Modesty, Privacy and Resistance*. Berg Fashion Library, 2003
  7. Fair, Laura. "Veiling, Fashion, and Social Mobility: A Century of Change in Zamzibar", in *Veiling in Africa*. Bloomington: Indiana University Press, 2013, 15–33.
  8. Fee, Sarah. "Anthropology and Materiality." In *The Handbook of Fashion Studies*. London: Bloomsbury, 2013, 301–324.
  9. Gott, Suzanne, and Loughran, Kristyne. *Contemporary African Fashion*. Bloomington: Indiana University Press, 2010.
  10. Hansen, Karen Tranberg. "The World in Dress: Anthropological Perspectives on Clothing, Fashion, and Culture" in *Annual Review of Anthropology*, 34 (2004): 369–392.
  11. Hebdige, Dick. *Subculture: The Meaning of Style*. Routledge, 1979.
  12. Hansen, Karen Tranberg. *Salaula: The World of Secondhand Clothing and Zambia*. Chicago, 2000.
  13. Rooks, Noliwe. *Hair Raising: Beauty, Culture, and African American Women*. Rutgers, 1996.
  14. Miller, Daniel and Sophie Woodward, eds. *Global Denim*. Berg, 2011.
  15. Mangieri, Tina. "Fashion, Transnationality, and Swahili Men", in *African Dress: Fashion, Agency, Performance*. London: Bloomsbury, 2013, 153–167.
  16. Schneider, Jane. "The Anthropology of Cloth", in *Annual Review of Anthropology*, 16 (1987): 409–448.
  17. Smith, Fred T. "Archaeological Evidence", in the *Berg Encyclopedia of World Dress and Fashion, Volume 1, Africa*. Berg Fashion Library, 2010.
  18. Tarlo, Emma, and Moors, Annelies. *Islamic Fashion and Anti-Fashion: New Perspectives from Europe and America*. London: Bloomsbury, 2013.
  19. Tarlo, Emma. *Clothing Matters: Dress and Identity in India*. Chicago: University of Chicago Press, 1996.
  20. Tarlo, Emma. *Visibly Muslim: Fashion, Politics, Faith*. Berg Fashion Library, 2010.

**OR**

**DSE-2: Anthropology of Health**

**Credits 06**

**DSE2T: Anthropology of Health**

**Credits 04**

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

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

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

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

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

### **Unit – 2: Measuring Health: Morbidity, Mortality, and Epidemiology**

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

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

### **Unit – 4: Chronic Disease, Injury, Stress, and Mental Health**

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

### **Unit – 5: Variations in Health Care Systems: A Comparative Perspective.**

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

### **Unit – 6: Healing and Healers in Cross-Cultural Perspectives.**

#### **A. Shamanism, Magic, and Healing.**

Shaman, Magic, Witchcraft and Sorcery,

#### **B. Folk Healers and “Alternative Medicine.”**

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

### **Unit – 7: Health and Human Rights**

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

### **Unit – 8: Legal Aspects & Future Prospects for Health**

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

## **DSE2P: Anthropology of Health Practical**

**Credits 02**

1. Make a Schedule on Health and Demography.

2. Calculation of Infant Sex ratio, Fertility rate, Total fertility rate, Mortality rate, Birth rate, crude birth rate, crude death rate, Mortality rate, life expectancy, immigration rate, population growth rate.
3. Identification and Characteristics of Various diseases.
4. Case Studies of Traditional and Modern healers.

### **Suggested Readings:**

1. Rajesh Khanna and A.K. Kapoor. 2007. Ethnic Groups and Health Dimensions. Discovery Publishing House, New Delhi.
2. Chin, James, M.D., M.P.H. (ed.) 2000. Control of Communicable Diseases Manual. 17th Edition. American Public Health Association. *Anyone interested in field work in less developed areas should own this book for reference.*
3. Helman, Cecil G. 2001. Culture, Health, and Illness. 4th ed. London: Arnold. *This book is written for health care practitioners and clearly explains the relevance of culture to health.*
4. Mann, Jonathon M., et al. (eds.) 1999. Health and Human Rights. New York: Routledge.
5. Albrecht, Gary L., Ray Fitzparick, and Susan C. Scrimshaw (eds.) 2000. The Handbook of Social Studies in Health and Medicine, SAGE Publications.
6. Bannerman, Robert, J. Burton, and Ch'en Wen-Chieh (eds.) 1983. Traditional Medicine and Health Care Coverage. Geneva: World Health Organization.
7. Chen, Lincoln C. Arthur Kleinman, and Norma C. Ware 1994. Health and Social Change in International Perspective. Harvard University Press.
8. Coreil, Jeannine and J. Dennis Mull (eds.) 1990. Anthropology and Primary Health Care, Boulder: Westview Press.
9. Hahn, Robert A. 1999. Anthropology in Public Health. Bridging Differences in Culture and Society. New York: Oxford University Press.
10. Helman, Cecil G. 1994. Culture, Health, and Illness. 3rd ed. Oxford: Butterworth-Heinemann.
11. Inhorn, Marcia C. and Peter J. Brown 1997. The Anthropology of Infectious Disease. International health Perspectives. Gordon and Breach Publishers.
12. Koop, C. Everett, Clarence E. Pearson, and M. Roy Schwartz (eds.) 2001. Critical Issues in Global Health. San Francisco: Jossey-Bass. A Wiley Company.
13. Mayer, Kenneth H. and H.F. Pizer (eds.) 2000. The Emergence of AIDS. The Impact on Immunology, Microbiology, and Public Health. Washington, D.C.: American Public Health Association.
14. Nichter, Mark and Mimi Nichter 1996. Anthropology and International Health. Asian Case Studies. Gordon and Breach Publishers.
15. Paul, Benjamin D. (ed.) 1955. Health, Culture, and Community. Case Studies of Public Reactions to Health Programs.
16. Williams, Cicely D., Naomi Baumslag, and Derrick B. Jelliffe 1994. Mother and Child Health. Delivering the Services. 3rd Edition. New York: Oxford University Press
17. Tsui, Amy O., Judith N. Wasserheit, and John G. Haaga (eds.) 1997. Reproductive Health in Developing Countries. Washington, D.C.: National Academy Press.

**DSE3T: Tribal cultures of India****Credits 04**

**Unit I:** Concept of tribes and its problematic nature, General and specific characteristics of tribes, Tribes in India: Antiquity, historical, academic, administrative and anthropological importance, Denotified tribes.

**Unit II:** Tribe- caste continuum, Constitutional safeguard/provisions, Gender and Tribe, Distribution of tribes in India

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

**Unit IV:** Tribal movements, Tribal monographs, 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.

**DSE3P: Tribal cultures of India****Credits 02****Practical**

Distribution of Indian Tribes: PTG, ST

Location of different tribes on the map of India

Write an annotated bibliography on any one tribe

Write the social structure of any one tribe of India

**Suggested Readings:**

1. Behera, D.K and Georg pfeffer. Contemporary Society Tribal Studies, Volume I to VII. New Delhi: Concept Publishing Company
2. Georg Pfeffer. Hunters, Tribes and Peasant: Cultural Crisis and Comparison. Bhubaneswar: Niswas.
3. Vidarthy, L.P. and Rai. Applied Anthropology in India.
4. Vidarrthy.L.P. and B.N. Sahay . Applied Anthropology and Development in India. New Delhi: National Publishing House

**OR****DSE-3: Demographic Anthropology****Credits 06****DSE3T: Demographic Anthropology Theory****Credits 04**

**Unit I:** Demographic Anthropology

1. Introduction, definition and basic concepts

2. Relationship between demography, population studies and anthropology
3. Importance of population studies in Anthropology

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

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

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

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

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

1. Sources of demographic data in India
2. Growth of Indian population
3. Demography of Indian tribal and non-tribal groups
4. Anthropological determinants of population growth
5. Impact of urbanization on the migration of tribal groups

#### **Unit V:** National policies

1. National Population Policy
2. National Health Policy
3. National Policy on Reproductive Health Care

#### **DSE3P: Demographic Anthropology Practical**

**Credits 02**

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

#### **Suggested Readings**

1. Bhende A. and Kaniikar, T. (2006) *Principles of Population Studies*. Himalaya Publishing House. Mumbai (All Units, It covers most topics)
2. Caldwell J.C. (2006). *Demographic Transition Theory*. Springer.
3. Census of India (2001,2011), SRS bulletin (2013), NFHS (2006 ), CRS, NSSO ( Can be seen from browsing net)
4. Gautam R.K., Kshatriya, G.K. and Kapoor A.K. (2010) *Population Ecology and Family Planning*. Serials publications. New Delhi.
5. Howell N. (1986) Demographic Anthropology. *Ann. Rev. Anthropol.* 15: 219-246
6. Kshatriya G.K. (2000). Ecology and health with special reference to Indian tribes. *Human Ecology special volume 9:229-245*.
7. Kshatriya G.K., Rajesh,G. and Kapoor , A.K. (2010) Population Characteristics of Desert Ecology. VDM Verlag Dr. Muller Gmbh and Co., Germany.
8. Misra BD (1982). *An introduction to the study of population*. South Asia publ. ltd. New Delhi.

9. National Population Policy <http://populationcommission.nic.in/npp.htm>
10. Park K. (2000) *Text book of Preventive and Social Medicine*. Banarsidas Bhanot, Jabalpur.
11. Patra P.K. and Kapoor, A.K. (2009) *Demography And Development Dynamics in a Primitive Tribe of Himalayas*. International Book Distributors, Dehradun
12. Riley N.E. and Mc Carthy, J. (2003) *Demography in the Age of the Postmodern*. Cambridge University press. UK. Pages 1-13 and 32-98
13. Sharma A.K. (1979) Demographic transition: A Determinant of Urbanization. *Social Change* 9: 13-17.
14. Srivastava O.S. (1996) *Demographic and Population Studies*. Vikas Publishing House, India
15. Zubrow E.B.W. (1976) *Demographic anthropology. Quantitative approaches*. University of New Mexico Press, Albuquerque.
16. <http://human-nature.com/dm/chap3.html>
17. <http://biography.yourdictionary.com/john-graunt>
18. <http://www.marathon.uwc.edu/geography/demotrans/demtran.htm>

**Or**

**DSE-3: Neuro Anthropology**

**Credits 06**

**DSE3T: Neuro Anthropology Theory**

**Credits 04**

**Unit 1:** Encultured Brain

- The Basics of Neuroanthropology
- The Nature of Variation
- Evolution by Natural Selection

**Unit 2:** Overview of Neural Systems & Their Interconnections

- Niche construction
- Primate Social Cognition, Human Evolution
- Evolution and the Brain

**Unit 3:** Memory & Medicine; Balancing Between Cultures

- Balancing between Cultures: Equilibrium in Capoeira
- Human Capacities, Skills and Variation
- Stone Age Body Image :Male embodiment in subsistence societies

**Unit 4:** Overcoming Mind/Body Dualism

- Addiction and Neuroanthropology
- Ritual and Emotion
- War and Dislocation: Neuroanthropological model of trauma
- Autism, theory of mind and religious development
- Cultural consonance, consciousness and depression

**Unit 5:** Neuroconstructivism and Embodied Learning

- Human Development: A Biocultural Process
- Enculturation and Memory
- The Neuroanthropology of Stress
- The Neuroanthropology of PTSD (Post traumatic stress disorder)

## Psychiatry in Neuroanthropological Perspective

### Unit 6: Neurological and Anthropological Methods

Neuroanthropology Applied

Critical Neuroscience

The Social and Personal uses of Neuroscience

### DSE3P: Neuro Anthropology (Practical)

Credits 02

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

### Suggested Reading:

1. Downey,(2008) Balancing between Cultures, in The Encultured Brain.J.of Neuroanthropology
2. Downey,(2010) 'Practice without Theory': A Neuroanthropological Perspective on Embodied Learning.JRAI
3. Miller & Kinsbourne,(2011) Culture and Neuroscience in Development Psychology: Contributions and Challenges.Child Development perspectives.<http://onlinelibrary.wiley.com/doi/10.1111/j.17508606.2011.00188.x/abstract>
4. Worthman,(2010) The Ecology of Human Development: Evolving Models for Cultural Psychology [Required for 500 level, optional for 400 level]
5. <http://jcc.sagepub.com/content/41/4/546.abstract>
6. Davidson & McEwen,(2012) Social Influences in Neuroplasticity: Stress and Interventions to Promote Well-Being.J.of Nature Neuroscience
7. <http://www.nature.com/neuro/journal/v15/n5/full/nn.3093.html>
8. Bonanno et al.,(2011) Weighing the Costs of Disaster: Consequences, Risks, and Resilience in Individuals, Families, and Communities. Association for psychological science
9. Luhrmann,(2012) Beyond the Brain  
<http://www.wilsonquarterly.com/article.cfm?AID=2196>
10. Kirmayer & Gold,(2012). Re-Socializing Psychiatry: Critical Neuroscience and the Limits of Reductionism, in Critical Neuroscience. Blackwell Reference online.
11. Lende and Downey,(2012)The Encultured Brain: An introduction to Neuroanthropology.Cambridge:Massachusetts Institute of Technology Press.
12. Goldin&Merrick,(2012)Neuroscience or Neurobabble,  
[http://www.stats.org/stories/2012/Neuroscience\\_Or\\_Neurobabble\\_jul16\\_12.html](http://www.stats.org/stories/2012/Neuroscience_Or_Neurobabble_jul16_12.html)
13. Margulies,(2011) The Salmon of Doubt, in Critical Neuroscience.
14. Lende, (2012)Neuroanthropology, Applied Research, and Developing Interventions.<http://blogs.plos.org/neuroanthropology/2012/05/10/neuroanthropologyapplied-research-and-developing-interventions/>

15. Buchowski et al.,(2011) Aerobic Exercise Training Reduces Cannabis Craving and Use in Non-Treatment Seeking Cannabis-Dependent Adults  
<http://www.plosone.org/article/info%3Adoi%2F10.1371%2Fjournal.pone.0017465>
16. <http://www.mc.vanderbilt.edu/news/releases.php?release=2044>
17. Xue et al.,(2012) A Memory Retrieval-Extinction Procedure to Prevent DrugCravingandRelaps.<http://www.sciencemag.org/content/336/6078/241.full>

**DSE-4: Urban Anthropology**  
**DSE4T: Urban Anthropology**

**Credits 06**  
**Credits 04**

## Theory

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

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

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

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

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

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

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

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

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

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

**DSE4P: Urban Anthropology (Practical)**

**Credits 02**

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

### **Suggested readings:**

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

OR

**DSE-4. Visual Anthropology**

**Credits 06**

**DSE4T. Visual Anthropology**

**Credits 04**

**Theory**

**UNIT 1:** Introduction to Visual Anthropology. Visual Culture. Photographic and Digital Media: Still, Interactive and Moving.

**UNIT 2:** Theory and Representation. 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'.

**DSE4P: Visual Anthropology**

**Credits 02**

**Practical**

This paper deals with analysis of visuals such as photographs and films pertaining to cultural practices dealing with institutions of religion, economy and politics.

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

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

**Ethnographic Film and Cinema Studies:** This unit consists of screenings followed by seminars. The emphasis will be on key feature, documentary and ethnographic films with a focal theme- the examination of the 'language of film'.

**Practical Implications:** Explore traditional and experimental means of using visual and audiovisual media to research, represent and produce anthropological knowledge. Critical engagement with policy and the use of audio-visual and internet based media in advocacy

and activism. The students are required to do the following exercises:

1. Basic principles of producing ethnographic films: text and its focus, camera angles, lighting and decision making behind the camera.
2. Analyze the visual data from classical ethnographies signifying how 'otherness' is constituted.
3. A gendered analysis of visuals produced during colonial and postcolonial times.
4. Hypertext and multimedia as analytic end points.
5. Collection, reporting and analysis of photo-ethnographic data.
6. Digital mirror: computer assisted exercises leading to production of ethnographic text.

### **Suggested Readings**

1. Marcus Banks and Howard Morphy, 1998, Rethinking Visual Anthropology
2. David MacDougall Transcultural Cinema, (Princeton, 1999)
3. 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.
4. Ch. 1, "Reading Pictures," pp. 1-12 [From: Banks, Marcus. 2001. Visual Methods in Social Research. London: Sage.]
5. Ember C.R. et al (2011). Anthropology. New Delhi: Dorling Kindersley. [Unit II, III, IV (Page: 282-321, 430-438, 464, 469-471)]
6. Banks M. and Ruby J. (2011). Made do Be Seen. Perspectives on the History of Visual Anthropology. University of Chicago Press
7. Schneider A. and Wright C. (2010) Between Art and Anthropology: Contemporary Ethnographic Practice. Berg Publishers [Practical]
8. Henley P. (2010). The Adventure of the Real. Jean Rouch and the Craft of ethnographic Cinema. Chicago University Press [Practical]
9. Pink S. (2010). Doing Sensory Ethnography. Sage Publications [Practical]
10. Grimshaw A. and Ravetz A. (2009). Observational Cinema. Anthropology, Film, and the Exploration of Social Life. Indiana University Press [Practical]

**OR**

**DSE-4: Project Work**

**Credits 06**

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

### **Skill Enhancement Course (SEC)**

**SEC-1: Public health and epidemiology**

**Credit 02**

**SEC-1T: Public health and epidemiology**

### **Unit I: Principles of Epidemiology in Public Health:**

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

### **Unit II: Statistical Methods for Health Science**

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

### **Unit III: Environmental Health**

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

### **Unit IV: Psychological, Behavioural, and Social Issues in Public Health**

Cultural, social, behavioural, psychological and economic factors that influence health and illness; behavioural science theory and methods to understanding and resolving public health problems; assess knowledge, attitudes, behaviours towards disease and patient compliance to treatment.

### **Unit V: Management of Health Care Program and Service Organizations**

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

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

### **Unit VI: Epidemiology of disease**

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

### **Suggested Reading**

1. Gordis L. (2004). Epidemiology. Third edition. Philadelphia: Elsevier Saunders.

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

**OR**

**SEC-1: Business and Corporate Anthropology**

**Credit 02**

**SEC-1T: Business and Corporate Anthropology**

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

**Suggested Readings:**

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

## **SEC-2: Media Anthropology**

**Credits 02**

### **SEC2T: Media Anthropology**

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

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

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

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

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

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

#### **Suggested Readings:**

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

**OR**

## **SEC-2: Tourism Anthropology**

**Credits 02**

### **SEC2T: Tourism Anthropology**

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

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

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

**Unit IV:** understand the global and local political economy of contemporary tourism, particularly in relation to international development; explore dynamic relationships between heritage-making enterprises, revival and preservation projects, the international

flow of capital; role of museums and other branches of the cultural industries" (including music, art, and food) in tourism economies; tourism and global mobility; Ecotourism and sustainable development

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

### **Suggested Readings**

1. Chambers E. (2000). *Native Tours: The Anthropology of Travel and Tourism*. Prospect Heights: Waveland.
2. Crick M. (1995). *The Anthropologist as Tourist: An Identity in Question*. In Lanfant MF, Allcock JB, Bruner EM (eds.) *International Tourism: Identity and Change*. London: Sage. pp. 205-223.
3. Dann GMS, Nash D and Pearce PL. (1988). *Methodology in Tourism Research*. *Annals of Tourism Research*. 15:1-28.
4. Gmelch SB. (2004). *Tourists and Tourism: A Reader*. Long Grove: Waveland.
5. Graburn NHH. (1977). *Tourism: The Sacred Journey*. Hosts and Guests: *The Anthropology of Tourism*. Valene L. Smith, ed. Philadelphia: University of Pennsylvania Press. Pp. 33-47.
6. Dann G. (2002). *The Tourist as a Metaphor of the Social World*. Wallingford: CAB International.
7. Nash D. (1996). *Anthropology of Tourism*. New York: Pergamon.
8. Kirshenblatt-Gimblett B. (1998). *Destination Culture: Tourism, Museums, and Heritage*. University of California Press.
9. Lippard LR. (1999). *On the Beaten Track: Tourism, Art and Place*. New Press.
10. Picard M and Wood R. (1997). *Tourism, Ethnicity, and the State in Asian and Pacific Societies*. University of Hawaii Press.
11. Crick M. (1994). *Anthropology and the Study of Tourism: Theoretical and Personal Reflections*. In Crick M (eds.). *Resplendent Sites, Discordant Voices: Sri Lankans and International Tourism*. Chur, Switzerland: Harwood Publishers.
12. Wood R. (1997). *Tourism and the State: Ethnic Options and the Construction of Otherness*. In Picard and Wood *Tourism, Ethnicity and the State in Asian and Pacific Societies*. University of Hawaii Press.
13. Richard B. (1992). *Alternative Tourism: The Thin Edge of the Wedge*. In Valene Smith and Eadington *Tourism* (eds.). *Alternatives: Potentials and Problems in the Development of Tourism*. University of Pennsylvania Press.
14. Hitchcock. (1997). *Cultural, Economic and Environmental Impacts of Tourism among the Kalahari*. In Chambers E (eds.) *Tourism and Culture: An Applied Perspective*. SUNY Press.

## **Generic Elective (GE)**

**[Interdisciplinary for other department]**

**GE-1 : Nutrition and Health**

**Credits 06**

**GE1 T : Nutrition and Health  
Theory**

**Credits 04**

- Unit-I:** Definition of Health and illness; measuring health; morbidity, mortality and epidemiology.
- Unit-II:** Women's health; family planning; reproductive health.
- Unit-III:** Concept of Nutrition; malnutrition – over & under; Assessment of nutritional status.
- Unit-IV:** Role of vitamins and minerals in health; concept of balanced diet.

**GE1 P : Nutrition and Health**

**Credits 02**

**Practical**

A student should assess the nutritional status of at least 10 individuals by the following parameters:

- a) BMI; b) Waist circumference; c) Waist hip ratio; d) Mid-upper arm circumference.

**GE-2 : Research Methodology**

**Credits 06**

**GE-2T: Research Methodology**

- Unit-I:** Concept of Research; research design; literature review; formulation of research problem; hypothesis; Quantitative & qualitative research.
- Unit II:** Fieldwork in Anthropology; Ethnographic approach, cultural relativism; ethnocentrism emic & etic perspectives; rapport establishment.
- Unit III:** Methods and techniques of data collection; surveys; questionnaire; observation method, interview, case study, gemology.
- Unit IV:** Basic statistics: Types of variable, Graphical representation, descriptive statistics in measurements of central tendency, deviations; skewness & curtosis; normal distribution. Inferential Statistics: Students t-test, Chi-square, correlation.
- Unit V:** Ethical issues in research. Concept of consent (Informed and verbal), Privacy & confidentiality, Plagiarism, conflict of interest.

## **GE-3: Tribes and Culture**

**Credits 06**

### **GE3T: Tribes and Culture**

**Unit I:** Concept of tribe and schedule tribe. Characterisation of tribe, Classification of tribal population in India: economy, occupation and religion.

**Unit II:** Acculturation and assimilation issues.  
Developmental and schemes and its effect on tribal life.

**Unit III:** Social organisation, material culture, political organisation of different tribes of West Bengal.

**Unit IV:** Tribal movements, tribal economy and forest, Forest policies migration and occupational shift, Displacement.

**Unit V:** Tribe-caste continuum, Constitutional safeguards.

## **GE-4: Introduction to prehistoric Anthropology**

**Credits 06**

### **GE4T: Introduction to prehistoric Anthropology Theory**

**Credits 04**

**Unit I:** Methods of studying Prehistory  
Different dating methods : absolute & relative

**Unit II:** Pleistocene epoch, Quaternary period, Glacial & Interglacial, Pluvial and Inter Pluvial.

**Unit III:** Tool making technology, use of tools in different time period, Tool typology.

**Unit IV:** Prehistoric cultures : Paleolithic Mesolithic, Neolithic Prehistoric sites of India; Indus Valley Civilization .

### **GE4P: Introduction to prehistoric Anthropology (Practical)**

**Credit 02**

Dreaming and identification of Prehistoric tools

- a) Core Tool
- b) Flake tool
- c) Microliths
- d) New lithi tool

