

# Vidyasagar University

## Curriculum for B.Sc. Honours in Anthropology

[Choice Based Credit System]

### Semester-I

Sl.No.	Name of the Subject	Nature	Code	Teaching Scheme in hour per week			Credit	Marks
				L	T	P		
C1	C1T: Introduction to Biological Anthropology	Core Course-1		4	0	0	6	75
	C1P: Introduction to Biological Anthropology Lab	Core Course1 [Practical]		0	0	4		
C2	C2T: Introduction to socio - cultural Anthropology	Core Course-2		4	0	0	6	75
	C2P: Introduction to Socio-cultural Anthropology	Core Course-2 [Practical]		0	0	4		
GE-1	GE-1	GE					4/5	75
	GE-1	GE					2/1	
AECC	English	AECC					2	50
<b>Total Credits =20</b>								

**L=Lecture, T=Tutorial, P=Practical**

**AECC- Ability Enhancement Compulsory Course: English /Modern Indian Language**

**Interdisciplinary/Generic Elective (GE) from other Department**

**[Four papers are to be taken and each paper will be of 6 credits]:**

[Papers are to be taken from any of the following discipline]: **Geology/Zoology/Botany/Chemistry /Computer Sc/Statistics/Geography/Physiology**

# **Semester -1**

## **Core Courses**

### **CC-1: Introduction to Biological Anthropology**

**Credits 06**

### **C1T1 – Introduction to Biological Anthropology**

**Credits 04**

#### **Introduction to Biological Anthropology**

##### **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 : Denikar, Dixon, Haddon, Hooton, Eickstedt and Coon-Garn-Birdsell (b) Indian context: Risley, Guha and Sarkar

#### **Reference Books**

- ▶ Jurmain R., Kilgore L., Trevathan W., Ciochon R.L. (2012). Introduction to Physical Anthropology. Wadsworth Publ., USA
- ▶ Krober 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.

## **C1 P1 – Introduction to Biological Anthropology Lab**

**Credits 02**

### **Introduction to Biological Anthropology**

#### **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

## Core-2

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

**C2 T2 - Introduction to Socio-cultural Anthropology      Credits 04**

### **Introduction to Social-cultural Anthropology**

**4 Credits**

#### **Unit 1**

Aim and Objectives of Social-Cultural Anthropology. Scope and relevance of Social-Cultural Anthropology. Relationship of Social-Cultural Anthropology with other disciplines. History of nomenclature.

#### **Unit 2**

Concepts and definitions of society and culture. Different types of Groups and Institutions. Society and community.

#### **Unit 3**

A study of Social Facts; Social System and Institution; Social Action, Social Stratification and Conflict.

#### **Unit 4**

Basic units of Society: Family; Marriage; Kinship system; Economic Organization; Political Organization; Religious practices.

#### **Reference Books**

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

The American Catholic Sociological Review.17(3): 206-218

- ▶ O'reilly K. (2012). Ethnographic Methods. Abingdon: Routledge.
- ▶ Parsons T. (1968). The Structure of Social Action. New York: Free Press
- ▶ Rapport N. and Overing J. (2004). Key Concepts in Social and Cultural Anthropology. London: Routledge.
- ▶ Royal Anthropological Institute of Great Britain and Ireland (1971). 'Methods' In Notes and Queries on Anthropology. London: Routledge & Kegan Paul Ltd.

## **C2 P2 – Introduction to Socio Cultural Anthropology Lab**

**Credits 02**

### **Introduction to Social-Cultural Anthropology Practical**

#### **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

## Generic Elective Syllabus

### GE-1 [Interdisciplinary for other department]

**GE-1 : Nutrition and Health**

**Credits 06**

**GE-1 T1 : Nutrition and Health**

**Credits 02**

#### **Theory (Credit-4)**

**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 P1 : Practical**

**Credit-2**

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.

# Vidyasagar University

## Curriculum for B.Sc. Honours in Anthropology [Choice Based Credit System]

### Semester-II

Sl. No.	Name of the Subject	Nature	Code	Teaching Scheme in hour per week			Credit	Marks
				L	T	P		
C3	C3T: Archaeological Anthropology	Core Course-3		4	0	0	6	75
	C3P: Archaeological Anthropology (Lab)	Core Course-3 [Practical]		0	0	4		
C4	C4T: Fundamentals of Human Origin and Evolution	Core Course-4		4	0	0	6	75
	C4P: Fundamentals of Human Origin and Evolution (Lab)	Core Course-4 [Practical]		0	0	4		
GE-2	GE-2	GE					4/5	75
	GE-2	GE					2/1	
AEC C-2	Environmental Studies	AECC					4	100
<b>Total Credits =22</b>								

**L=Lecture, T=Tutorial, P=Practical**

**AECC- Ability Enhancement Compulsory Course:** Environmental Studies.

**Interdisciplinary/Generic Elective (GE) from other Department**

**[Four papers are to be taken and each paper will be of 6 credits]:**

**[Papers are to be taken from any of the following discipline]:**

**Geology/Zoology/Botany/Chemistry/Computer Sc/Statistics/Geography/Physiology**

## Semester -2

### Core Courses

#### Core-3

**CC-3 : Archaeological Anthropology** **Credits 06**

**C3 T – Archaeological Anthropology** **Credits 04**

#### **Archaeological Anthropology**

**4 Credits**

##### **Introduction to Archaeological Anthropology**

1. Definition and scope of archaeological anthropology
2. Relation with other disciplines
3. Methods of studying archaeological anthropology

##### **Methods of Estimation of Time and Reconstruction of the Past**

1. Absolute dating methods (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, Olgorgesailie, 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**

#### **Archaeological Anthropology Lab**

**2 Credits**

#### **Typo-technological Analysis of Prehistoric Tools**

Identification, Interpretation and Drawings of the tool Types

1. Core Tool Types – any three Chopper, Hand axe, Cleaver.
2. Flake Tool Types – any two Scrapers, Points.
3. Blade Tool Types – any two Knife, Blade, Burin.
4. Microlithic Tool Type – any two Triangle, Lunate, Trapeze.
5. Neolithic Tool Type – any two Axe, Adze, Chissel, Ringstone.
6. Bone Tools – Barbed Harpoon, Lance point, Baton-de-commandment.

## Core-4

**CC-4 : Fundamentals of Human Origin and Evolution      Credits 06**

**C4 T: Fundamentals of Human Origin and Evolution      Credits 04**

### **Fundamentals of human origin and Evolution**

**4 Credits**

#### **Unit 1**

Primate origins and radiation with special reference to: Parapithecus, Ramapithecus, Dryopithecus, Sivapithecus and their distribution, features with their phylogenetic relationships

#### **Unit 2**

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

#### **Unit 3**

The origin of Homo sapiens: Fossil evidences of Neanderthals and Archaic Homo sapiens

#### **Unit 4**

The origin of Homo sapiens: Fossil evidences of Neanderthals and Archaic Homo sapiens

#### **Unit 5**

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

Brief outline of the models of human origin: Out-of-Africa and Replacement model

#### **Unit 6**

Hominisation process, Biology and culture Co-evolution

#### **Reference Books**

- Buettner-Janusch, J. (1966). *Origins of Man: Physical Anthropology*. John Wiley & Sons, Inc., New York, London, Sydney.
- Conroy, G.C. (1997). *Reconstructing Human Origins: A Modern Synthesis*. W. W. Norton & Company, New York, London.
- Howell F.C. (1977). *Horizons of Anthropology*. Eds. S. Tax and L.G. Freeman, Aldine Publishing House, Chicago.
- Nystrom P. and Ashmore P. (2011). *The Life of Primates*. PHI Learning Private

Limited, New Delhi.

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

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

**Credits 02**

#### **Fundamentals of human origin and evolution**

**2 Credits**

#### **List of Practical**

##### **1. Craniometry**

- a) Maximum Cranial length and breadth
- b) Maximum bizygomatic breadth
- c) Maximum frontal breadth
- d) Minimum frontal breadth
- e) Nasal height and breadth
- f) Bi-Mastoid Breadth
- g) Greatest occipital breadth
- h) Upper facial height
- i) Cranial index
- j) Nasal index

##### **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**

## Generic Elective Syllabus

### GE-2 [Interdisciplinary for other department]

**GE-2 : Research Methodology**

**Credits 06**

**GE-2 T: 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.

# Vidyasagar University

## Curriculum for B.Sc (Honours) in Anthropology [Choice Based Credit System]

### Semester-III

Course	Course Code	Name of the Subjects	Course Type/ Nature	Teaching Scheme in hour per week			Credit	Marks
				L	T	P		
CC-5		<b>C5T:</b> Tribes and Peasants in India	Core Course - 5	4	0	0	6	75
		<b>C5P:</b> Tribes and Peasants in India Lab		0	0	4		
CC-6		<b>C6T:</b> Human Ecology: Biological & Cultural Dimensions	Core Course - 6	4	0	0	6	75
		<b>C6P:</b> Human Ecology: Biological & Cultural Dimensions Lab		0	0	4		
CC-7		<b>C7T:</b> Biological Diversity in Human Populations	Core Course - 7	4	0	0	6	75
		<b>C7P:</b> Biological Diversity in Human Population Lab		0	0	4		
GE-3		TBD	Generic Elective -3				4/5	75
							2/1	
SEC-1		<b>SEC1:</b> Public health and epidemiology <b>Or</b> <b>SEC1:</b> Business and Corporate Anthropology	Skill Enhancement Course-1	1	1	0	2	50
<b>Semester Total</b>							<b>26</b>	<b>350</b>

L=Lecture, T= Tutorial, P=Practical, CC = Core Course, GE= Generic Elective, SEC = Skill Enhancement Course, TBD = to be decided

**Generic Elective (GE) (Interdisciplinary) from other Department [Four papers are to be taken and each paper will be of 6 credits]:**

Papers are to be taken from any of the following discipline: **Geology/Zoology/Botany/Chemistry/Computer Sc/Statistics/Geography/Physiology**

**Modalities of selection of Generic Electives (GE):** A student shall have to choose **04** Generic Elective (GE1 to GE4) strictly from **02** subjects / disciplines of choice taking exactly **02** courses from each subjects of disciplines. Such a student shall have to study the curriculum of Generic Elective (GE) of a subject or discipline specified for the relevant semester.

**Semester-III**  
**Core Course (CC)**

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

**Credits 06**

**C5T: Tribes and Peasants in India**

**Credits 04**

**Tribes and Peasants in India**

**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.

**Tribes and Peasants in India****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****Human Ecology: Biological & Cultural Dimensions****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

## **C6P: Human Ecology: Biological & Cultural Dimensions Lab**

**Credits 02**

### **Human Ecology: Biological & Cultural Dimensions Lab**

#### **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-Illiac 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**

### **Biological Diversity in Human Populations**

#### **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 Biological Diversity in human population

Credits 02

#### List of Practical

#### Quantitative traits: Anthropometric measurements

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

**Polymorphic trait/Markers:**

ABO Blood Group (as natural antigens), RhD Blood groups (as immune antigens) at least ten participants (using standard techniques).

Concept of ABO blood group subtypes and Rh Blood group haplotypes

**Polygenic trait**

Concept of Dermatoglyphics in Population Variation.

Collection of Finger Prints (Five Participants)

Analysis and interpretation of basic finger pattern types [Whorl, Loop (Ulnar and Radial) and Arch] Indices: Dankmeijer Index, Furuhashi's Index and Pattern Intensity index (basic comparison)

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

**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.
- 12.

**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.

### **Generic Elective Syllabus** **GE-3 [Interdisciplinary for other department]**

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

**Credit 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.