SRI VENKATESWARA UNIVERSITY: TIRUPATI S.V.U. COLLEGE OF SCIENCES MASTER OF SCIENCES

DEPARTMENT OF ANTHROPOLOGY



Re-Structured P.G. Programme (CBCS) as per National Educational Policy – 2020, National Higher Education Qualification Frame Work (NHEQF) and

Guidelines of APSCHE

(WITH EFFECT FROM THE BATCH ADMITTED IN THE ACADEMIC YEAR 2024-25)

SYLLABUS

Choice Based Credit System (CBCS)

ANTHROPOLOGY DEPARTMENT

GENESIS:

The Department of Anthropology came into being in 1971, with the auspices of the former Vice-Chancellor Prof. Dr. D. Jagannadha Reddy. He invited a famous and reputed Anthropologist, Prof. D. P. Mukherjee to run the Department by laying a strong foundation and strengthening different sub-divisions of Anthropology.

PROGRAMMES FOR SPECIAL ASSISTANCE:

The department has been identified by the University Grants Commission, New Delhi for financial assistance through Special Assistant Programme (SAP) in the year 1992. Three phases of the SAP programme has been successfully completed. Students, research scholars and faculty have been actively involved in the research and our contributions were reckoned by the scientific community.

Further the department was also awarded "Special Assistance to Strengthen Infrastructure in Humanities and Social Sciences" (ASIHSS) by the UGC.

In appreciation of this, University Grants Commission, New Delhi has recognized this department as "Centre of Advanced Studies (CAS)" for five years (2013-18) in the Phase-1.

The thrust areas under this programme are: Bio-cultural Perspectives of Health and Disease

Biological dimensions of health and disease Socio-cultural dimensions of health and disease.

NUMBER OF M.Phil / Ph.Ds PRODUCED:

M.Phils: 15 Ph.Ds : 86

DEPARTMENT HIGHLIGHTS:

The Department has made an immense contribution with respect to the generation of Anthropological knowledge. The only Anthropology department from south India to achieve the "Centre of Advanced Studies (CAS)" for five years (2013-18) in the Phase-1. The Department has been actively engaged in Teaching and research in all branches of Anthropology. The Department has well equipped in terms infrastructural facilities to carryout advanced research in the all the fields of Anthropology. The Department ensures that the syllabus has framed with periodical modifications to meet the emerging needs of the society.

VISION:

- 1. Anthropology is the study of humans and its biological relatives across time and space
- 2. To address the diversity of the human experience in its biological, cultural and historical contexts
- 3. Provide knowledge to analyze and addresses the issues with respect to biological, social and environmental problems.
- 4. Provides the answer to our questions about our self, our past, present and future.
- 5. The study the ability to lower the barrier of people's ethnocentric news of the world around them.

A degree in Anthropology will give a wide range of skills useful to many job roles, communication, and research problem solving, independent and collaborative work.

MISSION:

- 1. To nurture the students and young researchers with latest knowledge and skills in Anthropology and its subdivisions by enabling them to ensure human welfare and to improve the quality of life of people.
- 2. Committed to produce quality human resources upgrading the quality concerns to realize better employment potential within its disciplinary boundaries.
- 3. To transform the department into a centre of excellence with state-of-art infrastructural facilities and also as a resource centre to provide inputs to young researchers in terms of technology.

About the programme: -

- 1. M.Sc., with four semesters of two years duration
- 2. Ph.D., (Full time and Part-Time)

The P.G. course will have the following components:

Class room teaching, laboratory experiments, practicals in material culture and museum objects, designing research tools, and project work. Fieldwork is mandatory part of M.Sc., Anthropology IV Semester students visit rural or tribal areas to collect data on specific topics/ issues. Based on this, a dissertation is submitted.

CHOICE BASED CREDIT SYSTEM (CBCS):

The Choice Based Credit System (CBCS) provides an opportunity for the students to choose courses from the prescribed courses comprising core, elective/minor or skill based courses. The courses can be evaluated following the grading system, which is considered to be better than the conventional marks system. Therefore, it has been found necessary to introduce uniform grading system in the entire higher education in India. This will benefit the students to move across institutions to begin with. The uniform grading system will also enable potential employers in assessing the performance of the candidates. In order to bring uniformity in evaluation system and computation of the Cumulative Grade Point Average (CGPA) based on students' performance in examinations, the UGC has formulated the guidelines to be followed.

Students of this course would be expected to:

- 1. Be able to play leading role in industry, research and the public services;
- 2. Understand and appreciate major public concerns and issues associated with Anthropology
- 3. Have an understanding and grasp of international research environment where the frontiers of knowledge in Anthropology are under research;
- 4. Be able to adapt and respond positively and flexibly to changing circumstances;
- 5. Develop the professional skills and personal attributes to deal with complex issues, both systematically and creatively;
- 6. Have the capacity for individual work and teamwork;
- 7. Be lifelong learners with intellectual and practical skills.

Programme Objectives (POs):

- 1. Students of M.Sc. Anthropology should comprehensively understand the concepts and theories of major branches of anthropology i.e. Biological, Social and Archaeological anthropology.
- 2. Students should be familiar with approaches, techniques, methodology and study designs commonly used in anthropological research.
- 3. Awareness on value of anthropological knowledge in contemporary society, and the ability to apply it in solving social issues.
- 4. Learn about conducting population based fieldwork independently in collecting qualitative and quantitative data pertaining to the research work.
- 5. They should be aware of ethical principles and right to privacy and data protection.

Programme Educational Objectives (PEOs):

- 1. Students should be familiar with approaches, techniques, methodology and study designs commonly used in anthropological studies.
- 2. The students will be able to understand and apply the basic concepts like groups, institutions, organization and community in understanding of society and culture
- 3. They will also critically understand the various approaches to understand society and culture be able to understand how the knowledge of anthropology is important for health, business, ecology, psychology, media and public policy.
- 4. To understand the relevance of genetic data bases in human genetic research
- 5. Students will be able to draw genealogies and collect verbal as well as non verbal data. They would be able to prepare questionnaire and schedule to collect information on a specific topic and also organize and take notes in a focus group discussion.
- 6. They will be able to explain the critical concepts of tribe, caste, class, gender in understanding of Indian social reality.

Programme Specific Outcomes (PSOs):

- 1. Understanding culture as the distinguishing phenomenon of human life, and the relationship of human biology and evolution.
- 2. Awareness of human diversity and the ways humans have categorized diversity.
- 3. Knowledge of the significant findings of archaeology, cultural anthropology, and physical anthropology, and familiarity of the important issues in each sub-discipline.
- 4. Knowledge of the history of anthropological thought and its place in modern intellectual history.
- 5. Comprehension of migration, colonialism, and economic integration as significant phenomenon shaping global society.
- 6. Understand the importance of anthropological research in policy making and improving human life.
- 7. They should comprehensively understand the concepts and theories of Biological Anthropology
- 8. They should comprehensively understand the concepts and theories of Social Cultural Anthropology
- 9. They should comprehensively understand the concepts and theories of Archeological Anthropology
- 10. A student of anthropology should be able to relate all the core and elective papers with each other and with overall health of populations
- 11. They should achieve the efficiency in detecting the major or social problems of society/populations.
- 12. They should themselves give research based feasible solutions related any aspect of human life.

Sri VenkateswaraUniversity:: Tirupati <u>DEPARTMENT OF ANTHROPOLOGY</u>

Re-Structured P.G. Programme (CBCS) as per National Educational Policy – 2020, (NHEQF) and Guidelines of APSCHE (WITH EFFECT FROM THE BATCH ADMITTED IN THE ACADEMIC YEAR 2024-25)

Semester	Particulars	No. of Credits	Total
	101.CORE COURSE: 1. Introduction to Social Cultural Anthropology	4	
I	102.CORE COURSE -: 2 Papers (select any one) 2 (A): Introduction to Biological Anthropology 2 (B) Applied Anthropology	3	
	103.CORE COURSE -2Papers (select any one) 3 (A): Introduction to Archaeological Anthropology 3 (B) Indian Anthropology	3	20
	104.Practical -1:.Somatometry and Stone age tools	2	-
	105. SKILL OREIENTED COURSE :2 Papers (select any one) 1(A)-	3	1
	Ecological Anthropology 1(B)- Urban Anthropology		
	106.SKILL OREIENTED COURSE :2 Papers (select any one) 2(A)- Data Management and Computer Applications 2(B)- Prehistoric India	3	
	107. Practical -1I: Ecological Anthropology and Data Management	2	1
	109. Audit Course : Indian Knowledge System -1		
	201. CORE COURSE: 4. Theories of Culture	4	
II	202. CORE COURSE -2 Papers (select any one) 5 (A) - Comparative Ethnography and Indian Anthropology 5 (B) - Demographic Anthropology	3	
	203. CORE COURSE -2 Papers (select any one) 6 (A) - Human Evolution and Fossil Evidence 6 (B) Structural Anthropology	3	22
	204. Practical -III: Material Culture and Osteometry	2	
	205. SKILL OREIENTED COURSE : 2 Papers (select any one) 3(A)-Applied Biological Anthropology 3(B)- Bio statistics and Computer Applications	3	
	206. SKILL OREIENTED COURSE : 2 Papers (select any one) 4(A)- Research Methods in Anthropology 4(B)- Human Ecology	3	
	207. Practical -1V: Applied Anthropology and Research Methods	2	
	208. Open online Trandisciplinary Course -1	2	_
	209. Audit Course : Indian Knowledge System -2		
	301.CORE COURSE: 7.Developmental Anthropology	4	4
	302. CORE COURSE -2 Papers (select any one) 8 (A) - Human Genetics 8 (B) - Tribal India	3	
III	303. CORE COURSE-2 Papers (select any one) 9 (A) - Epidemiology 9(B) -Forensic Anthropology	3	22
	304. Practical -I: Advanced Biological Anthropology	2	_
	305. SKILL OREIENTED COURSE :2 Papers (select any one) 5(A)- Medical Anthropology 5(B)- Social Anthropology of Complex Societies	3	
	306. SKILL OREIENTED COURSE : 2 Papers (select any one) 6(A)- Human Growth, Development and Nutrition 6(B)-Anthropology of Religion	3	
	307. Practical -II: Human Physiology	2	
	308. Open online Trandisciplinary Course -2	2	_
	* Seminar/ Tutorials / remedial classes and Quiz as part of Internal Assessment		
	401. Open Online Skill Development Course	8	•
IV	402. Project Work – Orientation classes	12	20
	* Conducting classes for competitive exams, communication skills, UGC/CSIR and NET/SLET examinations		
Total credits	-		84

The course of the study and scheme of examination

	SEMESTER-I									
S.No	Course	Code	Title of the course	H/W	C	SEE	IA	Total marks		
1	CC	101	Introduction to Social Cultural Anthropology	4	4	70	30	100		
2		102	(A)Introduction to Biological Anthropology (B) Applied Anthropology	4	3	50	25	75		
3		103	(A) Introduction to Archaeological Anthropology	4	3	50	25	75		
4	P	104	(B)Indian Anthropology Somatometry and Stone age tools (related to CC 2 & 3)	6	2	35	15	50		
5	SOC	105	(A) Ecological Anthropology (B) Urban Anthropology	4	3	50	25	75		
6		106	(A) Data Management and Computer Applications (B)Prehistoric India	4	3	50	25	75		
7	P	107	Ecological Anthropology and Data Management (related to SOC 1 & 2)	6	2	35	15	50		
		36	20	340	160	500				
8	Audit Course	Total 109 Indian Knowledge Systems-1		4	0	0	100	0		

			SEMESTER-II					
S.No	Course	Code	Title of the course	H/W	С	SEE	IA	Total marks
1	CC	201	Theories of Culture	4	4	70	30	100
2		202	(A) Comparative Ethnography and Indian Anthropology(B) Demographic Anthropology	4	3	50	25	75
3		203	(A) Human Evolution and Fossil Evidence (B)Structural Anthropology	4	3	50	25	75
4	P	204	Material culture and Osteometry (related to CC 5 & 6)	6	2	35	15	50
5	SOC	205	(A)Applied Biological Anthropology (B)Bio statistics and Computer Applications	4	3	50	25	75
6		206	(A) Research Methods in Anthropology (B) Human Ecology	4	3	50	25	75
7	P	207	Applied Anthropology and Research Methods (related to SOC 3 & 4)	6	2	35	15	50
8	OOTC	208	Open online Transdisciplinary Course-1	_	2	_	100	100
	Total				22	340	260	600
9	Audit Course	209	Indian Knowledge Systems-2	4	0	0	100	0

			SEMESTER-III					
S.No	Course	Code	Title of the course	H/W	С	SEE	IA	Total marks
1		301	Developmental Anthropology	4	4	70	30	100
2	CC	302	(A)Human Genetics (B) Tribal India	4	3	50	25	75
3	303		(A) Epidemiology (B)Forensic Anthropology	4 3		50	25	75
4	P	304	Advanced Biological Anthropology (related to CC 8 & 9)	6	6 2		15	50
5	SOC	305	(A) Medical Anthropology (B) Social Anthropology of Complex Societies	4	3	50	25	75
6		306	(A)Human Growth, development and Nutrition (B)Anthropology of Religion	4	3	50	25	75
7	P	307	Human Physiology (related to SOC 5&6)	6	2	35	15	50
8	OOTC	308	Open online Transdisciplinary Course-2		2		100	100
*	* Seminar/ Tutorials / remedial classes and Quiz as part of Internal Assessment							
	Total					340	260	600

	SEMESTER-IV									
S.No	Course	Code	Title of the course	H/ W	C	SEE	IA	Total marks		
1	OOSDC	401	Open Online Skill Development Courses		8		200	200		
2	PW	402	Project Work – Orientation Classes	24	12	300	0	300		
*		Conducting classes for competitive exams, communication skills, UGC/CSIR and NET/SLET examinations								
			Total	36	20	300	200	500		
	Total Semesters				84	1320	880	2200		

<u>SEMESTER – I</u>

Core Course-1-101: INTRODUCTION TO SOCIAL CULTURAL ANTHROPOLOGY

Course Objective:

- a. To understand the basics about socio-cultural anthropology: its history, origin, elements and relationship to other branches.
- b. To understand the basic concepts like society, culture, Institutions, social organizations and socio stratification.
- c. To know the social institutions like family, marriage and kinship
- d. To understand the religion, magic, animism, taboo and ancestral worship

Unit I : Social-Cultural Anthropology: Meaning, Scope and Specializations; Basic Approaches: Holistic, Comparative, Historical, Nomothetic and Idiographic; Relationship to History, Psychology, Economics, Sociology, Management, Medical and Nutritional sciences.

Unit II: Basic Concepts: Society, Culture, Community, Association, Institution, Status and Role, Social Structure, Social Organization and Social Stratification.

Unit III: Family, Marriage and Kinship: Definition of Family and Marriage; Rules, Typology; Feminist Perspectives on Family and Marriage; Marriage Rules and Patterns of Marriage in Dravidian Kinship regions (Thomas T. Trautmann); Meaning and Sociological significance of Kinship; Classification of Kin terms; Descent: Rules and Descent groups; Kinship behavior.

Unit IV: Religion and Magic: Definition; Elements of Religion: Religious Beliefs; Ceremony; Ritual and Myth; Animism; Animatism; Taboo; Totemism; Ancestral Worship; Magic and Science; Types (J. Frazer).

Course Outcomes:

- a) Exposed to the basic introductory background about Socio-cultural Anthropology, its historical background and relation to other branches
- b) Provides knowledge about the entire subject matter of the socio-cultural anthropology as well as its different sub-branches.
- c) Exposed to social institutions
- d) Know the religion beliefs, rituals and myth

- 1. Beals, R. and Hoijer, H. 1971. An Introduction to Anthropology. London: Collier McMillan Company Ltd.
- 2. Bohannan, Paul. 1963 Social Anthropology. New York: Holt, Rinehart and Winston.
- 3. Child, A. B. and Child, I. I. 1975. Religion and Magic in the Life of Traditional People. Englewood Cliffs: Prentice-Hall, Inc.
- 4. Ember, C. R., Ember, M. and Peregrine, P. N. 2002. Anthropology. Delhi: Pearson Education Asia.
- 5. Evans-Pritchard, E. E. 1965. Theories of Primitive Religion. Oxford: Clarendon Press.
- 6. Firth, Raymond.1956 Elements of Social Organization. London: Watts and Co.,
- 7. Fox, Robin. 1971. Kinship and Marriage: An anthropological Perspective. Harmondsworth: Penguin Books.

- 8. Herskovits, M. J.1959.Cultural Anthropology. New Delhi: Oxford & IBH Publications Co.
- 9. Hoebel, E.A and Weaver, T. 1979. Anthropology and the Human Experience. New York: McGraw Hill Book Company.
- 10. Kapadia, K.M. 1971. Marriage and Family in India. Calcutta: Oxford University Press.
- 11. Kottak, C. P. 1982. Anthropology: The Exploration of Human Diversity. New York: Random House.
- 12. Lowie, R.H. 1971. Social Organization. London: Routledge and Kegan Paul Ltd.
- 13. Murdock, G.P. 1965. Social Structure. Illinois: Free Press, Glencoe
- 14. Radcliffe-Brown, A. R. 1973. Structure and Function in Primitive Society. London: Routledge and Kegan Paul Ltd.
- 15. Scientific American. 1972. Biology and Culture in Modern Perspective. San Francisco: W. H. Freeman Company.
- 16. Stephens, W.N. 1963. The Family in Cross-cultural Perspective. New York: Holt, Rinehart and Winston.
- 17. Trautmann, T. R. 1998. Marriage Rules and Patterns of Marriage in the Dravidian Kinship Region. In. Family, Kinship and Marriage in India. (Ed.). Oberoi, P. New Delhi: Oxford.

Core Course- 102- 2 (A) :INTRODUCTION TO BIOLOGICAL ANTHROPOLOGY

Course Objectives:

- a. To understand the scope, relation with other branches and historical development of biological anthropology
- b. To study the comparative anatomy of man and Apes
- c. To understand human origins and evolution
- d. To know about the race, racism and classification of major races.

Unit I: Meaning, Scope of Biological Anthropology. Relation with other Branches of Anthropology and with Biological, Social and Medical Sciences; Its historical development. Man's Place in the Animal Kingdom. Classification of Primates; Salient Feature of Primates; Primate behaviour with special reference to monkeys and apes Comparative Anatomy of Apes and Man

Unit II: Principles of Evolution – Speciation, Irreversibility, Parallelism and Convergence, Adaptive Radiation, Extinction and Theory of Orthogenesis; Theories of Organic Evolution - Lamarckism, Darwinism, Synthetic Theory.

Unit III: Human Origins and Evolution: Fossil Evidence-Pongid and Hominid, Emergence of Man: Evidences, Distribution and Pattern of Australopithecines, Homo erectus, Neandertal, Homo sapiens.

Unit IV: Race, Ethnicity and Populations: Concepts: Race, Racism; Classification of Races – Major Races of the World; Racial Criteria used for Racial Classification - Morphological, Serological and Genetic; Racial Classification of world population – Hooton, Coon, Garn and Boyd Racial Classification India Populations – Risley, Guha and Sarkar

Course Outcomes:

- a. Exposed to the basic concept, meaning and scope of Biological Anthropology
- b. Explain how human being acts as the central figure of Anthropology
- c. Elucidate the major divisions of Biological/ physical Anthropology
- d. Know the inter-relationship between Biological Anthropology and other sciences
- e. To know how Man evolved in animal kingdom
- f. To understand how evolution has occurred and what are the evidences of evolution and addresses human variation and the causes of variations

- 1. Buettner-Janusch, J. 1966. Origins of Man: Physical Anthropology. John Wiley & Sons, New York.
- 2. Buettner-Janusch, 1973. Physical Anthropology: A Perspective. New York: John Wiley and Sons.
- 3. Chiareelli, A.B. 1973. Evolution of the Primates: An Introduction to the Biology of Man. London: Academic Press.
- 4. Clark, Le Gross. W. E. 1962. The Antecedents of Man: An Introduction to the Evolution of the Primates. Edinburgh: Edinburgh University Press.
- 5. Clark, Le Gross, W. E. 1964. The Fossil Evidences of Human Evolution: An Introduction to the Study of Paleoanthropology. Chicago: University of Chicago Press.
- 6. Coon, C. S. 1965. The Origin of Races. New York: Alfred A. Knopf.
- 7. Das, B. M. 1999. Outlines of Physical Anthropology. New Delhi: Kitab Mahal.
- 8. Dobzhansky, T. 1962. Mankind Evolving: The Evolution of the Human species. New Haven: Yale University Press.
- 9. Hulse, F. S. 1963. The Human Species: An Introduction to Physical Anthropology. New York: Random House.
- 10. Montague, A. M. F. 1960. An Introduction to Physical Anthropology. Illinois: Charles C. Thomas Publishers.
- 11. Montagu, A. M. F. (Ed.). 1964. The Concept of Race. New York: The Free Press of Glencoe.
- 12. Napier, J. R. and Napier P.H. 1967. A Handbook of Living Primates. New York: Academic Press.
- 13. Pfeiffer, J.E. 1978. The Emergence of Man. New York: Harper and Row, Publishers.
- 14. Poirier, Frank, E. 1973. Fossil Man: An Evolutionary Journey. St. Louis: C.V. Mosby Company.
- 15. Shukla, B. R. K. and Rastogi, S. 2000. Physical anthropology and Human Genetics An Introduction. Delhi: PalakaPrakashan.
- 16. Stein P. L. and Row, B. M. 1989. Physical Anthropology. New York: McGraw-Hill Book Company.
- 17. Turnbaugh, W. A., Nelson, H., Jurmain, R. and Kilgone, L. 1996. Understanding Physical Anthropology and Archaeology. New York: West Publishing House.
- 18. Weiss, M. L. and Mann, A. E. 1978. Human Biology and Behavior: An Anthropological Perspective. Boston: Little Brown.
- 19. Relethford, J.H. 2002. An Introduction to Biological Anthropology. Boston: Mc. Graw Hill.
- 20. Ember, C. Ember, M. and Peregrine, P. 2008 Anthropology (12th Edition] New Delhi: Prentice Hall of India.
- 21. Jurmain R, L.Kilgore and Trevathan, W 2010 Essentials of Physical Anthropology. [8th Edition New York, Wiley- Blackwell.

PRACTICALS: INTRODUCTION TO BIOLOGICAL ANTHROPOLOGY

Course Objectives:

- a. To know about the constitution of the body across cultures.
- b. To understand the application of measurements in human variation towards various morbidities.

Unit I: Somatometric Measurements on Head and their Indices: Maximum Head Length, Maximum Head Breadth, Head Circumference, Minimum Frontal Breadth, Maximum Bizygomatic Breadth, Bigonial Breadth, Nasal Height, Nasal Length, Nasal Breadth, Morphological Facial Height, Morphological Upper Facial Height and the Indices.

Unit II: Somatometric Measurements on Body and their Indices: Height Vertex (Stature), Body Weight, Sitting Height, Biacromial Breadth, Chest Breadth (Transverse), Chest Depth (Sagittal), Chest Girth (Inspiration, Expiration and Normal), Total Right Upper Extremity Length / Total Right Lower Extremity Length, Right Upper Arm Length, Right Fore Arm Length, Right Hand Breadth, Right Hand Length, Right Foot Length, Right Foot Breadth, Upper Arm Girth, Skin fold Measurement at Biceps, Triceps, Sub scapular and Supra-Iliac.

Course outcomes:

- a. This paper will be provided a general conceptual understanding of Biological Anthropology and it will be made understood of various measurements on Head and Body
- b. This paper is basically designed for the students to taught various Somatometric techniques.

- 1. Comas, J. 1960. Manual of Physical Anthropology Springfield: Charles C. Thomas and Co.
- 2. Croney, John. 1981. Anthropometry for Designers New York: Van Nostrand Reinhold Company.
- 3. Das, B. M. and Deka, R. 1993. Physical Anthropology Practical. Allahabad: Kitab Mahal.
- 4. France, D. L. and Horn, A. D. 1992. Lab Manual and Workbook for Physical Anthropology. St. Paul: West Publishing Company.
- 5. Ghoshmaulik, S. K., Rath, B. and Mishra, S. K. 1990. Practical Anthropology. Bhubaneswar: Society for Anthropological and Archaeological Studies, Orissa.
- 6. Kelso, J. and Ewing, G. 1985. Introduction to Physical Anthropology Laboratory Manual. Boulder: Pruett Press, Inc.
- 7. Lohman, T. G., Roche, A. F. and Martorell, R. 1988. Anthropometric Standardization Reference Manual. Champaign: Human Kinetics Books.
- 8. Montague, A. M. F. 1960. A Handbook of Anthropometry. Springfield: Charles C. Thomas and Co.
- 9. Singh, I. P. and Bhasin, M. K. 1968. Anthropometry. Delhi: Kamalraj Publications.
- 10. Wiener, J. S. and Lourie J. A. 1969. Human Biology: A Guide to Field Methods. London: Blackwell Scientific Publications.
- 11. Wiener, J. S. and Lourie, J. A. 1981. Practical Human Biology. London: Academic Press.

- 12. Wolfe, L. D. and Lieberman, L. S. 1990. Physical Anthropology: Laboratory Textbook. Raleigh: Contemporary Publishing Company.
- 13. Sing, Inder P., and Bhasin, M.K. 2004. A manual of Biological Anthropology Kamal-Raj Enterprises, Delhi.

Core Course- 102- 2 (B) : Applied Anthropology

Course Objectives:

- a. To understand what is applied anthropology (or what it aspires to be) through its history, its uses of theory, its
- b. ethical dimensions, and some of its career profiles. To use applied anthropology to help address a real-life problem in our community (University or larger community).
- c. To demonstrate an understanding of the process and value of applying a holistic analysis to contemporary social
- d. problems affecting local communities affected by modernization and globalization.

Unit I: Applied Anthropology: Concept, Definition, Its Scope and History. Limitation of applied anthropology. Similarities and differences between applied, action and developmental anthropology.

Unit II : Anthropology and Tourism: Ecotourism, Cultural Tourism and New Approaches. Green Tourism and Sustainable Development.

Unit III: Social Anthropology and Public Policy: anthropological study of public policy, including the socio-cultural understandings of risk, the role of values in policy and research.

Unit IV: Social impact assessment and social marketing, NGO's and civil society, Role of NGO's in Human Development.

Course Outcomes:

- a. Students will practice cultural relativism and apply understandings of global diversity in a practical and applied form.
- b. Students will critically analyse and interpret anthropology data so that it can be used to apply to real-world issues.
- c. Students will apply anthropological principles for solving human problems on the local, regional and world scales.
- d. Through the details study of the course, it will empower the students to know about the law (rules and regulations) of the community as well as to safeguard the people.

- 1. elshaw, C.L. 1976. The orcerer's Apprentice: An Anthropology of Public Policy. Pergamon Press Inc., New York.
- 2. Burns, P, M. 1999. An Introduction to Tourism and Anthropology. Routledge, London.
- 3. Goldschmidt, W. 1986. Anthropology and Public Policy: A Dialogue. American Anthropological Association, USA.
- 4. Sulton, P. 2009. The Politics of suffering. Melbourne University Press, Victoria, Australia.
- 5. Fisher, R. 2002. Anthropology and Social Impact Assessment. Taylor and Francis, New York.
- 6. van Willigen, John. 2002. Applied Anthropology: An Introduction. Bergin and Garvey, CT, Westport, USA.

Practical: Applied Anthropology

Course Objectives:

- a. The course is designed for students to get practical experiences from the Government and Developmental sectors through
- b. training and working with them. After the training students are encouraged to write down the project reports.

Unit-I: The students will be required to make intensive study of case studies of applied anthropology in India.

Unit-II: Preparation of social impact assessment on locally implemented Policies sand Schemes.

Course Outcomes:

- a. The students will be able to know about the intensive applications of Anthropology in India.
- b. The students will get to know about the implementation of various policies and schemes.

Recommended Readings:

- 1. elshaw, C.L. 1976. The orcerer's Apprentice: An Anthropology of Public Policy. Pergamon Press Inc., New ork.
- 2. Burns, P, M. 1999. An Introduction to Tourism and Anthropology. Routledge, London.
- 3. Goldschmidt, W. 1986. Anthropology and Public Policy: A Dialogue. Americal Anthropological Association, USA.
- 4. Sulton, P. 2009. The Politics of suffering. Malbourne University Press, Victoria, Australia.
- 5. Fisher, R. 2002. Anthropology and Social Impact Assessment. Taylor and Francis, New York.
- 6. van Willigen, John. 2002. Applied Anthropology: An Introduction. Bergin and Garvey, CT, Westport, USA.

Core Course- 103- 1 (A): INTRODUCTION TO ARCHAEOLOGICAL ANTHROPOLOGY

Course Objectives:

- a. To make understand meaning, scope, relation to other branches of Archeological anthropology
- b. To understand Pleistocene epoch
- c. To understand the tool typology and technology
- d. To know above different dating methods
- e. To know the cultural chronology of Paleolithic, Mesolithic and Neolithic cultures

Unit I: Meaning, definition and scope of archeological anthropology. Relationship to other Branches of Anthropology, Earth Sciences, Physical Sciences, Life Sciences and Social Sciences. Define environmental Archaeology and ethno-archaeology.

Unit II: A Brief Outline on the Origin of Earth and Life and Geological Time Scale. Pleistocene Epoch Chronology; Pleistocene - Holocene Interphase Changes, Tool Typology and Technology. Tool Families: Pebble Tools, Hand Axe-Clever Complex, Flake Tool Complex, Blade Tool Complex, Microliths and Ground and Polished Tools.

Unit III: Dating Methods: Absolute and Relative Dating: Stratigraphy, Dendrochronology, Thermo-luminescence Dating, Pollen Dating, Varve analysis, Uranium Dating, Potassium-Argon Method, and C-14 Dating.

Unit IV: Cultural Chronology - Paleolithic, Salient Features of the Lower, Middle and Upper Palaeolithic Cultures, Mesolithic and Neolithic Cultures and their Artificers.

Course Outcomes:

- a. Able to define archaeological anthropology and its branches
- b. Understand the geological timescale, tool typology and technology
- c. The Course will explain the basic concepts and terminology used in prehistoric archaeology
- d. Understand chronological and cultural determinants of Indian and European prehistory

- 1. Agrawal, D.P. 1982. The Archaeology of India. London: Curzon Press
- 2. Barnouw, V. 1978. Physical Anthropology and Archaeology. Homewood: The Dorsey Press.
- 3. Bhattacharya, D. K. 1990. An Outline of Indian Prehistory. Delhi: PalakaPrakashan
- 4. Bordes, J. 1970. Tools of the Old and New Stone Age. New York: Natural History Press.
- 5. Bordes, F. 1968. The Old Stone Age. London: Weidenfeld& Nicholson.
- 6. Coles, J. M. and Higgs, E. S. The Archaeology of Early Man. London: Faber & Faber.
- 7. Daniel, G. 1967. The Origins and Growth of Archaeology. London: C.A. Watts & Co.
- 8. De Terra, H. and Paterson, T. T. 1939. Studies on the Ice Age in India and Associated Human Culture. Washington: Carnegie Institute, Publication No. 499.
- 9. Hole, F and Heizer, R. F. 1965. An Introduction to Prehistoric Archaeology. New York: Holt, Rinehart and Winston, Inc.
- 10. Kottak, C. P. 1982. Anthropology: The Exploration of Human Diversity. New York: Random House.
- 11. Michel, J. W. 1980. Dating Methods in Archaeology. Seminar Press.
- 12. Oakley, K. P. 1964. Man the Tool Maker. Chicago: University of Chicago Press.
- 13. Oakley, K. P. 1964. Frameworks for Dating Fossil Man. Chicago: Aldine Publishing Company.
- 14. Piggot, S. 1950. Prehistoric India. Harmondsworth: Pelican Books.
- 15. Rami Reddy, V. 1987. Elements of Prehistory. New Delhi: Mittal Publication.
- 16. Sali, S. A. 1990. Stone Age India. Aurangabad: Shankar Publications.
- 17. Sankalia, H.D. 1964. Stone Age Tools: Their Techniques, Names and Probable Functions. Poona: Deccan College Series.
- 18. Sankalia, H. D. New Archaeology Its Scope and Application to India, Ethnographic and Folk Culture Society

- 19. Sankalia, H. D. 1974. Prehistory and Prehistory of India and Pakistan. Pune: Deccan College Series.
- 20. Sankalia, H. D. 1977. New Archaeology: Its Scope and Application to India. (D.N. Majumdar Memorial Lecture 1964) Lucknow: Ethnographic and Folk Culture.
- 21. Scientific American. 1972. Biology and Culture in Modern Perspective. San Francisco: W. H. Freeman Company.
- 22. Turnbaugh, W. A., Nelson, H., Jurmain, R. and Kilgone, L. 1996. Understanding Physical Anthropology and Archaeology. New York: West Publishing House.
- 23. Weitz, C. A. 1979. Introduction to Physical Anthropology and Archaeology. Englewood Cliffs: Prentice-Hall, Inc.
- 24. Zeuner, F. E. 1958. Dating the Past. London: Methuen & Co.

PRACTICALS: INTRODUCTION TO ARCHAEOLOGICAL ANTHROPOLOGY

Course Objectives:

- a. Provide to enhance and spread the knowledge of various tools and typology.
- b. To strengthen the knowledge of various tool manufacturing methods and different techniques.
- c. To provide fundamental knowledge of various tool types such as core, flake and blade tools.

Unit I: Drawing, Description and Measurement of Tool Families belonging to Lower, Middle and Upper Paleolithic cultural Periods

Unit II: Draw and Description of Tool Families belonging to Mesolithic and Neolithic cultural period.

Course outcomes:

- c. This paper will be provided a general conceptual understanding of archaeology and it will be made understood of various tools and techniques of tool manufacturing hence it will be enabled to identify the different types of tools.
- d. This paper is basically designed for the students to taught various techniques of tool manufacturing and will also make practice to draw different tools.

- 1. Bhattacharya, D. K. 1979. Old stone Age Tools: A Manual of Laboratory Techniques of Analysis. Calcutta: K. P. Bagchi& Company.
- 2. Bordes, F. 1968. The Old Stone Age. London: Weidenfeld& Nicholson.
- 3. Cornwall, I. W. 1958. Soils for the Archaeologist. London: Phoenix House.
- 4. Jackson, M.L. Physical and Chemical Analysis of Soil. Englewood Cliffs: Prentice-Hall
- 5. Oakley, K. P. 1964. Man the Tool Maker. Chicago: University of Chicago Press, Phoenix Books.
- 6. Oakley, K. P. 1964. Frameworks for Dating Fossil Man. Chicago: Aldine Publishing Company.
- 7. Sankalia, H. D. 1971. Stone Age Tools and Techniques. Deccan College, Pune
- 8. Sankalia, H. D. 1994. Stone Age Tools: Their Techniques, Names and Probable Functions. Poona: Decan College Series.
- **9.** Shackley, M. L. 1975. Archaeological Sediments: A Survey of Analytical Methods. New York: Butterworth

Core Course- 103- 2 (B) :INDIAN ANTHROPOLOGY

Course Objectives:

To make understand

- a. Unity and diversity in Indian society and culture
- b. Basis of traditional Indian social structure and life cycle
- c. Different Caste system in India
- d. Major contributions of Indian Anthropologists to Anthropology

Unit- I: Unity and diversity in Indian society and culture: linguistic. Political, ethnic, communal and religious tensions and conflicts national integration.

Unit-II: Basis of traditional Indian social structure and life cycle: varnasharam dharma, purushartha, village: a part society: Jajmani system

Unit-III: Caste system- definition and criteria of caste system, varna and caste dominant caste Back ward castes and scheduled castes: statutory provisions.

Unit-IV: Major contributions of Indian Anthropologists M. N. Srinivas, S.C. Dube Andre Battlie and L. P. Vidyarthi.

Course Outcomes:

- a. Exposed to diversified linguistic, Political, ethnic, communal and religious tensions and conflicts national integration.
- b. Understand the social structure and lifecycle patterns of different past societies
- c. Understand the caste and varna systems.
- d. Learn the major contributions of different Indian Anthropologists to Anthropology

- 1. Allchin . B. & Allchin. T. The Rise of civilization in India and Pakistan, Cambridge University Press.
- 2. Sankalia, H. D. pre and proto History of India and Pakistan, Pune, Deccan college.
- 3. Karve, Irawathi, Kinship organization in India
- 4. Karve, Irawathi, Hindhu society an interpretation.
- 5. Mandelbaum, D. Society in India
- 6. Marriot, M, Village Indl: Studies in the Little community.
- 7. Singh, K. People of India: An Introduction, Calcutta Anthropological survey of India.
- 8. Vidyarthi, L. P. Scared complex of Kashi, A. Microcosm of Indian civilization, New Delhi, concept publication.
- 9. Leach, E. R. Aspects of caste in south India, Ceylon and North-West Pakistan.
- 10. Singer M; when a Great Tradition Modernizes.
- 11. Srinivas, M. N. Social change in Modern India.
- 12. Haimendorf, c. Tribes of India the struggle for survival..
- 13. Singh, K. S. Tribal Society in India.
- 14. Dube, S. C. India's changing villages.

PRACTICALS: INDIAN ANTHROPOLOGY

Unit-I: The students will be required to make intensive study of social structure and lifecycle patterns of different past societies.

Unit-II: Preparation of social impact assessment of Unity and diversity in Indian society and culture: A Case study

Recommended Readings:

- 1. Allchin . B. & Allchin. T. The Rise of civilization in India and Pakistan, Cambridge University Press.
- 2. Sankalia, H. D. pre and proto History of India and Pakistan, Pune, Deccan college.
- 3. Karve, Irawathi, Hindhu society an interpretation.
- 4. Mandelbaum, D. Society in India
- 5. Marriot, M, Village Indl: Studies in the Little community.
- 6. Vidyarthi, L. P. Scared complex of Kashi, A. Microcosm of Indian civilization, New Delhi, concept publication.
- 7. Srinivas, M. N. Social change in Modern India.
- 8. Singh, K. S. Tribal Society in India.
- 9. Dube, S. C. India's changing villages.

PRACTICALS: I- 104: SOMATOMETRY AND STONE AGE TOOLS

Skilled Oriented Course -105- 1- (A) – ECOLOGICAL ANTHROPOLOGY

Course Objectives:

Students will be understand

- a. Ecological Anthropology: Meaning and Scope
- b. Theoretical Formulations of ecology
- c. Ecological Issues
- d. Environmentalism

Unit I: Ecological Anthropology: Meaning and Scope; Concepts: Ecology, Ecosystem, Homeostasis of the Ecosystem, community and Population, Habitat and Ecological Niche, Ecosystem Development (or Ecological Succession), Environment, Adaptation, Culture Core.

Unit II: Theoretical Formulations: Environmental Determinism (Meggars); Environmental Possibilism (C. Wisler, A. L. Kroeber, D. Forde); Cultural Ecology (J. Steward); Techno-Economic and Techno-Environmental Determinism (M.Harris) Cognitive Ecology (H. Conklin, C. Frake and A. Beals); Single Unified Ecology (Vayda and Rappaport); Nature-Culture Dualism; Ethno-ecology.

Unit III: Ecological Issues: Forest and Tribes; Traditional Resources Management; NTFP; Sacred Grooves. Biodiversity for Sustainable Development; Community based Conservation (CBC): Issues and Prospects; Development Projects (Hydro-electric, Irrigation Projects and Industries) and Displacement.

Unit IV: Environmentalism: Meaning and Issues for Debate; Role of Anthropology; Ecological Protest Movements (Chipko and Narmada BachaoAndolan (NBA)); Environmental Policy and NGOs.

Course Outcomes:

- a. Understand the environment and ecosystem in understanding the cultural modifications
- b. Know about the cultural ecology, cognitive ecology, single unified ecology, and ethno ecology.
- c. Learn issues and prospects on development projects and displacement
- d. Understand Biodiversity for sustainable development
- e. Know about Ecological protest movements (Chipko and Narmada BachaoAndolan (NBA));

- 1. Frake, C. D. 1962. Cultural Ecology and Ethnography. American Anthropologist. 64: 53-60.
- 2. Harris, M. 1968. The Rise of Anthropological Theory. New York: Thoma Y. Crusell. (Chapter 23. pp. 654-687.
- 3. Meggars, B. J. 1954. Environmental Limitation to the Development of Culture. American Anthropologist. 56: 801-824.
- 4. Hardesty, D. L. 1977. Ecological Anthropology. New York: Wiley and Sons.
- 5. Kothari, A. et al. 1998. Communities and Conservation. New Delhi: Sage Publications.
- 6. Moran, E. R. 1971. Human Adaptability: An Introduction to Ecological Anthropology. Colorado: Westview Press.
- 7. Netting, R. Mc, C. 1971. The Ecological Approach in Cultural Study. New York: Addison Wesley Modules in Anthropology. Module 6 Sand Hill; Road, Menlo Park: Cummings Publishing Company.
- 8. Odum, E. P. 1991. Fundamentals of Ecology. Delhi: Nataraj Publishers.
- 9. Poffenberger, M. and McGean. 1998. Village Voices, Forest Choices: JFM in India. New Delhi: Oxford (Selected Chapters).
- 10. Ramakrishna, P. S. 1989. Managing Biodiversity for Sustainable Development. Ahmadabad: IIMA.
- 11. Ramakrishna, P. S. 1998. Conserving the Sacred: Ecological and Policy Implications. In. Ashish K. et al. (Ed.). Communities and Conservation. Sage Publications, New Delhi. Chapter 11. pp. 239-251.
- 12. Sahins, M. 1966. Culture and Environment: The Study of Cultural Ecology. In, Sol Tax (Ed.). Anthropology. Higginbotham, Madras.
- 13. Steward, J. H. 1968. Cultural Ecology. In. David Sills (Ed.). International Encyclopedia of Social Sciences. The Macmillan Co., The Free Press, N. Y.
- 14. Tiwari, D. D. 1994. Developing and Sustaining Non-timber Forest Products: Policy Issues and Concerns with Special Reference to India. Journal of World Forest Resource Management. 7: 151-178.
- 15. Vayda, A. P. (Ed.). 1969. Ecological Studies in Cultural Anthropology. Natural History Press, Garden City, N.Y.
- 16. Vayda A. P. and Rappaport, R. A. 1968. Ecology: Cultural and Non-Cultural. In. J. A. Clifton (Ed.). Introduction to Cultural Anthropology. Boston: Houghton Mifflin. pp. 477-497.
- 17. Viswandha Reddy, K 2002 Cultural Ecology of Indian Tribes. Delhi, M/S Raj Publications.

PRACTICALS: ECOLOGICAL ANTHROPOLOGY

Course Objectives:

- a. To acquaint the students about the ecology and ecological transition.
- b. To know about the concept of sustainable development and indigenous knowledge system.
- **Unit. I**: Types and Components of Ecosystem: Biotic and Abiotic, Ecological Niche **Unit. II:** Make a report on any contemporary environmental issue.

Course Outcomes:

- a. Know about the meaning, types and components of Ecosystem.
- b. To provide knowledge about the causes and consequences of ecological movements in India

Recommended Readings:

- 1. Cohen, Yehudi A. 1968. Man in adaptation; the cultural present. Chicago: Aldine Pub. Co.
- 2. Descola, Philippe, and GísliPálsson. 1996. Nature and society: anthropological perspectives. London: Routledge.
- 3. Guha, Ramachandra. 1990. The unquiet woods: ecological change and peasant resistance in the Himalaya. Berkeley: University of California Press.
- 4. Guha, Ramachandra. 2003. Social ecology. Oxford in India readings in sociology and social anthropology. Delhi [u.a.]: Oxford University Press.
- 5. Shiva, Vandana. 2009. Staying alive. [S.l.]: Zed Books Ltd.

Skilled Oriented Course -105- 1- (B) – Urban Anthropology Course Objectives :

- a. To understand history of urbanization
- b.To know about the Urban Environment and Ecological Processes
- c. To know about the Urban Ethnicity and urban development
- d. Urbanization and Industrialization in India

To understand the effect of urbanization on cultural transformation of different populations.

- **Unit- II**: Urban Environment and Ecological Processes: General Structure of Cities, Concentric Zone, Multiple Nuclei, Minor Nuclei, Slums, Suburbs and Satellites; Land use patterns; Growth of Cities and Towns: Effects of Demographic Growth on Urbanization: Urban Communication Networks.
- **Unit- III**: Urbanization and Industrialization in India: Cultural complexity and Urban society, Urbanism and Social organization; Social Categories: caste, Kinship and other forms of Associations Life styles of Urban Folk; Urban immigrants; Regional Linguistic Patterns of Immigrants, Structural Factors responsible for the inflow from Rural areas.
- **Unit- IV**: Urban Development: Problems and Perspectives, Urban Poverty, relevance of Anthropology to Urban Industry, Business and Corporate Sectors; Urbanization and Social Change in India.

Course Outcomes:

- a. Exposed to the history of urbanization.
- b. Understand the environment and ecological processes of urban
- c. Understand the urbanization and industrialization on cultural complexity
- d. Understand the relevance of anthropology to urban industry, Business and Corporate Sectors; Urbanization and Social Change in India.

Recommended Readings:

- 1. Banton, M. (Ed.). 1966. Social Anthropology of Complex Societies. London: Tavistock Publications.
- 2. Basham, R. and Degroot, D. 1977. Current Approaches to the Anthropology of Urban and Complex Societies. American Anthropologist. 79: 414-440.
- 3. Beidelman, T. O. 1959. A Comparative Analysis of the Jajmani System. Locust Valley, New York: Monograph of the Association for Asian Studies, No.8.
- 4. Betteille, A. 1974. Six Essays in Comparative Sociology. Delhi: Oxford University Press.
- 5. Blanter. 1976. Anthropological Study of Cities. ARA.
- 6. Eisenstadt, S. N. 1961. Anthropological Studies of Complex Societies, Current Anthropology, Vol.2, 201-210.
- 7. Fox, R. G. 1977. Urban Anthropology: Cities in their Cultural Setting. New York: Prentice-Hall.
- 8. Marriott, M. (Ed.). 1972. Village India: Studies in the Little Community. Chicago: The University of Chicago Press.
- 9. Rudolph, K. and Rudolf, L. 1960. The Political Role of India's Caste Associations. Pacific Affairs Vol. XXXIII No.1
- 10. Shah, A. M. Baviskar, B. S. and Ramaswamy, E. A.1996. Social Structure and Change. Vol. 3. Complex Organizations and Urban Communities. New Delhi: Sage Publications. Chapters 1, 4, 5 and 10.
- 11. Sharma, K. L. 1972. 'Modernization and Rural Stratification: An Application at the Micro-Level. Economic and Political weekly, Vol. 37.
- 12. Singer, M. When a Great Tradition Modernizes: An Anthropological Approach to Indian Civilization. New York: Praeger.

PRACTICALS: URBAN ANTHROPOLOGY

Course Objectives:

- a. Observing an urban situation.
- b. Understanding neighbourhood relations.
- c. Analyzing urban Kinship.
- d. Any other urban problems

Unit-I: Write a report on the problem selected using secondary sources.

Unit-II: Carryout fieldwork in any urban area and do any of the following type of primary research.

- a. A To visit city life among different urban community and appreciate the role of culture with politics and economics
- b. To document various Media related popular cultures Learning Outcomes: Empirical visit will be helpful for proper understanding of Urban life and its problems.

- 1. Eames, E& J. G. Good. 1977. Anthropology of the city. Prentice Hall.
- 2. Fox, R.G. 1977. Urban Anthropology: Cities and their Cultural Setting. Prentice Hal
- 3. Hannertz, U. 1983. Exploring the city inquires towards an urban anthropology. Colambia University Press.
- 4. Mangin, W.1970 Peasant in City. Houghon Mifflin
- 5. Melch, G.G & W.P. Zanner. 1996. Urban Life. Waveland Press
- 6. Southall, A.W. 1973. Urban anthropology: Cross-Cultural Studies of Urban Citites. Oxford University Press.
- 7. Southhall, A& A.W. Southall. 1973. Urban anthropology: Oxford University Press.

Skilled Oriented Course -106- 1- (A) – Data Management and Computer Applications

Course Objectives:

- a. To understand the Data: Concept and Definition, Development of Data. Data in Anthropology and Variables
- b. To know about the Personal computer operating system
- c. To know the SPSS package
- d. To learn the Excel

Unit I: Data: Concept and Definition, Development of Data. Data in Anthropology, Variables: Continuous and discontinuous variables, attributes and derived variables. Data collection methods; types of data, Accuracy and precision of the data, choosing appropriate scale and measurements to the data; preparing code book.

Unit II: Personal computer operating system – MS office –creating a document using word, editing and formatting text. Use of computers in the analysis of the data.

Unit III: SPSS: Getting to know SPSS, Preparing the Data, Screening and cleaning data, Manipulation of Data, preliminary analysis, Descriptive statistics: Correlation, Multiple Linear regression, one sample and two independent sample t test. Independent Chi Square Test, Logistic Regression and Discriminant Analysis. Factor Analysis, Cluster Analysis.

Unit – IV: Excel: Introduction manage workbook options and settings: Format worksheets and work books: Create and work books: Create Tables: Manage Table styles and options: Filter sort a Table perform operations with formulas and functions: create charts and objects: Apply custom data formats and layouts: create advanced formulas:

- a. Know about data Collection entry and management.
- b. Understand the M.S. Office.
- c. Exposed in using the SPSS in preparing charts and various advanced statistics
- d. Understand the excel package in using data analysis

- 1. Bryman, A and Cramer, D. 1977. Quantitative Data Analysis with SPSS for windows: A Guide for social Scientists London: Routeledge.
- 2. Bryman, A. and Cramer, D.1999. Quantitative Data Analysis with SPSS Release: 8 for windows: For Social Scientists. London: Routeledge.
- 3. Foster, J. J. 2001. Data Analysis Using SPSS for Windows Versions 8.0-10.0: A Beginner's Guide. Sage Publications India Pvt. Ltd. New Delhi.
- 4. Gilbert, N. 1989. Biometrical Interpretation, Making Sense of Statistics in Biology. Oxford: Oxford Science Publications.
- 5. Johnson, R. A. and Wichern, D. W. 1988. Applied Multivariate Statistical Analysis. London: Prentice-Hall International.

PRACTICALS: Data Management and Computer Applications

Unit I: SPSS: Getting to know SPSS, Preparing the Data, Screening of the data, preliminary analysis, Descriptive statistics: Descriptive statistics: one sample and two independent sample t test. Independent Chi Square Test, Correlation, Univariate and multivariate analysis, Logistic Regression and Factor Analysis

Unit-II: Excel: Format worksheets and work books: Customize options and views for worksheets and work books: Create Tables: Manage Table styles and options: Filter sort a Table perform operations with formulas and functions: create charts and objects: Apply custom data formats and layouts: create advanced formulas:

Skilled Oriented Course -106- 2- (B) – Prehistoric India Course Objectives :

- a. To understand the pre-history of India
- b. To know about the Indian Meosolithic culture in India
- c. To know the Indian Neolithic culture and Harappan civilizations
- d. To understand the metallic cultures and distribution of Megaliths

Unit I: Prehistory of India: Regional Distribution of Lower Paleolithic, Middle Paleolithic and Upper Paleolithic Cultures.

Unit II: Mesolithic Cultures: Climatic Changes, Typo-Technology, Habitat, Economic Activity and Socio-Religious features; Indian Mesolithic Cultures.

Unit III: Neolithic: Northern Zone, North-East Zone, Central Zone and Southern Zone; Harappan Civilization:

Unit IV: Copper and Iron age, Features and Distribution Megaliths.

- a. learn the regional distribution of lower, middle, and upper Paleolithic cultures
- b. To learn the Mesolithic culture and typo- technology
- c. Learn the regional distributions of Neolithic cultures
- d. understand the copper and iron age
- e. exposed to the distribution of megaliths

- 1. Agrawal, D.P. 1982. The Archaeology of India. London: Curzon Press
- 2. Allchin, B. and Allchin, F. R. 1968. The Birth of Civilization. Harmondsworth: Penguin Books
- 3. Allchin, B and Allchin, F. R. 1982. The Rise of Civilization of India and Pakistan. Cambridge: Cambridge University Press
- 4. Banerjee, N. R. 1965. Iron Age in India. Delhi: Munshiram Manoharlal
- 5. Barnouw, V. 1978. Physical Anthropology and Archaeology. Homewood: The Dorsey Press.
- 6. Bhattacharya, D.K. 2006. An Outline of Indian Prehistory. Delhi: PalakaPrakashan
- 7. Bordes, F. 1968. The Old Stone Age. New York: World University Press.
- 8. Brothwell, D. and Higgs, E. (Ed). 1970. Science in Archaeology. London: Thames & Hudson.
- 9. Butzer, K. W. 1971. Environment and Archaeology: An Ecological Approach to Prehistory. Chicago: Aldine.
- 10. Chakrabarti, D. K. 1992. The Early Use of Iron in India. Delhi: Oxford University
- 11. Press.
- 12. Clark, D. L. 1968. Analytical Archaeology. London: Methuen & Co. Ltd
- 13. Coles, J. M. and Higgs, E. S. The Archaeology of Early Man. London: Faber & Faber
- 14. Hester, J. J. Introduction to Archaeology. New York: Holt, Rinehart and Winston.
- 15. Kennedy, A. R. and Gregory, L. P. Studies in Archaeology and Palaeoanthropology of South Asia. London: Oxford & IBH Publishing Co.
- 16. Oakley, K. P. 1951. Man the Tool Maker. London: Weidenfeld and Nicolson.
- 17. Ramana, M. S. 1983. Megaliths of South India and South-East Asia. Madras: New Era Publications.
- 18. Rami Reddy, V. 1989. Palaeolithic and Mesolithic Cultures. New Delhi: Mittal Publication.
- 19. Rami Reddy, V. 1991. Neolithic and Post-Neolithic Cultures. New Delhi: Mittal Publication.
- 20. Sankalia, H. D. 1977. New Archaeology: Its Scope and Application to India. (D.N. Majumdar Memorial Lecture 1964) Lucknow: Ethnographic and Folk Culture Society.
- 21. Sankalia, H. D. 1974. Prehistory and Protohistory of India and Pakistan. Pune: Deccan College Series.
- 22. Turnbaugh, W. A., Nelson, H., Jurmain, R. and Kilgone, L. 1996. Understanding Physical Anthropology and Archaeology. New York: West Publishing House.
- 23. Bailey. G & Pspikns (Edn 2008) Mesolithic Europe Cambridge Uni Press
- 24. Possehi, G 2002. Harappan civilization A contemporary perspective New Delhi: Vistar Pub.

PRACTICALS: Prehistoric India

Course Objectives:

- a. To provide the basic knowledge of practical in archaeology and also provide to enhance and spread the knowledge of various tools and typology.
- b. To strengthen the knowledge of various tool manufacturing methods and different techniques.
- c. To provide fundamental knowledge of various tool types such as core, flake and blade tools.

Typo-technological Analysis of Prehistoric Tools: Identification, Interpretation and Drawings of the tool Types

- 1. Core Tool Types
- 2. Flake Tool Types
- 3. Blade Tool Types
- 4. Microlithic Tool Type
- 5. Neolithic Tool Type

Course Outcomes: The students will be able to

- a. This subject will ensure and stimulate the basic understanding of archaeological anthropology and will also make aware about the academic prospective of this subject.
- b. The subject will boost the knowledge of the present and past culture of human being and about the civilization.

Recommend Readings:

- 1. Allchin and Allchin (1993). The Rise of Civilization of India and Pakistan. CambridgeUniversity Press
- 2. Bhattacharya D.K. (1978). Emergence of Culture in Europe, Delhi, B.R. Publication.
- 3. Bhattacharya D.K. (1979). Old Stone Age Tools and Techniques. Calcutta, K.P. BagchiCompany
- 4. Bhattacharya D.K. (1996). Palaeolithic Europe. Netherlands, Humanities Press.
- 5. Champion et al. (1984). Prehistoric Europe. New York, Academic Press.
- 6. Fagan B.M. (1983). People of Earth: An Introduction. Boston, Little, Brown & Company.
- 7. Phillipson D. W. (2005). African Archaeology. Cambridge, Cambridge University Press.
- 8. Sankalia H.D. (1964). Stone Age Tools. Poona Deccan College

Practicals - II- 107- Human Ecology and Data management

SEMESTER – II

Core Course - 201- 4 – Theories of Culture

Course Objectives:

Aimed to understand the students

- a. Culture and Cultural Evolution
- b. Diffusion and Diffusions
- c. Culture and Personality
- d. Historical Approach

Unit I: Culture and Cultural Evolution: Meaning; Culture as Adaptive System; Ideational Theory of Culture (Culture as Cognitive, Structural and Symbolic Systems). Conceptual Contributions of E. B. Tylor, B. Malinowski, A. L. Kroeber, L. White, Unilineal Evolution (L. H. Morgan and E. B. Tylor); Multilineal Evolution (J. Steward); Universal Evolution (L. White); General and Specific Evolution (Sahlins and Service).

Unit II: Diffusion and Diffusions: British School; German-Austrian School; American – Distribution School.

Unit III: Culture and Personality; Patterns of Culture (R. Bendict); Basic Personality, Model Personality (Kardiner, Linton, Cora Dubois); Selfhood (Murphy); Symbolic (G. Obeysekere)

Unit IV: Historical Approach: History and Social Anthropology; Relevance of Historical Approach; Historical Particularism (F. Boas).

Course Outcomes:

- a. Understand the Conceptual Contributions of E. B. Tylor, B. Malinowski, A. L. Kroeber, L. White, Unilineal Evolution (L. H. Morgan and E. B. Tylor); Multilineal Evolution (J. Steward); Universal Evolution (L. White)
- b. To know the British School; German-Austrian School; American Distribution School of culture
- c. Know the Patterns of Culture (R. Bendict); Basic Personality, Model Personality (Kardiner, Linton, Cora Dubois); Selfhood (Murphy); Symbolic (G. Obeysekere)
- d. understand the historical approaches of culture

- 1. Carneiro, Robert L. 1973. The Four Faces of Evolution: Unilinear, Universals
- 2. Keesing, R. M. Theories of Culture. Annual Review of Anthropology. 12: 73-
- 2 0/
- 4. Harris, M.1968. The Rise of Anthropological Theory: A History of Theories of Culture. London: Routledge and Kegan Paul, (Chapters 6,7,9,10,14 and 22.)
- 5. Harold, R. S. and Naroll, F. 1973. Main Currents in Cultural Anthropology. New York: Appleton Century Crofts. (Chap.3: pp. 47-122 Chap 5: pp 157-184 and Chap.8: pp. 247-280)
- 6. Harris, M. 1969. Cultural Materialism: The Struggle for a Science of Culture. New York: Random House.

- 7. Kroeber, A. L. 1952. The Nature of Culture. Chicago: University of Chicago Press.
- 8. Lowie, R. H. 1973. History of Ethnological Theory. New York: Holt, Rinehart and Winston. (Chapters 9,10 and 11 pp 128-195
- 9. Manners, R. A and Kaplan, D. (Eds.). 1969. Theory in Anthropology. London: Routledge and began Paul,
- 10. Malinowski, B. 1960. A Scientific Theory of Culture and other Essays. New York: Oxford University Press.
- 11. Sahlins, M. D. and Service, E. R. (Eds.). 1960. Evolution, Specific and General, In Sahlins M. D. and Service E.R. (Eds.) Evolution and Culture. Ann Arbor: University of Michigan Press (PP 12-44)
- 12. Steward, J. H.1955. Theory of Culture Change: The Methodology of MultilinealEvolution. Illinois: University of Urbana, (Chap.1: PP 11-29)
- 13. Tylor, E. B. 1958. Primitive Culture: Researches into the Development of Mythology, Philosophy, Religion, Language, Art and Custom. Revised Fourth edition. New York: Harper Torch Books (TB-33-4) (Originally Published by J. Murray and Company in 1871) Vol. 1, Chapter 1: pp. 1-25)
- 14. White, L. A. 1969. The science of Culture: A Study of Man and Civilization. New York: Farrer Strauss and Ciroux, (Chapter13: pp. 363-396)
- 15. White, L. A. 1959. The Concept of Culture. American Anthropologist. 6: 227-251.

Core Course -202-5 (A) -COMPARATIVE ETHNOGRAPHY AND INDIAN ANTHROPOLOGY

Course Objective:

- a. To understand meaning, scope and major ethnological regions of the world
- b. To understand peoples and cultures of India
- c. To know the traditional Indian culture
- d. To understand the contributions to Indian Anthropology by different anthropologists

Unit I: Ethnology and Ethnography – Meaning, Scope and Method; Major Ethnological Regions of the World.

Unit II: Peoples and Cultures of India – Ethnic and Linguistic Classifications; Caste, Tribe, Dalits and Minorities (Broad Features and Identities); The Aryan controversy; Caste, family, marriage, kinship, authority and female autonomy in South India and North India.

Unit III: Traditional Indian Culture – Hindu Religious and Philosophical Traditions; Jajmani System and agrarian economy; Joint family; India as a Cultural Region; Ethnicity and pluralism; Sanskritization; Westernization; Modernization.

Unit IV: Contributions to Indian Anthropology – V. Elwin; N. K. Bose; I. Karve; M. N.Srinivas; S. C. Dube; S. C. Sinha; C. V. Furer-Haimendorf, L.P. Vidyarthi, Milton Singer Contemporary India: Globalization and Indian culture and society

- a. To understand the major ethnological regions of the world
- b. To know the ethnic and linguistic classifications
- c. Able to understand the traditional Indian culture
- d. To know the contributions of Indian anthropologists

- 1. Cohn, B. S. 1975. India: Social Anthropology of a Civilization. Englewood Cliffs: Prentice-Hall.
- 2. Elwin, V. 1959. A Philosophy for NEFA. Shillong: Sachin Roy on behalf of the North-East Frontier Agency.
- 3. Elwin, V. 1965. Tribal World of Elwin.
- 4. Forde, C. D. 1963. Habitat, Economy and Society: A Geographical Introduction to Ethnology. New York: Dutton and Company
- 5. Government of India. 1973. Tribal People of India. New Delhi: Publications Division, Ministry of Information and Broadcasting.
- 6. Haimendorf, C. 1982. Tribes of India, the Struggle for Survival. Delhi: Oxford...
- 7. Karve, I. Hindu Society an Interpretation
- 8. Leach, E. R. Aspects of Caste in South India, Ceylon and North-West Pakistan
- 9. Linton, R. 1955. The Tree of Culture New York: Harper & Row Publishers.
- 10. Majumdar, D. N. 1973. Races and Cultures of India. Bombay: Asia Publishing
- 11. Mandelbaum, D. 1970. Society in India. Bombay: Popular Prakashan.
- 12. Oswald, W. H. 1972. Other Peoples and Other Customs: World Ethnography and Its History. New York: Holt, Rinehart and Winston.
- 13. Singer, M. 1972. When a Great Tradition Modernizes: An Anthropological Approach to Indian Civilization. New York: Praeger.
- 14. Singh, K. People of India: An Introduction. Anthropological survey of India, Calcutta Singh, K. S. Tribal Society in India.
- 15. Srinivas, M. N. 1962. Caste in Modern India and other Essays. London: Asia Publishing House.
- 16. Vidyarthi, L. P. and Rai, B. K. 1993. Tribal Cultures of India New Delhi: Concept Publishing House.
- 17. Middleton, J. 1976. Studies in Social and Cultural Anthropology. New York: Thomas Cromwell & Co.

PRACTICALS -202-5 (A): COMPARATIVE ETHNOGRAPHY AND INDIAN ANTHROPOLOGY

Unit I: Ethnographic tools: Introduction Anthropological. Applications Photography

Unit II: Material Culture: Identification, Drawing and Description of the Prescribed Ethnographic Objects; Implements used in Procuring Food –Hunting and Gathering, Fishing, and Agriculture;

- 1. Basu, M. N. 1975. A Study of Material Culture. Calcutta: The World Press Pvt. Ltd.
- 2. Lips, J. 1938. Material Culture. New York: Watts & Co.
- 3. Collier, Jr. J.1978. Visual Anthropology: Photography as a Research Method.
- 4. Gabel, C. 1967. Analysis of Prehistoric Economic Patterns. New York: Holt, Rinehart and Winston, Inc.
- 5. Indian National Trust for Art and cultural Heritage. 1987. A Portrayal of Peoples. In Essays on Visual Anthropology in India. ASA New Delhi: Inter-India Publications.
- 6. Langness, L. L. 1967. The Life History in Anthropological Sciences. New York: Holt, Rinehart and Winston, Inc.
- 7. Madge, J. 1952. Tools of Social Science. New York: Free Press of Glencoe
- 8. Mead, M. 1963. Anthropology and the Camera. Encyclopedia of Photography. Ed.

- W.D. Morgan.
- 9. Royal Anthropological Institute. 1967. Notes and Queries on Anthropology. London: Routledge.
- 10. Sahay, K. N. 1982. A Brief History of Ethnographic Films in India. Visual Anthropology. Bulletin. IV: (1). June.
- 11. Williams, T. R. 1907. Field Methods in the Study of Culture. New York: Holt, Rinehart and Winston, Inc.

Core Course -202-5 (B) - DEMOGRAPHIC ANTHROPOLOGY

Course Objectives:

- a. To learn the definition and concept of demography, theories of population growth
- b. To learn the basic demographic variables and life tables
- c. To understand the factors regulating population growth
- d. To understand the different demographic models

Unit I: Definition and Concept of Anthropological Demography. Population Growth: Theories – Biological and Socio-Cultural.

Unit II: Basic Demographic Variables - Age, Sex, Marriage, Sex ratio, Fertility, Mortality, Migration and Population Growth. Factors Affecting Demographic Variables - Life tables – Their Construction and Uses.

Unit III: Factors Regulating Population Growth - Fertility Rate, Birth rate, Age-Specific Fertility Rates, Net Reproductive Rate, Mortality Rate, Migration Rates, Intrinsic Rate of Natural Increase;

Unit IV: Demographic and Genetic Consequences of Family Planning and Family Welfare. Demographic Models: Mathematical and Migration Models. Demographic Studies in Anthropology.

Course Outcomes:

- a. Know about the different population growth theories
- b. Learn the basic demographic variables
- c. Understand how the different factors regulates the population growth
- d. Understand the different demographic models
- e. Learn the genetic consequences of family planning

- 1. Baker, P. T. and Sanders, W. T. 1972. Demographic Studies in Anthropology. In. Annual Reviews in Anthropology, Volume I, (Ed.). Siegel, B. Palo Alto: Annual Reviews, Inc. pp. 151-178.
- 2. Bhende, A. and Kanitkar, T. Principles of Population Studies. Bombay: Himalaya Publishing House.
- 3. Bogue, D. 1969. Principles of Demography. New York: John C. Wiley & Sons, Inc.
- 4. Cavalli-Sforza, L. L. and Bodmer, W. F. 1971. The Genetics of Human Population. San Francisco: W. H. Freeman and Company.
- 5. Crawford, M. H. and Workman, P. L. (Eds.). 1973. Methods and Theories of Anthropological Genetics. Albuquerque: University of New Mexico Press.
- 6. Harrison G.A. and Boyce, J. (Eds.). 1972. The Structure of Human Populations. Oxford: Clarendon Press.

- 7. Hauser G. A. and Duncan, O. D. 1959. The study of Population. Chicago: The University of Chicago.
- 8. Malhotra, K.C. (Ed). 1988. Statistical Methods in Human Population Genetics. Calcutta: IBRAD, ISI and ISHG Publication.
- 9. Nag, M. 1962. Factors Affecting Human Fertility in Non-Industrial Societies: A Cross-Cultural Study. Yale University Publication in Anthropology. No. 66.
- 10. Swedlund, A. C. and Armelagos, G. J. 1976. Demographic Anthropology. Dubuque: WM. C. Brown Company Publishers.
- 11. Thomlinson, R. 1976. Population Dynamics: Causes and Consequences of World Demographic Change. New York: Random House.
- 12. Weiss, K.M. and Ballonoff, P. A. (Eds.). 1975. Demographic Genetics. Pensylvania: Hutchinson & Ross.

PRACTICALS: 202-5 (B) -DEMOGRAPHIC ANTHROPOLOGY

Course Objectives:

- a. The main purpose of this course is to provide the basic understanding of population studies.
- b. To understand schedule preparation for collection of demographic data.
- c. To study the compilation and presentation of population data from the secondary sources.
- d. To learn how to interpret data, report writing & API style of writing references.

Unit I: Preparation of schedules for collection of demographic data.

Unit II: Preparation of flow chart and graphic presentation

Unit III: Compilation and presentation of data on population studies (from secondary data like Census): (i) Age composition (ii) Sex composition (iii) Age ratio (iv) Fertility measures (v) Mortality measures

Unit IV: Pictorial comparison of health indicators

Unit V: Interpretation and Preparation of Report Writing, APA Style of writing references. **Course Outcomes:** The students will be able to understand:

- a. Understand preparation of schedules for demographic data collection.
- b. Analytical skills of data collection, interpretation, compilation, presentation & pictorial comparison from the secondary sources.

- 1. Mahadevan, K. Fertility and Mortality.
- 2. Agarwal, S. N. India's Population Problem.
- 3. Arora, Gomti. Social Structure & Fertility.
- 4. Bhenda, Asha, A. &Kanetkar Tara. Principles of Demography.
- 5. Bose, Ashish. India's Urbanization 1901-2001.
- 6. Srivastava, O. Demography.

- 7. Chand, Gyan. Population in Perspective.
- 8. Sandhya, S. Socio-Economic and Cultural Correlates of Infant mortality.6. Council for Social Development Publication. Aspects of Population Policy in India.
- 9. Davis-Kingsley. The Population of India and Pakistan.
- 10. G.A. Harrison, J.M. Tanner, D.R. Pilbeam, P.T. Baker. Human Biology.8. Driver, E. R. Differential Fertility in Central India.
- 11. Kesarwani, Baburam. Fertility and Differential Fertility.
- 12. Kumarg, T. K. Vimala. Infant Mortality among the Fishermen.
- 13. Mahadevan, K. Sociology of Fertility.
- 14. Mitra, Ashok. India's Population Vol. I & II.
- 15. Senapati R.N, P.K. Nayak, P.K.Das. Population profile of Orissa.
- 16. Sinha, V. Dynamics of Indian Population Growth.

Core Course -203-6 (A) – HUMAN EVOLUTION AND FOSSIL EVIDENCE

Course Objectives:

- a. To understand the theories of human evolution through paleontological evidences
- b. To understand the stages of human evolutions
- c. To understand the Neanderthal Origin; Phylogeny; Extinction; Affinities; Antiquity and Cultural Life
- d. To understand the spatial distributions of homo sapiens and future of human species

Unit I: Theories of Human evolution Paleontological evidence, evolutionary trends of primates prosimians to homosapiens with special reference to Dentition and limbs, Human bipadalism, Homanization processes.

Unit II: Hominid evolution. The problem of Ramapithicus and Dryopithicus. The Stages of Human Evolution Austrolopithicine stage Pithicinthropine stage - The Distribution, Antiquity and Origin; Nomenclature; Taxonomic Status; Skeletal Biology and Phylogeny; Cultural Life.

Unit III: The Neanderthals: Distribution, Taxonomy, Western European or Classical Neanderthals; The Neanderthal Collaterals: Fossil Hominids from Eastern Europe, Western Asia and Northern Africa; The Neaderthaloids and the Progressive Neanderthals; The Neanderthal Origin; Phylogeny; Extinction; Affinities; Antiquity and Cultural Life.

Unit IV: Homo sapiens: Discoveries; Distribution in Europe, Asia, Africa and Australia; Anatomical Characters; Cultural Variation and Development; Phylogenic Position. The Continuing Human Evolution and the Future of Human Species.

- a. Understand the evolutionary trends of primates, prosimianms to homosapiens
- b. To know the hominid evolution
- c. To know the Neanderthals distributions and extension
- d. Exposed to the homo sapiens distribution and feature of human species

- 1. Brace, C. L. 1967. The Stages of Human Evolution: Human and Cultural Evolution. Englewood Cliffs: Prentice-Hall, Inc.
- 2. Buettner-Janusch, J. 1969. Origins of Man: Physical Anthropology. New Delhi: Wiley Eastern Pvt. Ltd.
- 3. Buettner-Janusch, J. 1973. Physical Anthropology: A Perspective. New York: Wiley and Sons.
- 4. Chiarelli, A. B. 1973. Evolution of the Primates: An Introduction to the Biology of Man. Oxford: Clarendon Press.
- 5. Clark, Le Gross, W. E. 1962. The Antecedents of Man: An Introduction to the Evolution of the Primates. Edinburgh: Edinburgh University Press.
- 6. Clark, Le Gross, W. E. 1964. The Fossil Evidences of Human Evolution: An Introduction to the Study of Paleoanthropology. Chicago: University of Chicago Press.
- 7. Lewin, R. 1989. Human Evolution: An Illustrated Introduction. Boston: Blackwell Scientific Publications.
- 8. Nelson, H and Jurmain, R. 1991. Introduction to Physical Anthropology. New York: West Publishing Company.
- 9. Poirier, F. E. 1973. Fossil Man: An Evolutionary Journey. St. Louis: C.V. Mosby Company.
- 10. Poirier, F. E. 1974. In Search of Ourselves: An Introduction to Physical Anthropology. Minneapolis: Burgess and Company.
- 11. Stein P. L. and Row, B. M. 1989. Physical Anthropology. New York: McGraw-Hill Book Company.
- 12. Camilo.J, Cela Conde and Fransisco J, 2007 Human Evolution trails from the past Ayola oxford Uni press.
- 13. David.W Cameron & Collin.P, Goves- Elsevier In.2004.
- 14. Russel Tuttel 2007 The functional and Evolutionary biology of primates.
- 15. B.A. Wooded, L.B. Martin, Peter Andrues 2009 Manor topics in primate in Human evolution

PRACTICALS-: HUMAN EVOLUTION AND FOSSIL EVIDENCE

Unit I: Osteology: Drawing and Description of Limb Bones, Clavicle and Scapula.

Unit II: Osteometry: All the Students have to take the Following Linear and Angular Measurements on Clavicle, Scapula, and Limb Bones.

Clavicle: Maximum Length and Girth in the Middle; Angles: Two Angles of Curvature – Inner and Outer; Indices: Caliber Index and Claviculo-Humeral Index.

Scapula: Anatomical Breadth or Maximum Length, Anatomical Length or Maximum Breadth, Anatomical Breadth of Supraspinous Fossa, and Anatomical Breadth of Infraspinous Fossa; Angles: Breadth-Length Angle, Spino-Infraspinal Angle and Spino-Supraspinal Angle; Indices: Scapular Index and Fossorial Index.

Humerus: Maximum Length, Maximum Diameter in the Middle, Minimum Diameter in the Middle and Least Girth of Shaft; Angles: Torsion Angle and Condylo-Diaphysial Angle; Indices: Cross Section Index of Shaft and Caliber Index.

Radius: Least Girth of Shaft and Physiological Length; Angles: Torsion Angle and Collo-Diaphysial Angle; Indices: Caliber Index

Ulna: Maximum Length, Girth of Ulna and Physiological Length; Angles: Joint-Axis Angle and Olecrano-Coronoid Angle; Indices: Caliber Index and Length-Depth Index.

Femur: Maximum Length, Shaft Length, Physiological Length, Upper Sagittal Diameter of Shaft, Upper Transverse Diameter of Shaft, Sagittal Diameter of Middle of Shaft and Transverse Diameter of Middle of Shaft; Angles: Torsion Angle, Collo-Diaphysial Angle and Condylo-Diaphysial Angle; Indices: Robusticity Index, Pilastric Index and Platymeric Index.

Tibia: Total Length of Tibia, Girth of Shaft, Maximum Length of Tibia and Minimum Girth of Shaft; Angles: Inclination Angle, Retroversion Angle, Biaxial Angle and Torsion Angle.

Fibula: Maximum Length, Maximum Diameter in Middle, Minimum Diameter in Middle, Girth in Middle and Minimum Girth of Fibula; Angles: Torsion Angle; Indices: Cross-Section Index in Middle and Caliber Index.

Recommended Readings:

- 1. Comas, J. 1960. Manual of Physical Anthropology. Springfield: Charles C. Thomas and Company.
- 2. Das, B. M. and Deka, Ranjan. 1993. Physical Anthropology Practical. Allahabad: Kitab Mahal.
- 3. Montagu, A. 1960. A Handbook of Anthropometry. Springfield: Charles C. Thomas and Company.
- 4. Singh, I. P. and Bhasin, M. K. 1989. Anthropometry. Delhi: Kamalraj
- 5. Enterprises.

Core Course -203-6 (B) - STRUCTURAL ANTHROPOLOGY

Course Objectives:

- a. Students to understand structure and function
- b. To know about the Social Structure and Social Organization
- c. To learn the Structuralism (Levi-Straus)
- d. To understand the Symbols and Meanings

Unit I: Structure and Function: Organism Analogy; Social Structure and Function (A.R.Radcliffe-Brown); Functionalism and the Theory of Needs; Institution; Primitive Exchange and Religious Motivations; Psycho-Analytical and Bio-Cultural Interpretations (B. Malinowski)

Unit II: Social Structure and Social Organization: Ideal and Real (E. R. Leech); Social Organization (R. Firth); Status and Role (S. F. Nadal)

Unit III: Structuralism (Levi-Straus): General Notion of Structuralism; Surface Structure and Deep Structure; Binary Opposition; Model; Structural Approach and Myth.

Unit IV: Symbols and Meanings: Symbols and Structure (V. Turner and M. Douglas); Interpretative Anthropology (C. Geertz); Post-Modernism.

Course Outcomes:

- a. Know the social structure and function of culture
- b. Understand about the ideal and real social structure and social organization
- c. Know the general notion of structuralism
- d. Learn the symbols and structure

Recommended Readings

- 1. Firth, R. W. 1972. Elements of Social Organization. London: Tavistock Publications.
- 2. Hatch, E. 1973. Theories of Man and Culture. New York: Columbia University Press.
- 3. Kaplan, D. and Manners, R. A. 1972. Culture Theory. Englewood Cliffs: Prentice-Hall, Inc.
- 4. Kuper, A. J. 1975. Anthropologists and Anthropology. England: Peregrine Books.
- 5. Leach, E. R. 1970. Levi-Strauss. Fontana Modern Masters Series. London: William Collins.
- 6. Leach, E. R. 1965. Political Systems of Highland Burma: A Study of Kachin Social Structure.
- 7. Moore, J. A. 1997. Visions of Culture. London: Alta Mira Press.
- **8.** Radcliffe-Brown, A. R. 1973. Structure and Function in Primitive Society: Essays and Addresses. London: Routeledge and Kegan Paul.

PRACTICALS: STRUCTURAL ANTHROPOLOGY

Unit – I : Know the social structure and function of culture

Unit- II: Learn the symbols and structure

- 1. Firth, R. W. 1972. Elements of Social Organization. London: Tavistock Publications.
- 2. Hatch, E. 1973. Theories of Man and Culture. New York: Columbia University Press.
- 3. Kaplan, D. and Manners, R. A. 1972. Culture Theory. Englewood Cliffs: Prentice-Hall, Inc.
- 4. Kuper, A. J. 1975. Anthropologists and Anthropology. England: Peregrine Books.
- 5. Leach, E. R. 1970. Levi-Strauss. Fontana Modern Masters Series. London: William Collins.
- 6. Leach, E. R. 1965. Political Systems of Highland Burma: A Study of Kachin Social Structure
- 7. Moore, J. A. 1997. Visions of Culture. London: Alta Mira Press.
- 8. Radcliffe-Brown, A. R. 1973. Structure and Function in Primitive Society: Essays and Addresses. London: Routeledge and Kegan Paul

PRACTICALS - 204-III- MATERIAL CULTURAL AND OSTEOMETRY

SKILLED ORIENTED COURSE -205- (A) -3-APPLIED BIOLOGICAL ANTHROPOLOGY

Course Objectives:

Students to understand the

- a. Applications of Anthropometry
- b. Forensic Anthropology its application in crime investigation
- c. Genetic and Society
- d. Bio-Medical Anthropology its applications

Unit I: Applications of Anthropometry: Assessment of Nutritional Status; Clinical Applications of Anthropometry; Kinanthropometry – Body Proportionality in Relation to Sports; Applications in the Fields of Defense and Air Force, Artificial Limbs, Readymade Garments, Shoe Making and Furniture Industries, etc.

Unit II: Forensic Anthropology: Definition, Aims and Scope; Establishment of Identity through Skeletal Remains – Age, Sex and Reconstruction from Skeletal Remains; Dermatoglyphics in Forensic Anthropology; Personal Identification – Identification through Somatometry and Somatoscopy; Identification through Hair and Body Fluids in Personal Identification; Blood Location, Semen, Saliva and Urine Collection and Evaluation, Medico-Legal Aspects; Questioned Paternity; DNA Finger Printing.

Unit III: Genetic and Society: Congenital Malformations; Genetic Counseling – Genetical, Medical and Social Concepts and Essential Qualities of Genetic Counseling; Genetic Screening and Prenatal Diagnosis of Genetic Diseases; Genetic Engineering. Ethical Aspects of Genetic Counseling; Human Genome Project; Treatment of Genetic Diseases and Gene Therapy.

Unit IV: Bio-Medical Anthropology: Physical Anthropological Approaches to the study of Diseases: Goiter, Kuru and Sickle-Cell Anaemia. Blood Groups and Disease Associations. Concept of Race and Racism, UNESCO Statement, Race Relations Racial Fallacies.

- a. Know about various applications of anthropometry and kinanthropometry in various fields
- b. Understand about the importance of Forensic anthropology in crime investigations
- c. Know about the Congenital Malformations, Genetic Counseling Genetic Screening and Prenatal Diagnosis of Genetic Diseases; Genetic Engineering. Ethical Aspects of Genetic counseling; Human Genome Project; Treatment of Genetic Diseases and Gene Therapy.
- d. Understand about the importance of biological anthropology in study of various diseases

- 1. Croney, J. 1981. Anthropometry for Designers. New York: Von Nostrand Reinhold Company.
- 2. El-Najjer, M. Y. and McWilliams, R. 1978. Forensic Anthropology. Springfield: Charles C. Thomas Publishers.
- 3. Emery, A. E. H. 1983. Elements of Medical Genetics. Edinburgh: Churchill.
- 4. Kitano, H. H. L. 1974. Race Relations. Englewood Cliffs: Prentice-Hall, Inc.
- 5. Lewis, Rick. 2001. Human Genetics: Concepts and Applications. London: McGraw Hill.
- 6. Lohman, T. G., Roche, A. F. and Martorell R. 1988. Anthropometric Standardization Reference Manual. Illinois: Human Kinetic Books.
- 7. Mueller, R. F. and Young, I. D. 1998. Emery's Elements of Medical Genetics. Livingstone: Churchill.
- 8. Nussbaum, Robert L., Mclinnes, Roderick R. and Willard, Huntington F. 2001. Thompson and Thompson Genetics in Medicine. Philadelphia: W. B. Saunders Company.
- 9. Safe, P. 1993. Sociology. (Chapter 21: Race Relations). McMillan.
- 10. Singh, S. P. and Malhotra, P. 1989. Kinanthropometry. Patiala: Lunar Publications.
- 11. Sodhi, H. S. 1991. Sports Anthropometry. Mohali: Anova Publications.
- 12. Stevenson, A. C. and Davidson, B. C. 1976. Genetic Councelling. London: Heinmann.
- 13. Stewart, T. D. 1979. Essentials of Forensic Anthropology. Springfield: Charles C. Thomas and Company.
- 14. SurinderNath. 1984. Finger Print Identification. Delhi: Department of Anthropology, Delhi University.
- 15. SurinderNath. 1989. An Introduction to Forensic Anthropology. New Delhi: Gian Publishing House.

PRACTICALS: APPLIED BIOLOGICAL ANTHROPOLOGY

Course Objectives:

- a. To get practical knowledge of applied biology students do body measurements by the use of anthropometry and skin other instruments.
- b. To know about the nutritional status the measurements are taken and estimate the BMI of a person as well as the health status of a community.

Unit I: Techniques of taking basic Somatometric Measurements: Height, Weight, Waist circumference, Hip circumference; Estimation of Body Mass Index (BMI), Waist Hip Ratio (WHR), Waist Height Ratio (WHTR) and classification of obesity.

Unit II: Skinfold Measurements: Bicep, Tricep, Sub-scapular and Supra-iliac skinfold.

- a. Students get benefited after getting knowledge of body mass index skin fold measurements.
- b. They calculate the proper nutritional status through BMI.

Recommended Readings

- 1. Singh I. P. & Bhasin M. K. (1989) A Laboratory Manual on Biological Anthropology. Kamla-Raj Enterprises, Delhi.
- 2. Mukherjee, D., Mukherjee, D., & Bharati, P. (2009) Laboratory Manual for Biological Anthropology. Asian Book Private Limited, New Delhi.
- 3. Das B.M. and Deka R. Physical Anthropology Practical. Kitab Mahal, Allahabad, U.P.
- 4. Ulijaszek S.J., and Mascie-Taylor C.G.N. Anthropometry: the individual and the population.
- 5. Das, B. M. Outlines of Physical Anthropology. New Delhi.
- 6. Galton F. (1884) Anthropometric Laboratory. London (Also in J. Anthrop. Inst., (Lond.) 1884, 14, 205).

SKILLED ORIENTED COURSE -205- (B) 3-BIOSTATISTICS AND COMPUTER APPLICATIONS

Course Objectives:

- a. To understand the concept, definition and development of biometry.
- b. To understand the different statistical tools in data analysis
- c. To know about the Calculation of Gene Frequencies
- d. To understand the personal computer operating system

Unit I:Biometry: Concept and Definition, Development of Biometry. Data in Biological Anthropology, Variables in biological anthropology. Variables: Continuous and discontinuous variables, attributes and derived variables. Accuracy and precision of the data: Error groups.

Unit II: Statistical tools: Descriptive statistics: one sample and two independent sample t test. Independent Chi Square Test, Correlation, Univariate and multivariate analysis, Logistic Regression and Factor Analysis

Unit III: Personal computer operating system – MS office –creating a document using word, editing and formatting text Use of computers in the analysis of the data.

Unit IV: A note on statistical software's packages: Excel and SPSS charts and graphs and interpretation of the output. Power point presentation.

Course Outcomes:

- a. To understand the concept of research and its purpose
- b. To enlighten the process of research and conceptual structure of a research design
- c. Understand the disease outcomes through measurement of descriptive, analysis of variance and regression models through computer applications
- d. Know the use of computers in the analysis data and power point presentation

- 1. Bryman, A and Cramer, D. 1977. Quantitative Data Analysis with SPSS for windows: A Guide for social Scientists London: Routeledge.
- 2. Bryman, A. and Cramer, D.1999. Quantitative Data Analysis with SPSS Release: 8 for windows: For Social Scientists. London: Routeledge.
- 3. Foster, J. J. 2001. Data Analysis Using SPSS for Windows Versions 8.0-10.0: A Beginner's Guide. Sage Publications India Pvt. Ltd. New Delhi.

- 4. Gilbert, N. 1989. Biometrical Interpretation, Making Sense of Statistics in Biology. Oxford: Oxford Science Publications.
- 5. Johnson, R. A. and Wichern, D. W. 1988. Applied Multivariate Statistical Analysis. London: Prentice-Hall International.
- 6. Kempthrone, O. 1957. An Introduction to Genetic Statistics. New York: Wiley.
- 7. Khan, I. And Atiya, K. 1994. Fundamentals of Biostatistics. Ukaaz Publications.
- 8. Kinnear, P. R. and Gray, C. D. 1999. SPSS for Windows Made Simple. 3rd Edition. London: Psychology Press.
- 9. Malhotra, K. C. (Ed.). 1988. Statistical Methods in Human Population Genetics. Calcutta: IBRAD, ISI and ISHG Publication.
- 10. Mather, K. and Jinks, J. L.1977. Introduction to Biometrical Genetics. London: Chapman and Hall.
- 11. Morrison, D. F. 1984. Multivariate Statistical Methods. Singapore: McGraw Hill.
- 12. Neibauer, A. L. 2000. Office 2000 The Basics and Beyond 2000. New Delhi: Tata McGraw-Hill Publishing Company.
- 13. Rao, C. R. 1965. Advanced Statistical Methods in Biometric Research. New York: John-Wiley & Sons Inc.
- 14. Sarkar, S. K. and Gupta, A. K. 1998. Elements of Computer Science. New Delhi: S. Chand & Company. (Selected Chapters)
- 15. Sarma, K.V.S (2000), Statistics Made Simple, Do it Yourself on PC, Prentice Hall of India.
- 16. Siegel, S. 1956. Non-Parametric Statistics for the Behavioural Sciences. New York: McGraw-Hill.
- 17. Snedecor and Cochran. 1967. Statistical Methods. Oxford: Oxford Press.
- 18. Sokal, R. R. and Rholf, F. J. 1973. Biometry. San Francisco: W. H. Freeman and Company.
- 19. Sokal, R. R. and Rholf, F. J. 1973. Introduction to Biostatistics. San Francisco: W. H. Freeman and Company.
- 20. Sundar Rao, P. S. S. and Richard, J. 1996. An Introduction to Biostatistics. New Delhi: Prentice-Hall of India.

PRACTICALS: BIOSTATISTICS AND COMPUTER APPLICATIONS

Course Objectives:

- a. To understand how to draw genealogy.
- b. To provide hands on training on how to use different interview tools and techniques.
- c. To learn how to write case study and report writing on various demographic and social problems.
- d. To acquaint the students with various bio-statistical methods used in research.

Unit I: Statistical tools: Descriptive statistics, Paired independent sample tests Chi square test, one way analysis of variance, Correlation and regression.

Unit II: Personal computer operating system – MS office –creating a document using word, editing and formatting text Use of computers in the analysis of the data. A note on statistical software's packages: Excel and SPSS charts and graphs and interpretation of the out put. Power point presentation.

Course Outcomes:

- a. Learning of genealogy will help to study kinship system in a society.
- b. Learning of report writing will help students to be place in different research organization.
- c. Through this course, students will be able to conduct/participate in any kind of Social Research/Survey.
- d. Students will be able to apply the knowledge of bio-statistical tools in research

Recommended Readings

- 1. Research methods in cultural anthropology H. R. Bernard (1988). Sage.
- 2. Research Methods in Anthropology Qualitative and Quantative approaches: H. R. Bernard, (2006).Rowman and Lillerfield Publication.
- 3. Participant Obseivation J. P. Sproldley & K. Baker Holt Rinehart and Winston New York. (1980).
- 4. Cross-Cultural Research Methods. R. W. Brislin, W. J. Conner, R. M. Thorndike. John Willey and Sons.
- 5. Research Practices in the Study of Kinship. A. Barnard & A. Good. (1984). Academic Press.
- 6. Methodology and Fieldwork. V. K. Srivastava Oxford University Press (1994).
- 7. Research Methods in Anthropology. H. Russel and H. Russel. Alta Mira Press.
- 8. Case Study Research Design and Methods R. K. Yin Sage, (2008).

SKILLED ORIENTED COURSE -206- (A) 4 -RESEARCH METHODS IN ANTHROPOLOGY

Course Objectives:

- a. To under stand the field work traditions in anthropology
- b. To familiar with research design types of research design
- c. Make the students to understand different data collection techniques
- d. Prepare the students to understand the usage of different statistical tools in data analysis and preparation of writing the research report.
- **Unit I:** Field Work Tradition in Anthropology; Approaches: Emic-Etic, Macro-Micro Methods:Ethnography, Comparative Method, Participant Observation, Genealogical Method, Case Study and Survey.
- **Unit II:** Research Design: Review of Literature, statement of the research problem; Objectives, Hypotheses, Research Questions, Conceptual Model, Types of Research Design.
- **Unit III:** Techniques of Data Collection: (a) Primary Sources: Observation, Interview, Key Informants, Schedule and Questionnaire, Life History, Focus Group Discussion, Scaling Techniques, (b) Secondary Sources: Census, National Sample Survey, Documents and Records, Maps, National and International Reports (UNDP, World Bank, UNICEF, etc.); Archaeological Methods Exploration, Excavation and Documentation.
- Unit IV: Statistical Methods and Research Report: Sampling, Classification and Tabulation of Data, Variables, Measures of Central Tendency and Dispersion; Hypothesis Testing Statistics: t-Test and $\chi 2$ Test; Different Types of Reports. Preparation of Anthropological Research Report.

Course Outcomes:

- a. To understand the fieldwork traditions in Anthropology
- b. To understand the concept of research and its purpose
- c. highlight the conceptual structure of a research design
- d. understand the various statistical tools in the analysis and interpretation of the data

Recommended Readings

- 1. Bernard, H. R. 1988. Research Methods in Cultural Anthropology. London: Sage Publications.
- 2. Cohen, L. 1963. Statistical Methods of Social Scientists: An Introduction. New Delhi: Prentice Hall of India (p) Ltd.
- 3. Danda, A. Research Methodology in Anthropology. Inter-India New Delhi
- 4. Goode, J. and Hatt, P. K. 1962. Methods in Social Research, New York: Mc Graw Hill Book Company.
- 5. Kothari, C. R. 1997. Research Methods: Methods and Techniques. Delhi: WishwaPrakashan.
- 6. Madge, J. 1952. Tools of Social Science. New York: Free Press of Glencoe
- 7. Royal Anthropological Institute. 1967. Notes and Queries on Anthropology. London: Routledge and began Paul
- 8. Sundar Rao, P. S. S. and Richard, J. 1996. An Introduction to Biostatistics. New Delhi: Prentice-Hall of India.
- 9. Thomas, D. H. 1976. Figuring Anthropology: First Principles of Probability and Statistics. New York: Holt, Rinehart and Winston.
- 10. Werner, O. and Schoepfle. G. M. 1987. Systematic Field Work (Vol.1) Foundations of Ethnography and Interviewing. Newbury Park: C.A. Sage Publications.

PRACTICALS: RESEARCH METHODS IN ANTHROPOLOGY

Course Objectives:

- a. To understand how to draw genealogy.
- b. To provide hands on training on how to use different interview tools and techniques.
- c. To teach how to write case study and report writing on various demographic and social problems.

Unit-1. Genealogical method: Construction of Genealogy.

Unit-II. Project Report: The student shall undertake a project under which they will investigate and interpret a Physical or Social problem by collecting primary data from the field

Course Outcomes

- a. Learning of genealogy will help to study kinship system in a society.
- b. Learning of report writing will help students to be place in different research organization.
- c. Through this course, students will be able to conduct/participate in any kind of Social Research/Survey

Suggested Readings

- 1. Bernard, ft Research methods in Anthropology: Qualitative and Quantitative Approaches. altaMira Press. 2011.
- 2. Sarantakos, S. Social Research. London, McMillan Press. 1998.
- 3. Madriga L. Statistics for Anthropology. Cambridge, Cambridge University Press. 2012.
- 4. Zar, ZH, Biostatistical Analysis. Printice Hall. 2010.
- 5. Emerson RM, Fretz RI and Shaw L. Writing Ethnographic Field Notes. Chicago, Chicago University Press. 1995
- 6. Barnard, H.R. 2006. Research Methods in Anthropology. Qualitative and Quantative Approarches. Rowman Altamira Press.
- 7. O'reilly/Karen. 2012. Ethnographic Methods. London: Routledge.
- 8. Barnard, A. & A. Good. 1984. Research Practices in the Study of Kinship. Academic Press.
- 9. Bernard, Harvey Russell. 2006. Research Methods in Anthropology: Qualitative and Quantitative Approaches. Rowman Altamira Press.
- 10. Bernard, H.R. 1988. Research methods in cultural anthropology. Sage.
- 11. Brislin, R.W., W. J. Conner, R. M. Thorndike. 1973. Cross-Cultural Research Methods. New York: John Willey and Sons.
- 12. Creswell, John.W. 2014. Research Design: Qualitative, Quantitative, and Mixed Methods Approaches. Sage.
- 13. Krikand, J., and M. L. Miller. 1986. Reliability and Validity in Qualitative Research. Sage.
- 14. Miller, D.C. & N. J. Salkind. 2002. Handbook of Research Design & Social Measurement. Sage.
- 15. Patton, M.Q. 2014. Qualitative Research & Evaluation Methods: Integrating Theory and Practice. Sage Publications .
- 16. Spradley, James P. 1980. Participant Observation. New York: Holt, Rinehart and Winston New York.
- 17. Srivastava, V.K. 1994. Methodology and Fieldwork. Oxford University Press.

Skilled Oriented Course -206- (B) – 4- Human Ecology

Course Objectives:

Students to understand

- a. Human ecology definition scope, and types of habitat
- b. To understand human variation
- c. To know human growth and development
- d. Know about genetic adoptation

Unit- I: Human Ecology: Definition, Terms and concepts, Types of Habitat and Scope

Unit-II: Human Variation: Sources and Evidences, Ecological Evaluation and Adaption.

Unit-III: Human Growth, and development: An Environmental Perspective, Reactivity, Eco- Sensitivity, Adaptability of Human organism.

Unit-IV: Genetic Adaption: Differential Fertility and Mortality, Survival Indices, quality of Life and Fitness.

Course Outcomes:

- a. Exposed to the various ecological settings of human habitat .
- b. Know the ecological evaluation and adaptation.
- c. To understand the growth and development in various eco-systems
- d. Understand the Differential Fertility and Mortality, Survival Indices, quality of Life and Fitness.

- 1. Barth, F. 1956. Ecological Relationships of Ethnic Groups in Swat, Northern Pakistan.
- 2. American Anthropologist, 58: 79
- 3. Beals, A. R. 1974. Village Life in South India: Cultural Design and Environmental Variation. Aldine Publishing Company, Chicago.
- 4. Conklin, H. C. 1954. An Ecological Approach to Shifting Agriculture. Transactions of the New York Academy of Sciences Series 2. 17: 133-142.
- 5. Fikret B. (Ed.). Common Property Resources: Ecology and Community Based Sustainable Development. London: Belhaven Press A Division of Printer Publishers. (Chapter 3: Natural Resources: Access Rights-to-Use and Management. Pp. 33-54).
- 6. Harrison, G. A., Tanner, J. M., Pilbeam, D. R. and Baker, P. T. (Eds.). 1988. Human Biology: An Introduction to Human Evolution, Variation, Growth and Adaptability. Oxford: Oxford University Press.
- 7. Lewis, R. 2001. Human Genetics: Concepts and Applications. London: McGraw Hill.
- 8. Little, M. A. and Haas, J. D. 1989. Human Population Biology: A Transdisciplinary Science. New York: Oxford University Press.
- 9. Nussbaum, Robert L., Mclinnes, Roderick R. and Willard, Huntington F. 2001. Thompson and Thompson's Genetics in Medicine. Philadelphia: W. B. Saunders Company.
- 10. Schutkowski, H. Berlin 2006 Human Ecology: Bio- Cultural adaptations in human
- 11. communities-Springer Verlag.
- 12. Brown D E. 2010 Human Biological Diversity- An introduction to human biology.
- 13. Barry Bogin, Patterns of Human Growth, 2nd ed. (1991) Cambridge University, London.
- 14. J.M. Tanner, Growth at Adolescence, 2nd ed. (1962) Oxford; Blackwell Scientific..
- 15. Kaushik Bose Concept of Human physical growth and development (03-10-2007) URL No. http://nsdl.niscair.res.in/jspui/handle/123456789/243
- 16. Harrison, G. A., Tanner, J. M., Pilbeam, D. R. and Baker, P. T. (Eds.). 1988. Human Biology: An Introduction to Human Evolution, Variation, Growth and Adaptability. Oxford: Oxford University Press.
- 17. Garm, S.M. and Zvishamir. 1958. Methods for Research in Human Growth Charless. C. Thomas publishers, Springfield, Illlinois.
- 18. Indian Council for Medical Research, 1989. Growth and Physical Development of Indian infants and children. Tech. Rep. ser.,18. New Delhi.
- 19. Singh, I.P. and Bhasin, M.K. 1968 Anthropometry, BharathiBhavan Delhi.
- 20. Watson, E.H. and Lowrey, G.H. 1954. Growth and development of children. The year book publishers, Inc. Chicago, pp.296.
- 21. Nag, M. 1962. Factors Affecting Human Fertility in Non-Industrial Societies: A Cross-Cultural Study. Yale University Publication in Anthropology. No. 66.
- 22. Swedlund, A. C. and Armelagos, G. J. 1976. Demographic Anthropology. Dubuque: WM. C. Brown Company Publishers.

- 23. Thomlinson, R. 1976. Population Dynamics: Causes and Consequences of World Demographic Change. New York: Random House.
- 24. Weiss, K.M. and Ballonoff, P. A. (Eds.). 1975. Demographic Genetics. Pensylvania: Hutchinson & Ross.

Practical: Human Ecology Course Objectives:

- a. To provide the practical based knowledge of ecology, particularly based on biological and cultural dimensions to
- b. the under graduate students. To provide the basic knowledge about the procedures of taking measurement of different body shapes of the
- c. human being such as measurement of stature, sitting height, nasal breadth, body weight, body mass index, ponderindex and nasal index.
- d. To provide the basic concept and knowledge of the environment and provide guideline to prepare report writingon contemporary issues of environment.

Unit-I. Make a report on any contemporary population issue.

Unit- II. Make a report on any contemporary pollution or environmental issue.

Course Outcomes:

- a. This paper will enhance the practical based knowledge of ecology, human ecology and will also provide the ideas of biological and cultural dimensions in environment.
- b. This paper will also boost the knowledge about report writing on problems of ecology and their significance relation with human being.

Recommended Readings:

- 1. Human ecology: biocultural adaptation in human communities. (2006) Schutkowski, H. Berlin: Springer Verlag.
- 2. Human ecology and cognitive style: comparative studies in cultural and physical adaptation. (1976). Berry, J.B.New York: John Wiley.
- 3. Human ecology. (1964) Stapledon. Faber & Faber. Studies in Human Ecology. (1961) Theodorson, G.A. Row, Peterson & Company Elmsford, New York.
- 4. 4 Human ecology: (1973) Problems and Solutions. Paul R. Ehrlich, Anne H. Ehrlich and John P. Holdress.
- 5. Cohen, Yehudi A. 1968. Man in adaptation; the cultural present. Chicago: Aldine Pub. Co.
- 6. Redfield, Robert. 1965. Peasent society and culture an anthropological approach to civilization. Chicago [u.a.]:Univ. of Chicago Press.
- 7. Wittfogel, Karl August. 1957. Oriental despotism; a comparative study of total power. New Haven: YaleUniversity Press.
- 8. Symposium on Man the Hunter, Richard B. Lee, and IrvenDeVore. 1969. Man the hunter. Chicago: Aldine Pub.Co.. General Anthropology. Jacob and Stern

207- PRACTICALS -IV-APPLIED ANTHROPOLOGY AND RESEARCH METHODS

SEMESTER -III

CORE COURSE -301-7- DEVELOPMENTAL ANTHROPOLOGY

Course Objectives:

- a. To understand the meaning and scope of Development Anthropology
- b. To learn the various Steps in Planning Development Project
- c. To know the different Agencies of Development
- d. To learn the Model Project (Intensive Study)

Unit I: Development Anthropology: Meaning and Scope; Concept of Development and Sustainable Development; Relevance of Anthropological Knowledge in Role of Values and Institution in Development); Indices and Measurement of Development; Models and Theories in Development.

Unit II: Steps in Planning Development Project: Concept of Planning; The Logical Framework-Project Planning and Management Technique; Project Preparation and Defining of Goals; Process of Implementation; Monitoring and Evaluation; Social Assessment and Stake Holder Analysis.

Unit III: Agencies of Development: Role of Government Agencies; Non-Governmental Organizations; Community Based Organizations; Peoples Participation in Development.

Unit IV: Model Project (Intensive Study): Case Studies on Forestry; Watershed Management and Irrigation (RelegoanSiddi); Resettlement (Narmada); Poverty Alleviation (Velugu); Primary Education (VECs)

Course Outcomes:

- a. Know about the Concept of Development and Sustainable Development
- b. Understand the steps in project preparation, goals, process of implementation and monitoring.
- c. Role of government, NGOs and peoples participation in development
- d. Know the watershed management and irrigation, resettlement, (Narmada) poverty Alleviation (Velugu); Primary Education (VECs)

- 1. Cochrane, G. 1971. Development Anthropology. New York: Oxford University Press
- 2. Dalton, G. 1967. Economic Anthropology and Development: Essays on Tribal Peasant Economies. New York: Natural History Press.
- 3. Dube, S. C. 1989. Tradition and Development. New Delhi: Vikas Publishing Home.
- 4. Kurien, C. T. 1978. Poverty, Planning and Social Transformation. Bombay: Allied: Publishers.
- 5. Long, N. 1977. An Introduction to Sociology of Rural Development. London: Tavistock Publications
- 6. Mair, Lucy P. 1957. Studies in Applied in Anthropology. London: Athlona Press.
- 7. Mair. Lucy P. 1984. Anthropology and Development. London: Macmillan and company.
- 8. Mathur, H. M.1990. Ed. The Human Dimensions of Development: Perspectives from Anthropology. New Delhi: Concept Publishing Company.
- 9. Mathur, H. M. and Haimendorf, C. V. F. 1977. Anthropology in the Development Process. New Delhi: Vikas Publishing House.

- 10. Myrdal, G. 1970. The Challenges of World Poverty: A World Anti-Poverty Programme in Outline. Harmondsworth: Penguin Books.
- 11. Pitt D. C. 1967. Ed. Development from Below-Anthropologists and Development Situations. The Hague: Monton.
- 12. Spicer, E. H. (Ed.). Human Problems in Technological Change. A Case Book.
- 13. New York: Russell Sage Foundation

CORE COURSE - 302- (A)-8A- HUMAN GENETICS

Course Objectives:

- a. Methods of studying heredity
- b. To understand the human cytogenetics and prenatal diagnosis of chromosomal abnormalities
- c. To understand the human biochemical genetic variations and Genetic equililbrium
- d. To learn about the genetic equilibrium and selection intensity

Unit I: Patterns of Inheritance in Man: Autosomal dominant and recessive, Sex-linked dominant and recessive, Sex-limited and Sex- Influenced. Multiple allelism and Polygenic Inheritance with suitable examples. Blood groups and their Anthropological Perspectives. The ABO, Rh, and MN System.

Unit II: Human Cytogenetics: Chromosome Nomenclature and Mapping; Methods of Studying Human Chromosomes; Numerical and Structural Chromosomal Abnormalities. Prenatal Diagnosis of Chromosomal Abnormalities.

Unit III: Human Biochemical Genetic Variation: Serum Proteins and Enzymes (Hb, G6PD, PGM and Tf, Haemoglobinopathies), Gene-Enzyme Hypothesis; Inborn errors of Metabolism - Protein, Carbohydrate, Lipid Metabolites, Concept of Gene and its Expression. Replication, Transcription, Translation. Genetic Code, Recombinant DNA Molecules; Genetic Engineering; Genome Project and Ethical Issues.

Unit: IV: Mendelian Population with Reference to Man, Principles of Genetic Equilibrium: Hardy-Weinberg Law; Mutation, Hybridization, Genetic Drift and Selection, Genetic Isolates, Geographic Isolates, Mating system - Random Mating/Panmixia; Selective Mating/ Preferential Mating; Inbreeding Coefficient (Fratios), Genetic Load, Population Distance Measures.

Course Outcomes:

- a. understand the meaning and scope of human genetics
- b. know methods of studying human chromosomes and chromosomal abnormalities
- c. depict Inborn errors of metabolism with typical examples
- d. know the concept of "one-gene-one-enzyme hypothesis" which explains development of genetic diseases/disorders caused by defective genes controlling the functions of enzymes in metabolic pathways
- e. To know about the population structure

Recommended Readings

- 1. Bodmer, W. F. and Cavalli-Sforza, L. L. 1976. Genetics, Evolution and Man. San Francisco: W. H. Freeman and Company.
- 2. Brock, D. J. H. and Mayo, O. (Eds.). 1972. The Biochemical Genetics of Man. New York: Academic Press.
- 3. Crawford, M. H. and Workman, P. L. (Eds.). 1973. Methods and Theories of Anthropological Genetics. Albuquerque: University of New Mexico Press.
- 4. Giblett, E. R. 1969. Genetic Markers in Human Blood. Oxford: Blackwell Publications.
- 5. Harris, H. 1980. The Principles of Human Biochemical Genetics. Amsterdam: North-Hall and Publishing Company.
- 6. Harrison, G. A., Tanner, J. M., Pilbeam, D. R. and Baker, P. T. 1988. Human Biology: An Introduction to Human Evolution, Variation, Growth and Adaptability. Oxford: Oxford Science Publications.
- 7. Kan, Y. W. 1982. Haemoglobin Abnormalities: Molecular and Evolutionary Studies. Harvey Lecture Series. 76. Academic Press Inc.
- 8. Livingstone, F. B. 1967. Abnormal Hemoglobins in Human Populations. Chicago: Aldine.
- 9. Rothwell, N. V. 1977. Human Genetics. London: Prentice-Hall International.
- 10. Stern, C. 1973. Principles of Human Genetics. London: W. H. Freeman & Company.
- 11. Yunis, J. J. (Ed). 1969. Biochemical Methods in Red Cell Genetics. New York: Academic Press.

PRACTICALS: HUMAN GENETICS

Course Objectives:

- a. To determine the blood group typing.
- b. To study the colour blindness status, & PTC testing ability.

Unit I: Serology: Techniques and Procedures in Blood Grouping of ABO, Rh (D), MN Systems.

Unit II: Other Genetical Traits: Techniques and Procedures in determining the Tasting Ability to Phenyl Thio-carbamide and Identifying the Colour Blindness using the Ishihara Colour Plates.

Course Outcomes:

- a. Students will be able to determine blood group types, colour blindness status & PTC ability.
- b. Understand basic concepts of biochemical markers.

- 1. Harris H. Human Biolochemical Genetics. Cambridge University Press. 2010.
- 2. Relethford JH. Human Population Genetics. A John Wiley & Sons, Inc., Publication. 2012.
- 3. Steve Jones, Robert Martin and David Pilbeam (Edt.) The Cambridge Encyclopedia of Human Evolution. Cambridge University Press, 1997.
- 4. Grine FE, Fleagle JG, Leakey RE. The First Humans Origin and Early Evolution of the Genus Homo. Springer, 2006.

CORE COURSE 302–(B)-8B- TRIBAL INIDA

Course Objective:

Students to understand

- a. Concept and Definition of Tribe
- b. Tribal Development Administration
- c. Constitutional bodies and institutional arrangement for Tribal Development
- d. Development Initiatives

To understand the tribal development during pre and post independent period.

Unit- I: Concept and Definition of Tribe: Definition and classification of Tribe; Approaches towards Tribal development during pre and post independent period, Constitutional safeguards for Schedule Tribes; Fifth & Sixth schedules.

Unit-II: Tribal Development Administration: Tribal Sub- Plan- Integrated Tribal Development Agency (ITDA). Modified Area Development Agency(MADA), Cluster, Disperse Tribal Development Plan (DTDP) and Micro project.

Unit-III: Constitutional bodies and institutional arrangement for Tribal Development National Commission for STs, Tribal Advisory Council, Tribal Welfare Department, Tribal Research Institute.

Unit-IV: Development Initiative- Implementation and Impact of R&R Act, PESA and FRA.

Course Outcomes:

- a. Exposed to the various constitutional safeguard for schedule tribes.
- b. To understand the various tribal sub planes.
- c. To know the National Commission for STs, Tribal Advisory Council, Tribal Welfare Department
- d. To understand the implementation of developmental initiatives.

- 1. Aron, Raymond & Levi Strauss. Cultural Dynamics in Approaches to the Science of Socio-economic development (ed) by Peter Lengyel.
- 2. Vidyarthi L. P.(ed). Applied Anthropology in India.
- 3. Vidyarthi L. P & B. N. Shay(ed). Applied Anthropology and Development in India.
- 4. Behura, N. K. and Panigrahi, N. Indian Constitution and the Tribals: Functioning of Fifth Schedule in the state of Orissa.
- 5. Cassen Robert & Associate (ed) Does Aid work?
- 6. Cernea, Michael M. Putting people first: Sociological Variables in Rural Development.
- 7. Chambers, Robert, Rural Development; Putting the Last First.
- 8. Commission for UNESCO Neitherlands. Cultural Dimension of Development.
- 9. Mathur, Hari Mohan (ed). Anthropology in the Development Process.
- 10. Meier, Gerald, M. Leading Issues in Economic Development.
- 11. Dube, S.C. Modernization & Development: The Search for Alternative Paradigms.

- 12. Dube, S.C. Cultural Dimensions of Development in International Science Journal.
- 13. Foster, G. M. Traditional Culture and Impact of Technological Change.
- 14. Harris. J. (ed) Rural Development.
- 15. Mathur, Hari Mohan. The Human Dimension of Development: Perspectives from Anthropology
- 16. Nieuwinhuijze C. A. O., Van. Culture and Development: False dilemmas and real issues in ISSJ, Vol. 18.
- 17. Schumacher, E. F Small is Beautiful.
- 18. Skar, Horold (ed) Anthropological Contributions to planned change and Development.
- 19. Sharma, B. D. Planning for Tribal Development.

PRACTICALS: TRIBAL INIDA

Unit- I: Pick up any tribe of your choice, and visually present distinctive features of its society with special focus on gender, or sustainability or indigenous knowledge.

Unit- II: A project report of not more than 3000 words on contemporary tribal issues.

- 1. Bailey, F.G. (1960). Tribes, caste and Nations : A study of political activity and political change inttighland Orissa.
- 2. Béteille, André. (1998). The Idea of Indigenous People. *Current Anthropology*, Vol. 39, No. 2 (April 1998), pp. 187-192.
- 3. Behera, M.C. (ed). (2018). *Revisiting Tribal Studies: A Glimpse after Hundred years*. Japiur: Rawat Publications.
- 4. Fürer-Haimendorf, & Christoph, von. (1985). *Tribal populations and cultures of the Indian subcontinent*. Handbuch der Orientalistik, 7. Bd. Leiden: E.J. Brill.
- 5. Guha, Ramachandra(1996). Savaging the Civilised: Verrier Elwin and the Tribal Question in Late Colonial India. Economic and Political Weekly, Vol. 31, No. 35/37, Special Number (Sep., 1996), pp.2375-2380+2382-2383+2385-2389
- 6. Miri, Mrinal. (2003). *Identity and the moral life*. New Delhi: Oxford University Press.
- 7. Oommen, T. K. (2011). Scheduled Castes, Scheduled Tribes, and the Nation: Situating G.
- S. Ghurye. Sociological Bulletin, Vol. 60, No. 2 (May-August 2011), pp. 228-244
- 8. Sachchidananda. (1970). Tribe-Caste Continuum : A Case Study of the Gond in Bihar. Anthropos, Bd. 65, H. 5./6. , pp. 973-997
- 9. Srivastava, V. K. (2008). Concept of 'Tribe' in the Draft National Tribal Policy. *Economic and Political Weekly*, Vol. 43, No. 50 pp. 29-35
- 10. Vidyarthi, L. P. (1977). Tribal Culture of India: concept publishing company.
- 11. Xaxa, Virginius. (2008). *State, society, and tribes: issues in post-colonial India*. New Delhi: Dorling Kindersley (India)

CORE COURSE - 303 (A)-9A - EPIDEMIOLOGY

Course Objectives:

- a. To understand the Meaning and Scope, Methods, Rates, Indices, Genetic Epidemiology, Clinical Epidemiology
- b. To understand the Complex Diseases
- c. To know about human obesity and its complications
- d. To learn the Major Communicable and Non-communicable diseases

UNIT I: Epidemiology: Meaning and Scope, Methods, Rates, Indices, Genetic Epidemiology, Clinical Epidemiology

UNIT II: Complex Diseases: Concept, Genetic Factors, Environmental Impact, Etiology, Diagnosis, Prevalance; Prevention and Control of Diabetics, Cardio-Vascular Diseases and HIV/AIDS

UNIT III: Human Obesity: Characteristics, Types, Reasons and Complications on Individual Health, Prevention and Control.

UNIT IV: Major Communicable and Non-communicable diseases: Global and Indian Scenario; Malaria, and Tuberculosis: Etiology, Prevalence, Prevention and Management.

Course Outcomes:

- a. Exposed to the basic concepts in epidemiology with examples of epidemiology in different areas of public health.
- b. Understand the global burden of health outcomes and diseases by assessing measures and interpret the prevalence, risk, rate, and odds within the context of epidemiology
- c. Know about Complications of obesity on health its prevention and control
- d. Understand the complex web of biological, behavioral, cultural and environmental factors towards the prevalence of communicable infections and chronic infections

- 1. Robert H. Fletcher, Suzanne W Fletcher. Clinical Epidemiology: The Essentials
- 2. Robert C. E. Ston, Jare M Olson, LycePalmes. Biostatistical Genetics and Genetic Epidemiology
- 3. Ron Stall, Sandra m Cifford, Croing R Jeans. Anthropology and Epidemiology: Inter Disciplinary Approaches to the study of Health and Disease
- 4. Gary D Friedman. Primer of Epidemiology
- 5. Sackett et al., 1991. Clinical Epidemiology : A Basic Science for Clinical Medicine
- 6. Penny Webb, Chris Bain, Sandi Pirozzo. Essential Epidemiology : An Introduction for students and Health Professionals
- 7. JH. Abramson, Z.H. Abramson. Survey Methods in Epidemiological research, Programme Evaluation and Community Medicine

PRACTICALS: EPIDEMIOLOGY

Course Objectives

- a. To get practical knowledge in undertaking survey of various communicable and noncommunicable diseases in different population settings
- b. To know about the intervening factors in the community level

Unit I: Skills in developing various survey instruments of both closed and open ended

Unit II: Undertaking community surveys on different problems, submission of field report

Course Outcomes

- a. Students get knowledge on various epidemiological designs
- b. Calculate both the incidence and prevalence
- c. Know about confounding factors in the predisposition of both communicable and non-communicable diseases

Recommended Readings

- 1. Henryk, Dancygier (2005). Clinical Epidemiology. Lippincott Williams & Wilkins.
- 2. Patrick, Parfrey., Pietro, Ravani (auth.)., Brendan, Barrett., Patrick, Parfrey (eds.) (2009). Clinical Epidemiology: Practice and Methods. Humana Press
- 3. Thomas C. Timmreck (1998). An introduction to epidemiology. Jones and Bartlett
- 4. Jacques Cabaret, Serge Morand (auth.), Serge Morand, François Beaudeau, Jacques Cabaret (eds.) (2010). New Frontiers of Molecular Epidemiology of Infectious Diseases. Springer Netherlands
- 5. Yu-Kang Tu., & Mark S. Gilthorpe (2011). Statistical Thinking in Epidemiology. Chapman and Hall/CRC
- 6. Moyses Szklo, & Javier, Nieto (2014). Epidemiology: Beyond the Basics. Jones & Bartlett

303- CORE COURSE –(B)-9 B- FORENSIC ANTHROPOLOGY

Course Objectives:

- a. To Understand the crime types, crime scene and methods of investigation
- b. To know use of Dermatoglyphics in Forensic Anthropology and Somatoscopic characters in personal identification
- c. To understand the skeletal remains in Forensic Anthropology
- d. To learn the Modern methods in Crime Investigation

Unit I: Meaning and Scope of Forensic Anthropology, Crime types, Crime scene, Methods of Investigation; Death- Modes of Death, Assessment of time since death

Unit II:Dermatoglyphics in Forensic Anthropology, Poroscopy, Dead body finger printing, Somatoscopic characters in personal identification; Body fluids- Blood, Semen, Nasal secretion, Sweat, Hairs and Fibers in Personal Identification. Hand Writing, Foot and Tire marks in Criminal Investigation

Unit III: Skeletal remains in Forensic Anthropology: Age, Sex and Stature estimation; Forensic Odontology, Superimposition, Facial Physiognomy

Unit IV: Modern methods in Crime Investigation: DNA Finger Printing, Iris Image, Biometry, Polygraph and Lie Detection Tests

Course Outcomes:

- a. able to know about forensic anthropology, a specialized, applied branch of physical/biological anthropology which deals with the crime investigation
- b. understand how dermatoglyphic, somatoscopic characteristics and body fluids helpful in crime investigation
- c. know the use of skeletal remains in forensic investigations
- d. know the importance of modern methods in crime investigation

Recommended readings

- 1. Cherril, F. R. Finger Print Systems at Scotland.
- 2. EI-Najjer, M. Y. and McWilliams, R. 1978. Forensic Anthropology. Springfield: Charles C. Thomas Publishers.
- 3. Kind, S. and Micheal. Science Against Crime.
- 4. Krik, P. L. Crime Investigation.
- 5. Lewis, Rick. 2001. Human Genetics: Concept and Applications. London: McGraw Hill.
- 6. Lundguist, F. and Curry, A. S. Methods in Forensic Sciences.
- 7. Steward, T. D. Forensic Anthropology.
- 8. Stewart, T. D. 1979. Essentials of Forensic Anthropology. Springfield: Charles C. Thomas and Company.
- 9. SurinderNath. 1984. Finger Print Identification. Delhi: Department of Anthropology, Delhi University.
- 10. SurinderNath. 1989. An Introduction to Forensic Anthropology. New Delhi: Gain Publishing House.
- 11. Symans, J. Crime and Detection.
- 12. Turner. Forensic Science and Labaratory Techniques.
- 13. Yunis, J. J. (Ed.). 1969. Biochemical Method in Red Cell Genetics. New York; Academic Press.

PRACTICALS: FORENSIC ANTHROPOLOGY

Course Objective:

- a. To learn the scope and basic concepts of forensic anthropology
- b. To understand the methods used in forensic anthropology and their limitations
- c. To describe the applications of forensic anthropology

Unit I. Finger prints: Identification of living and dead through partial and complete prints. Classification of fingerprints for criminal record purposes. Chance Prints. Various methods of latent print development.

Unit II: Modern methods in Crime Investigation: DNA Finger Printing, Iris Image, Biometry, Polygraph and Lie Detection Tests

Course Outcomes:

Students will

- a. Be able to describe the scope and various concepts of forensic anthropology
- b. Understand the relevance of various methods used in forensic anthropology

Recommended Readings

- 1. Linda, L. Klepinger (2006). Fundamentals of Forensic Anthropology. Wiley-Liss.
- 2. Steven, N. Byers (2007). Introduction to Forensic Anthropology (3rd Edition). 2007.
- 3. Stewart, T. D. 1979. Essentials of Forensic Anthropology. Springfield: Charles C. Thomas and Company.
- 4. SurinderNath. 1984. Finger Print Identification. Delhi: Department of Anthropology, Delhi University.
- 5. SurinderNath. 1989. An Introduction to Forensic Anthropology. New Delhi: Gain Publishing House.
- 6. Symans, J. Crime and Detection.
- 7. Turner. Forensic Science and Labaratory Techniques.
- 8. Yunis, J. J. (Ed.). 1969. Biochemical Method in Red Cell Genetics. New York; Academic Press

304- PRACTICALS -I- ADVANCED BIOLOGICAL ANTHROPOLOGY

SKILLED ORIENTED COURSE - 305 (A)-5- MEDICAL ANTHROPOLOGY

Course Objectives:

- a. To understand the scope, meaning and Basic Premises in Medical Anthropology
- b. To understand the Epidemiology, Ecology, culture and diseases, Infectious and non-infectious diseases
- c. To understand the Ethno medicine
- d. To know about the Modern Medical systems and Health care delivery services

UNIT - I

- 1) Meaning and scope
- 2) Basic Premises in Medical Anthropology
- 3) Central concepts
- 4) Major theoretical frameworks

UNIT-II

- 1) Epidemiology: Definition and Components of study in epidemiology, rates and ratios used in epidemiology
- 2) Epidemiology and Medical Anthropology.
- 3) Ecology, culture and diseases
- 4) Infectious and non-infectious diseases

UNIT-III: Ethno medicine

- 1. Aetiology, disease classification
- 2. Diagnosis and treatment: Folk methods
- 3. Cultural context of health and illness behavior: illness behavior definition models of illness behavior

UNIT – IV: Modern Medical systems and Health care delivery services

- 1. Medical pluralism
- 2. Factors influencing health programmes
- 3. Medical practitioners and patients
- 4. Health Research: Anthropological methods critical medical and social economy approaches to health and illness.

Course Outcomes:

- a. Exposed to the basic concepts in epidemiology with examples of epidemiology in different areas of public health.
- b. Understand the etiology, control of infections and non-infections diseases
- c. Understand the ethno-medicine in the management of health and illness behavior
- d. Understand the modern medical systems and health care delivery services

References Readings:

Unit – I

- 1. Brown, Peter, 1998 understanding and Applying Medical Anthropology, London:
- 2. Mayfield Publishers.
- 3. Leiban R W (1974): Medical Anthropology In Hand Book of Social and Cultural Anthropology (Ed) Honnigman; Chicago, Rand Mc Nally& Co (pages 1031 -1071)
- 4. Brown J Peter, Ronanld L. Barret, Mark B Padilla (1998) Medical Anthropology: An Understanding to the Fields; In Understanding and Applying Medical Anthropology (Ed) Brown J Peter
- 5. Joshi PC & Anil Mahajan (1990):Medical Anthropology: an Over View, In Medical Anthropology (Ed) P.C Joshi and Anil Mahajan, New Delhi, Reliance Publishing House.
- 6. Joshi PC & Anil Mahajan (Ed) (1990): Medical Anthropology, New Delhi, Reliance Publishing House.
- 7. Foster M George & Anderson B G (1977): Medical Anthropology, New York, John Wiley & Sons pp (1-10)
- 8. Baer A Hans et al (2000): Medical Anthropology and the World systems; PP 1 -53
- 9. Johnson T.M & Sargent FG (Ed)(1990): Medical Anthropology: A Hand Book of Theory and Method; New York, Green wood Press

Unit - II

- 1. Park JE and K Park (1977): Text Book of Social and Preventive Medicine, Jabalpur, Banarasi Das Bhanot
- 2. Trostle A James and Johannes Sommerfield (1996): Medical Anthropology and Epidemiology, Annual Review of Anthropology 25, PP 253 74
- 3. Janes RC Craig et al (Ed.) (1986): Anthropology and Epidemiology: Interdisciplinary Approaches to the Study of Health and Disease, Boston, D. Reidel Publishing Company
- 4. Dubos Rene(1977): Determinants of Health and Disease In Culture, Disease and Healing (Ed), David Landy, New York, Mac Millan Pub.

Unit - III

- 1. Johnson T.M & Sargent FG (Ed) (1990): Medical Anthropology: A Hand Book of
- 2. Theory and Method; New York, Green wood Press
- 3. Foster M. Goerge& Anderson BG (1978): Medical Anthropology, New York,
- 4. John Wiley & Sons; PP 51-79.
- 5. Banarjee B G and Ritual J(1988): Folk Illness and Ethno medicine, New Delhi, Northern Book Centre
- 6. Loudon JB (Ed) (1976): Social Anthropology and Medicine, London, Academic Press.
- 7. SalilBasu (Ed) (1994): Tribal Health in India, Delhi, Manak Publications
- 8. Joshi PC & Anil Mahajan (Ed)1990) Medical Anthropology , New Delhi, Reliance Publishing House.

Unit - IV

- 1. David Mechanic (1978): Medical Sociology, New York, Free Press PP 249 286
- 2. Rodney M Coe (1978): Sociology of Medicine, New York, Mac Graw Hill Book Comp, PP 95 114
- 3. Denton (1978): Medical Sociology Houston Moffillin Company PP 73-85
- 4. Ignu U A (1979: Stages in Health Seeking: A descriptive Model social sciences
- 5. and Medicine. Vol. 13A
- 6. Logan HM et al (1978) Health and Human condition: Perspectives on Medical
- 7. Anthropology; Massachusetts, Durabury Press.
- 8. Foster M George & Anderson BG (1978): Medical Anthropology New York,
- 9. John Wiely& sons.
- 10. Lesile C (Ed)(1980): Medical Pluralism in world Perspectives, social Sciences and Medicine, VOl.14B 191.

PRACTICALS: MEDICAL ANTHROPOLOGY

Unit I: Make a project proposal on any relevant issue in Medical Anthropology.

Unit II: Do a short field-work to investigate any of the following.

- a. Cultural approach to health and healing.
- b. Traditional health practitioners.
- c. Collection of medical biographies.
- d. Indigenous knowledge of medicine.
- e. Any other as suggested by concerned teacher.

- 1. Alland, A . 1970. Adaptation in Cultural Evolution: An approach to Medical Anthropology. Columbia University Press.
- 2. Brown, Peter.J., and Svea Closser. 2016. Understanding and Applying Medical Anthropology. Routledge.
- 3. G.M. Foster and B.G Anderson. 1978. Medical Anthropology. McGraw-Hill Companies.
- 4. Helman, Cecil. 2007. Culture, Health and Illness.5th edition. Oxford: Butterworth-Heinemann

- 5. Kakar, Sudhir. 2013. Shamans, Mystics and Doctors. Knopf Doubleday Publishing Group.
- 6. Kalla, A.K.and P.C. Joshi. 2004. Tribal Health and Medicines. Concept Publishing Company.
- 7. Landy, David. 1977. Culture, Disease and Healing: studies in Medical Anthropology. Macmillan University Press.
- 8. Manderson, Lenore, Elizabeth Cartwright, Anita Hardon. 2016. The Routledge Handbook of Medical Anthropology. Routledge.
- 9. Mc Elroy, Ann, and PK Townsend. 2018. Medical Anthropology in ecological perspective. Routledge.
- 10. Simons, Ronald, C., and CC Hughes. 2012. The Culture-Bound Syndromes: Folk Illnesses of Psychiatric and Anthropological Interest. Springer Science & Business Media

SKILLED ORIENTED COURSE: 305-(B)-5-SOCIAL ANTHROPOLOGY OF COMPLEX SOCIETIES

Course Objectives:

Students will learn

- a. Meaning and approach of complex societies
- b. Peasant societies
- c. Complex cultures in western societies
- d. Urban anthropology and complex organizations

Unit I: Complex Societies: Meaning and Approach, Folk-Urban Continuum (R. Redfield); Great and Little Traditions (R. Redfield and Singer); Text and Context (Singer);

Unit II: Peasant Societies: Contributions of Redfield, Shanin and Eric Wolf; Peasants and Tribes; Peasants and Workers; The Image of Limited Good (G. M. Foster). Contemporary Peasant Communities.

Unit III: Complex Cultures in Western Societies: Social Class in Western Societies; Culture of Poverty (O. Lewis); Institutions in Complex Societies: Family and Kinship; Study of Culture at a Distance and National Character.

Unit IV: Urban Anthropology and Complex Organizations: Urban Anthropology: Meaning and Scope; Urban Problems and Anthropological Interventions; Urbanization and Social Change (Harshad R. Trivedi); Global problems and culture of capitalism.

Course Outcomes:

- a. Learn the meaning and approach of great and little traditions
- b. learn about the peasant societies and contemporary peasant societies
- c. know the culture of poverty, institution and complex societies
- d. understand problems of urbanization and social changes

Recommended Readings

- 1. Banton, M. (Ed.). 1966. Social Anthropology of Complex Societies. London: Tavistock Publications.
- 2. Basham, R. and Degroot, D. 1977. Current Approaches to the Anthropology of Urban and Complex Societies. American Anthropologist. 79: 414-440.
- 3. Beidelman, T. O. 1959. A Comparative Analysis of the Jajmani System. Locust Valley, New York: Monograph of the Association for Asian Studies, No.8.
- 4. Betteille, A. 1974. Six Essays in Comparative Sociology. Delhi: Oxford University Press.
- 5. Blanter. 1976. Anthropological Study of Cities. ARA.
- 6. Eisenstadt, S. N. 1961. Anthropological Studies of Complex Societies, Current Anthropology, Vol.2, 201-210.
- 7. Foster, G. M. 1965. Peasant Society and the Image of the Limited Good. American Anthropologist. 63: 293-315.
- 8. Fox, R. G. 1977. Urban Anthropology: Cities in their Cultural Setting. New York: Prentice-Hall.
- 9. Halperin, R. 1977. Peasant Livelihood: Studies in Economic Anthropology and Cultural Ecology. New York: St. Martins.
- 10. Kothari, R. 1970. Caste in Indian Politics. New Delhi: Orient Longmans.
- 11. Marriott, M. (Ed.). 1972. Village India: Studies in the Little Community. Chicago: The University of Chicago Press.
- 12. Redfield, R. 1956. Peasant Society and Culture: An Anthropological Approach to Culture. Chicago: university of Chicago Press.
- 13. Rudolph, K. and Rudolf, L. 1960. The Political Role of India's Caste Associations. Pacific Affairs Vol. XXXIII No.1
- 14. Shanin, T. (Ed). 1970. Peasant and Peasant Societies. New York: Penguin Books.
- 15. Shah, A. M. Baviskar, B. S. and Ramaswamy, E. A.1996. Social Structure and Change. Vol. 3. Complex Organizations and Urban Communities. New Delhi: Sage Publications. Chapters 1, 4, 5 and 10.
- 16. Sharma, K. L. 1972. 'Modernization and Rural Stratification: An Application at the Micro-Level. Economic and Political weekly, Vol. 37.
- 17. Singer, M. When a Great Tradition Modernizes: An Anthropological Approach to Indian Civilization. New York: Praeger.
- 18. Sober, G. 1960. The Pre-Industrial Society. New York:
- 19. Srinivas, M. N. 1964. Caste in Modern India and Other Essays. Bombay: Asia Publishing House.
- 20. Wolf, E. R. 1966. Peasants. Englewood Cliffs: Prentice Hall.

PRACTICALS: SOCIAL ANTHROPOLOGY OF COMPLEX SOCIETIES

Unit: I: A case study on Contemporary Peasant Communities.

Unit: II: A report on Problems of urbanization and social changes

SKILLED ORIENTED COURSE – 306-(A)-6 – HUMAN GROWTH, DEVELOPMENT AND NUTRITION

Course Objectives:

- a. Students will be able to learn about various stages and environmental factors involved in human growth and development which help them in understanding growth monitoring of a child.
- b. To know about different methods for studying growth
- c. To understand analysis of Human Physique and constitution or Body composition
- d. They will understand the role played by balance diet in leading a healthy

Unit I: Human Growth: Definition and Concept of Growth, Development, Differentiation and Maturation. Concept of Age and its Ascertainment: Chronological, Dental, Skeletal and Morphological. Stages of Growth: Infancy, Childhood, Juvenile, Adolescence, Adulthood and Senescence.

Unit II: Methods of Studying Growth: Cross-Sectional, Longitudinal and Semi-Longitudinal Studies and their Relative Merits and Demerits; Factors Affecting Growth: Genetic, Environmental and Hormonal. Growth Curves - Universal Curves: Lymphoid, Neural, General and Genital. Basic (Data) Curves: Distance, Velocity, Incremental and Percentile.

Unit III: Analysis of Human Physique and constitution or Body composition: Viola, Kretschemer, Sheldon and Health Carter. Human Physique and its Relation of Function, Disease and Behavior.

Unit IV: Human nutrition Basics Terms and Concept: Nutrients and Nutrition, Malnutrition, Under nutrition over nutrition and Obesity; Socio-Cultural Aspects of Nutrition; Functions and uses of Nutrients in Health and Disease. Groups at Risk. Infants growing children pregnant women and lactating mothers and aged people. Determinants of nutritional levels Anthropometric clinical sings and Biochemical diet and nutrition through diet surveys. Concept of References standards of Growth status. Secular trends of Growth and Nutrition.

Course Outcomes:

- a. Know about the Differentiate the term growth, maturation and development
- b. To learn the methods of studying growth and the factors affecting the growth
- c. To understand the Human Physique and its Relation of Function, Disease and Behavior.
- d. Know the socio-cultural aspects of nutrition and nutrients in health and diseases

- 1. Barry Bogin, Patterns of Human Growth, 2nd ed. (1991) Cambridge University, London.
- 2. J.M. Tanner, Growth at Adolescence, 2nd ed. (1962) Oxford; Blackwell Scientific..
- 3. Kaushik Bose Concept of Human physical growth and development (03-10-2007) URL No. http://nsdl.niscair.res.in/jspui/handle/123456789/243
- 4. Harrison, G. A., Tanner, J. M., Pilbeam, D. R. and Baker, P. T. (Eds.). 1988. Human Biology: An Introduction to Human Evolution, Variation, Growth and Adaptability. Oxford: Oxford University Press.
- 5. Garm, S.M. and Zvishamir. 1958. Methods for Research in Human Growth Charless. C. Thomas publishers, Springfield, Illlinois.

- 6. Indian Council for Medical Research, 1989. Growth and Physical Development of Indian infants and children. Tech. Rep. ser.,18. New Delhi.
- 7. Singh, I.P. and Bhasin, M.K. 1968 Anthropometry, BharathiBhavan Delhi.
- 8. Watson, E.H. and Lowrey, G.H. 1954. Growth and development of children. The year book publishers, Inc. Chicago, pp.296.

PRACTICALS: HUMAN GROWTH, DEVELOPMENT AND NUTRITION Course Objectives:

- a. To explain the various methods of assessing growth status using somatometric measurements
- b. Assessment of obesity through various indices.
- b. To provide knowledge about the estimation of body composition with skinfold thickness
- Unit-I. Assessment of body composition using different national/ International methods

Unit-II. Measurement of systolic and diastolic blood pressures. Calculation of Mean Arterial Pressure

Course Outcomes:

a. The students will learn about how to assess growth, obesity, body composition and Blood Pressure.

- 1. Growth, maturation & physical activity (2004) Malina, Robert M; Bouchard, Claude, Bar-Or, Oded. Human Kinetics.
- 2. Human growth and development by Cameron Noel {2002}. St. Louis, Academic Press.
- 3. Patterns of human growth by Bogin, Barry {1999}. Cambridge University Press.
- 4. Human biology: An introduction to human evolution, variation, growth & adaptability by Harrison, GA; Tanner, JM; Pilbeam. DR; Baker PT (1988). Oxford, England, Oxford University Press.
- 5. Proceeding on Human Physical Growth and Maturation by eds. Johnson, FE, Roche, AF, Susanne, C, (1980). Plenum Publishing Corporation.
- 6. Applied body Compositon Assessment (2009) Heyward, VH; Wagner DR Human Kinetic.

SKILL ORIENTED COURSE: 306 (B)-6-ANTHROPOLOGY OF RELIGION

Course Objectives:

- a. To understand the role of sacred complexes in cultural modifications in contemporary society
- b. To understand the Anthropological theories or religion
- c. To know the Analytical studies on religion
- d. To learn the Contemporary issues of religion

Unit – I: Anthropology of Religion: Meaning scope and relation with power and political leverage, ethic identity and other aspects of culture in traditional and modern societies; elements of religion: Ritual ceremony, myth, taboo, sacred and profane, Rites of passage; van Gennep (separation, Liminality and incorporation); Witchcarft; sacrifice (Hicks and Gwywne); purity and pollution (Pauline kolenda).

Unit – II: Anthropological theories or religion; Durkheims theory of religion; functional school of religion symbolism anthropological conceptualization of pilgrimage; sacred space; sacred time and sacred knowledge; man-nature-sprit complex and sacred complex as a dimension of Indian civilization (vidyarthi, sinha and saraswathi) conceptual contributions concerning civilization (primary-secondary of Robert redfield); universalization and parocholozation of Marriot cultural Media and cultural performance of singer.

Unit – III: Analytical studies on religion; Mini-Readings-The imagined landscape; Patters in the construction of Hindu sacred Geography (Diana L. Eck); The issue of Right of Food among the Hindu – Notes and comments (R S Khare); Moharam (A R Saiyid); Five symbols of sikh identity (J.P.S Uberoi); Aspects of sarora ritual and Shamansism (victor tuner); Ritual Regulation of environmental relations among a new guinea people (Ray A Rapport) and Christianity in India (K.N. Sahey).

Unit – **IV**: Contemporary issues of religion; the logic of religious violence (M. Juergensmeyer); Secularism (Brass and Madan) and fundamentalism; Religious conversion; Religious tourism; management and ecological issues.

Course Outcomes:

- a. Know about meaning and relation with power and political leverages, ethnic identity and other aspects of culture in tradition and modern societies
- b. Know the different anthropological theories of religion
- c. Know the issues of right of food among by Hindus, five symbols of sikh identity, Aspects of sarora ritual and Shamansism, and Christianity in India
- d. To understand Contemporary issues of religious violence, secularism and fundamentalism

- 1. Cole B. J. Ed.1982. Anthropology of Eighties introductory readings (chapter 23). The free press, New York. Pp371-385.
- 2. Das V. et. Al 1999 eds. Tradition pluralism and identify. Sage publications India Pvt Ltd., New Delhi (chapter 6) pp.111-136.

- 3. De Waal M.A. 1968. Religion and culture; An Introduction to Anthropology of Religion. New York: The McMillan Company.
- 4. Dube, S.C. 1965. The study of complex cultures in towards the sociology of culture in India. T.K.N. Unnithan, I and Yogendra Singh, New Delhi: Prentice Hall of India Pvt. Ltd.
- 5. Evans-Pritchard, E.E. 1965. Theories of Primitive Religion. Oxford: Clarendon Press.
- 6. Jha,M (Ed). 1991. Social Anthropology of Pilgrimage. New Delhi Inter-India Publications.
- 7. Madan, T.N. Ed 1977. Religion in India; 4th Edition. Oxford University Press, New Delhi, Chapters by P. Kolenda, A.R. Saiyid and J.P.S. Uberoi Stephen Fuchs, Origin of Religion.
- 8. Redfeild, Robert, 1956. Peasant society and culture; An Anthropological Approach to civilization. Chicago: University of Chicago Press.
- 9. Sahay, K.N. 1976 under the shadow of the cross. Calcutta; Institute of Social Science and Action Anthropology.
- 10. Singh, Yogendra 1973 Modernization of Indian tradition: New Delhi: Thomson press.
- 11. Siner, Milton 1972 When a great tradition modernizers? An Anthropological approach to Indian civilization. New York; Praegerpublishers .
- 12. Srinivas M.N. 1952. Religion and society among the Coorgs if South India, Oxford: Clarendon press (chapters 3 &4).
- 13. Tuner, V.W. 1967, Aspects of Saora ritual and shamanism: An approach to the Data of Ritual. In A.L. Epstein (Eds). 1967. The crafts of social Anthropology, London: Tavistock publications.
- 14. Vidyarthi, L.P. 1961. Sacred complex of Hindu-Gaya, Bombay Asia publishing house.

PRACTICALS: ANTHROPOLOGY OF RELIGION

Course Objectives:

To survey the anthropology of religion, involving the study of human beliefs and rituals concerning the supernatural among cultures in the past and present.

Unit I : Religion in contemporary global issues: Analysis on Religion, violence and peace measures in contemporary contexts or, Preparation of a project report on religion and environment.

Unit II: Religion and Spirituality in India: Collection of Narratives of narratives from peoples experiences with religion and spirituality in India.

Course Outcomes:

Students will examine the holistic nature of the anthropological approach towards the diverse belief systems and practices of the world

- 1. Bielo, James. S. Anthropology of Religion: The Basics, (Routledge Publishing, 2015).
- 2. DeNapoli E. Antoinette , Real Sadhus Sing to God:Gender,Asceticism and Vernacular Religion.(Oxford University Press,2013)
- 3. Eller, D.Jack. Introducing Anthropology of Religion:Linking Culture to the Ultimate(Routledge,2007).NY.

- 4. Elizabeth.S Beyond Religious Freedom: The New global politics of Religion .(Princeton University Press, 2017)
- 5. Furseth, I and P.Rapstad.An Introduction to sociology of Religion:Classical and Contemporary perspectives(Ashgate Publishing company, 2006).
- 6. Gottlieb, R. This sacred earth: religion, nature, environment. (Routledge Publication, 2004).
- 7. Hurd, Hobgood, L. and Whitney Bauman. Religion and Nature, (Bloomsbury Publication, 2018).
- 8. Jakelic, S. .Collectivistic Religions: Religion, Choice, and Identity in Late Modernity, (Routledge Publication, 2010).
- 9. King, E.Francis. Material Religion and Popular Culture.(Routledge, 2009)
- 10. Jacobson A, Knut South Asian Religions on Display:Religious Processions in South Asia and the Diaspora (Routlede, 2008)
- 11. Jakelic, S. Collectivistic Religions: Religion, Choice, and Identity in Late Modernity, (Routledge Publication, 2010).
- 12. Lambeck, Michel. A reader in Anthropology of Religion. (Wiley Blackwell, 2008). UK.

307- PRACTICALS - II -HUMAN PHISIOLOGY

IV semester

402-Paper: Project work / Field Work Dissertation

All the students of PG (M.Sc. IVth Semester) are required to undertake field work in rural/tribal/urban areas for preparation of dissertation under the guidance of teacher(s). The topic of the dissertation will be allotted by the concerned teacher (Supervisor). The students will prepare Field work Dissertation and present.

M.SC., DEGREE EXAMINATION, Branch: ANTHROPOLOGY

MODEL QUESTION PAPER

Re-Structured P.G. Programme (CBCS) as per National Educational Policy – 2020, National Higher Education Qualification Frame Work (NHEQF) and Guidelines of APSCHE (WITH EFFECT FROM THE BATCH ADMITTED IN THE ACADEMIC YEAR 2024-25)

Time: 3 Hrs Max. Marks: 70

Section - A

Answer any Five questions, All questions carry equal marks (5x 4 = 20)

1. Ethnography 2. Caste 3. Tribe 4. Jajmani system

5. Globalization 6. N.K. Bose 7. Joint Family 8. Sanskritization

Section - B

Answer ALL questions, All questions carry equal marks $(4 \times 12.5 = 50)$

9. Discuss the major ethnological regions of the world.

OR

Explain the scope and method of Ethnography.

10. Examine the contribution of L.P. Vidyarthi to Indian anthropology.

OR

Write a note on Ethnic classification of Indian population.

11. Explain the contribution of M.N. Srinivas.

OR

Describe about the Ethnicity and pluralism.

12. Discuss the linguistic classification of Indian population.

OR

Explain the Westernization.

M.SC., DEGREE EXAMINATION, Branch: ANTHROPOLOGY

MODEL QUESTION PAPER

Re-Structured P.G. Programme (CBCS) as per National Educational Policy – 2020, National Higher Education Qualification Frame Work (NHEQF) and Guidelines of APSCHE (WITH EFFECT FROM THE BATCH ADMITTED IN THE ACADEMIC YEAR 2024-25)

Time: 3 Hrs Max. Marks: 50

Section - A

Answer any Five questions, All questions carry equal marks (5x2 = 10)

1. Ethnography 2. Caste 3. Tribe 4. Jajmani system

5. Globalization 6. N.K. Bose 7. Joint Family 8. Sanskritization

Section - B

Answer ALL questions, All questions carry equal marks $(4 \times 10 = 40)$

9. Discuss the major ethnological regions of the world.

OR

Explain the scope and method of Ethnography.

10. Examine the contribution of L.P. Vidyarthi to Indian anthropology.

OR

Write a note on Ethnic classification of Indian population.

11. Explain the contribution of M.N. Srinivas.

OR

Describe about the Ethnicity and pluralism.

12. Discuss the linguistic classification of Indian population.

OR

Explain the Westernization.

M.SC., DEGREE EXAMINATION, Branch: ANTHROPOLOGY

MODEL QUESTION PAPER

ANO - 204 - Practical - related to CC 5 & 6)

Re-Structured P.G. Programme (CBCS) as per National Educational Policy – 2020, National Higher Education Qualification Frame Work (NHEQF) and Guidelines of APSCHE (WITH EFFECT FROM THE BATCH ADMITTED IN THE ACADEMIC YEAR 2024-25)

Time: 2 hrs. Answer All questions Marks: **35 marks**1. Identify, measure, draw, label and describe the specimen provided to you. 10 marks

2. Compare, draw, label and describe the cultural characteristics of the specimens 10 marks

3. Practical record 5 marks

10 marks

4. Viva – Voce