

(Learning Outcomes)

**Course offered by the Post Graduate Department of
Anthropology**

M.A. / M.Sc.



**P.G. DEPARTMENT OF ANTHROPOLOGY
CENTRE OF ADVANCED STUDY (CAS)
UTKAL UNIVERSITY
BHUBANESWAR – 751004**

2021-22

“Anthropology is the most scientific of the humanities and the most humanistic of the sciences” - A. L. Kroeber commented. Anthropology poises itself as a discipline of infinite curiosity about human beings. As the study of humankind, it seeks to produce useful generalisations about people and their behaviour to arrive at the fullest possible understanding of human diversity. Anthropologists try to seek answers to an enormous variety of questions about humans. They are interested in discovering when, where and why humans first appeared on the earth; how and why they have changed since then; how and why modern human populations vary/overlap in certain physical features. They are also interested in knowing how and why societies in the past and present have similar/different norms, values, customs, beliefs and practices.

1. Aims of Master's Degree Programme in Anthropology

The overall aims of the for Anthropology at PG level are:

- To help formulate postgraduate attributes, qualification descriptors, programme learning outcomes and course learning outcomes that are expected to be demonstrated by the holder of a Master's degree;
- To enable prospective students, parents, employers and others to understand the nature and level of learning outcomes (knowledge, skills, attitudes and values) or attributes a graduate/postgraduate should be capable of demonstrating on successful completion of MA/MSc;
- To maintain national standards and international comparability of standards to ensure global competitiveness, and to facilitate postgraduate mobility; and
- To provide higher education institutions and their external examiners an important point of reference for setting and assessing standards.

Structure of MA/MSc Course in Anthropology: M.A. / M.Sc. (Anthropology) shall be spread over a period of Two Academic Years consisting of four semesters. The duration of each semester shall not be less than 16 weeks or more than 18 weeks

1.2. GENERAL REGULATION

Semester System course under the **Choice Based Credit System (CBCS)** is in effect from the academic year 2013-2014 onwards.

1) Course offered and duration of the course:

Master of Anthropology (MA / M.Sc.): Two Years

Areas of Specialization:

1. Social-Cultural Anthropology
2. Biological Anthropology
3. Archaeological and Palaeocultural Anthropology
4. Development Anthropology

1. The distribution of Papers and Credit points are distributed as follows:

Paper / Credit	(A) Core Courses (C)	(B) Core Elective Courses (CE)	(C) Allied Elective Courses (AE)***	(D) Free Elective Courses* (FE)	(E) Audit Courses(AC)* *	TOTAL
Paper	10	5	2	0		18
Total Marks	1000	500	200	100		1800
Credit	44 [8x4= 32 2x 6 (Practical)= 12]	24 [4x4=16 + 1x8 (Dissertation)= 8]	12 (2x4=8)	04 (1x4=4)		82

2. Semester wise distribution of papers/credits

Semester	Core	Core Elective	Allied Elective	Free Elective	Total	
					Paper	Credit*
I	5 (5 X 100= 500)	0	0	0	5	22
II	5 (5 X 100= 500)	0	0	0	5	22
III	0	2	2	0	4	16
IV	0	4 (2x4 credits = 8) (1Practical x6 credit; and 1 Fieldwork & Dissertation x 8 credit)	0	1	4	22
Total Papers	10	6	2	1	18	82
Total Credits	44	30	08	04	82	

Theory = 4 credits, Practical = 6 credits & Dissertation (1 paper) = 8 credits = 100 marks

Mode of Evaluation & Pass Marks for Theory and Practical/ Dissertation or Fieldwork Based Papers

Mid-Semester Examination: 30%

End- Semester Examination: 70%

For theory paper the pass mark is 30 out of 100 (09 out of 30 in mid-term and 21 out of 70 end-term examinations) and similarly in case of papers on practical / dissertation or fieldwork, the pass mark is 40 out of 100 (12 out of 30 in mid-term and 28 out of 70 end-term examinations).

3. Title/name of papers:

Se me ster	Types of Papers	Code numbe r of the Paper	Name of the Paper (Course Titles)	Objectives	Outcomes
I	Core Course (C)	ANTH -C-1	Social and Cultural Anthropology	To provide basic skills and concepts in Socio-cultural Anthropology	The students will learn key concepts in social and cultural anthropology. The students will also learn about social institutions, associations and organisations of traditional societies.
		ANTH -C-2	Biological Anthropology	To provide basic skills and concepts in Biological Anthropology	The students will learn various theories and principles of organic evolution, primatology, and paleoanthropology. They will learn about the basic concepts of human genetics, population genetics and genetic variation.
		ANTH -C-3	Archaeologica l Anthropology	To provide basic skills and concepts in Archeological Anthropology	The students will learn about key concepts in archeological anthropology, methods of dating, prehistoric stone tools and techniques. They will learn also about the prehistoric environment and the development of lithic cultures in Africa, Europe and Asia.
		ANTH -C-4	Research Methodology and Statistics	To demonstrate basic trainings and skills for collection of anthropological data and use statistics.	They will also learn about various qualitative and quantitative methods and techniques of data collection, data analysis and report writing in anthropological research.

		ANTH -C-5	General Practical: Biological and Forensic Anthropology	To demonstrate basic trainings and skills in Biological and forensic anthropology.	The students will have hands on training experience on collection and analysis of demographic data, human osteology and craniometry, forensic analysis of fingerprints and tress elements, nutritional anthropometry and physiological data.
II	Core Course (C)	ANTH -C-6	Indian Society and Applied Anthropology	To provide basic knowledge and concepts in Indian Society and Applied Anthropology	The students will learn about structure of Indian society and the contributions of Indian anthropologists to study the Indian civilization. The students will also learn about the issues and problems, development programmes, movements and committee reports on tribes of India
		ANTH -C-7	Ecological Anthropology	To provide basic concepts and skills in Ecological Anthropology	The students will learn about the cultural determinants of environment, various components of ecology and human biocultural adaptation. The students will also learn about environmentally sustainable development as well as environment policy in India.
		ANTH -C-8	Anthropologic al Thoughts	To provide basic concepts and knowledge about thinkers and theoretical debates in Anthropology.	The students will learn about the emergence of anthropology as an empirical discipline and the theoretical debates in the discipline.

		ANTH -C-9	Medical Anthropology	To provide basic concepts and skills in Medical Anthropology	The students will learn about basic concepts about health, sickness and disease from anthropological perspectives. They will also learn about medical pluralism in India and disease transition and policies.
		ANTH -C-10	General Practical : Prehistoric Archaeology and Museology	To demonstrate basic trainings and skills in Prehistoric Archaeology and Museology.	The students will learn about the skill to identifying the prehistoric tools and artifacts, basic principles of museum and identification and use of museum specimens. They will also learn about prehistoric techniques and tool typology.
III	Core Elective (CE)	ANTH -CE-A1	Anthropological Theories on Culture	To provide basic concepts and knowledge on anthropological theories of culture.	The students will learn about the science and humanity in social anthropology, approaches to the study of culture, evolutionism, neo evolutionism, diffusionism to study culture. The students will learn about functional, configurational, culturlogical approach to study culture.
		ANTH -CE-A2	Psychological Anthropology	To provide basic concepts and skills in Psychological Anthropology.	The student will learn about the meaning and scope of psychological anthropology. The students will learn about personality and human nature, psychology of culture change, inter-generational change and cultural psychiatry.
		AE-A1	Tribes of India: Their Problems and Development	To provide basic knowledge about the indigenous communities in India, their problems and development perspectives.	The students will learn about basic concepts on tribe, distribution in India, emerging problems and constitutional and other policy remedies for their welfare and development.

		AE-A2	Anthropology of Gender	To provide basic knowledge of gender and Anthropological perspectives of gender and its significance.	The students will learn about the origin and growth of anthropology of gender, and they will learn about the contributions of feminist Anthropologists.
		ANTH-CE-B1	Human Biology	To provide basic concepts and skills in Human Biology.	The student will learn about the meaning and scope of human biology, biological systems and its evolutionary linkages. They will learn about human growth and development, BP programmes and human bio-cultural variation and adaptation.
		ANTH-CE-B2	Demographic Anthropology: Meaning & Methods of Study	To provide basic concepts, methods and skills in Demographic Anthropology.	The students will learn about basic concepts of demography and demographic profile of small communities, LGBTQ, refugees and concerned policies.
		AE-B1	Forensic Anthropology & Criminology	To provide basic concepts, methods and skills in Forensic Anthropology and Criminology.	The students will learn about scope and application of forensic anthropology and odontology.
		AE-B2	Biotechniques	To provide basic tools and techniques in biotechnology	To will have basic training on methods and principles in biotechnology.
		ANTH-CE-C1	Principles and Methods in Prehistoric Archaeology	To provide basic concepts, methods and skills in Prehistoric Archaeology	The students will learn about the principles and methods in Prehistoric Archaeology, Ethnoarchaeology of Odisha and India.

		ANTH -CE- C2	Prehistoric Archaeology and Palaeoanthropology of Africa and Europe	To provide basic concepts, methods and skills in Paleoanthropology of Africa and Europe.	The students will learn about Pleistocene events and early humans. They will also learn about prehistory of Africa and Europe.
		AE-C1	Archaeology of Odisha	To provide basic knowledge on Odisha Archaeology and different prehistoric sites of Odisha.	The students will learn about the discovery and distribution of major archaeological sites in Odisha and its significance.
		AE-C2	Heritage of Odishan Art and Archaeology	To provide knowledge on the heritages of Odisha Art and development of temple architecture.	The students will learn about the temple iconography, sculptures and cultures of Odisha.
		ANTH -CE- D1	Principles in Development Anthropology	To provide basic concepts, and principles in Development Anthropology.	The students will learn about development as a historical process. They will learn about meaning of Economic development and Economic growth, the concept of developmental state and the concept of Globalization as a highly differentiated process of change.
		ANTH -CE- D2	Theories & Methods in Development Anthropology	To provide basic theories and methods in Development Anthropology.	The students will learn about various theories of development. They will learn about problems of development, preparation of development action plans, cost-benefit analysis, and participatory research methods.

		AE-D1	Tribes of India: Their Problems and Development	To provide basic knowledge about the indigenous communities in India, their problems and development perspectives.	The students will learn about basic concepts on tribe, distribution in India, emerging problems and constitutional and other policy remedies for their welfare and development.
		AE-D2	Anthropology of Gender	To provide basic knowledge of gender and Anthropological perspectives of gender and its significance.	The students will learn about the origin and growth of anthropology of gender, and they will learn about the contributions of feminist Anthropologists.
IV	Core Elective (CE)	ANTH -CE-A3	Anthropological Theories on Society	To provide basic concepts and theories of society in Anthropology	The students will learn various approaches to study the society and culture. They will learn various anthropological theories on society including symbolic, interpretative and postmodern anthropology.
		ANTH -CE-A4	Linguistic Anthropology	To provide basic concepts and theories of Linguistic Anthropology	The students will learn about language and its place in anthropological studies. They will learn about phonetics, phonemics and syntax of language, classification of language and cultural interpretation of language.
		ANTH -CE-A5	Practical: Research Methods and Ethnography Readings	To provide basic skill and training on research methods and exposure to established ethnographic works .	The students will learn various methods used for research works in anthropology as well as they will learn about the works of luminary anthropologists.

		ANTH -CE- A6	Fieldwork and Dissertation	To provide basic skill and training to collect primary data.	The student will learn how to collect the qualitative and quantitative data, its analysis, interpretation and report write.
		ANTH -CE- B3	Medical Genetics	To provide basic concepts and methods in Medical genetics. Linguistic Anthropology	The students will learn about scope and application of medical genetics. They will also learn about tools and techniques of population screening, community genetics and ethical issues and challenges.
		ANTH -CE- B4	Human Genomics: Methods & Principles	To provide basic concepts, methods and principles in Human Genomics.	The students will learn about the molecular logic of life, gene expression and regulation. They will also learn about human genome and genetic defects and tools and techniques of human molecular genetics.
		ANTH -CE- B5	Advanced Practical in Demography & Human Genetics	To demonstrate basic trainings and skills in demography and human genetics methods, tools and techniques.	The students will learn hands on training on analysis of demographic data. They will also learn about analysis of human blood. The will also learn about DNA extraction methodology. The students will also learn about the methods and techniques of identification of human chromosome.
		ANTH -CE- B6	Fieldwork and Dissertation	To provide basic skill and training to collect primary data.	The student will learn how to collect the qualitative and quantitative data and make its interpretation. They will also learn how to analyze and interpret data and write a report.

		ANTH -CE- C3	Field Techniques and Methods in Prehistoric Archaeology	To demonstrate basic trainings and skills about field archaeology.	The students will learn about fieldwork methods and techniques of exploration, excavation, and data collection in prehistoric archaeology. They will learn about identification and interpretation of archaeological specimens.
		ANTH -CE- C4	Prehistory and Protohistory of Eastern India and South East Asia	To provide basic knowledge about the Prehistory and Protohistory of Eastern India and south East Asia.	The students will learn about the Holocene and Pleistocene events in South east Asia, the prehistory and protohistory culture of Odisha and South east Asia.
		ANTH -CE- C5	Advanced Practical in Prehistoric Archaeology	To demonstrate basic trainings and skills about handling various archaeological specimens.	The students will learn about the artifacts and ceramic analysis, soil testing, and Topo-sheet reading. They will also learn the identification, preservation various archaeological specimens.
		ANTH -CE- C6	Fieldwork and Dissertation	To provide basic skill and training to collect of archaeological data from the field.	The students will learn about to archaeological exploration and/or excavation of Prehistoric or Protohistory sites, ethno-archaeology, and ethno-technology of ethnic groups: tribal or rural community.
		ANTH -CE- D3	Culture and Development	To provide basic concepts and knowledge on Culture and Development.	The students will learn about the symbiotic relationship between culture and development. They will also learn about integration of cultural factors into development, impact of culture on development and politics of aid in development.

		ANTH -CE- D4	Anthropology of Organisational and Business Development	To provide basic skills and knowledge on organizational and business Development.	The students will learn about the development of business anthropology, and cultural ecology of organizations. They will also learn about anthropological aspects of market and marketing, business advertising and consumer behaviour.
		ANTH -CE- D5	Advanced Practical in Community and Organisational Development	To provide basic skill and training on community and organisational development.	The students will learn how to use relationship tools, assessment tools and planning tools. The students will also learn the skill for monitoring and evaluation of different development programmes.
		ANTH -CE- D6	Fieldwork and Dissertation	To provide basic skill and training to collect primary data in a natural setting.	The student will learn how to collect the qualitative and quantitative data and make its interpretation. They will also learn how to analyze the data and write a report.
	Allied Elective	ANTH -AE	Tribes of India: Their Problems and Development	To provide basic knowledge on Tribes of India and their problems and development.	The students will learn about the scope of tribal studies in India and their problems in India and their remedial measures taken by different agencies.
			Forensic Anthropology & Criminology	To provide training on use of anthropological tools and methods used for forensic science.	The students will learn about forensic anthropology and its growing importance, as well as the identification on the individuals on the basis of tooth, skeleton, finger prints, blood, etc.

			Anthropology for Archaeology	To provide training on use of anthropological tools and methods used for archaeology.	The students will learn about archaeological anthropology and its growing importance in the field of Archaeology and Anthropological theories in archaeology.
			Archaeology of Odisha	To provide basic knowledge on Archaeology and Archaeological culture of Odisha.	The students will learn about the Stone Age culture and rock arts of Odisha, and they will learn about the cultural relations between Odisha and South East Asia.
			Anthropology of Gender	To provide basic knowledge of gender and Anthropological perspectives of gender and its significance.	The students will learn about the origin and growth of anthropology of gender, and they will learn about the contributions of feminist Anthropologists.
	Value Added Course		Museology and Cultural Resource Management	To provide training on use of anthropological tools and methods used for Museology and culture resource management.	The students will learn about the basics of museum management, acquisition, documentation, preservation and display of museum specimens.

SEMESTER-I

CORE: 5 PAPERS= 20 CREDITS = 500 MARKS

*All Core Papers in Semester-I are also available as Allied Elective Papers for students from specified allied disciplines.

SEMESTER – I

ANTH-C-I

SOCIAL AND CULTURAL ANTHROPOLOGY

Full Marks: 100 (Theory: 70 + Assessment/Evaluation: 30)

Duration of Examination: 4 hours

(Questions are to be set covering first four units)

Unit-I Aim and scope of Social and Cultural Anthropology, History and Development; Major Areas of Interest: Ethnography, Ethnology, Folklore, Economic Anthropology, Political Anthropology, Psychological Anthropology, Linguistic Anthropology, Medical Anthropology, Urban Anthropology, Visual Anthropology, Applied and Action Anthropology.

Unit-II Culture: Concept, Definition; Nature of Culture, Characteristics of Culture; Culture Change: Innovation, Diffusion, Acculturation, Assimilation, Integration, Cultural Adaptation; Enculturation and Socialization, Transculturation; Culture Shock and Culture Conflict cultural relativism, Cultural Pluralism and World-View.

Religion: Concept, Origin, Functions; Types: Animism, Animatisms, Bongaism, Fetishism, Totemism, Manaism, Magic, Witchcraft, Sorcery; Shamanism, Taboo, Sacred and Profane.

Unit-III Marriage Concept, function and Definition of Marriage; Types of Marriage: Endogamy, Exogamy, Polygamy and Monogamy, Polygyny and Polyandry, Preferential and Prescriptive Marriages, Levirate and Sororate, Cross-cousin. Marriage, Parallel Cousin Marriage, Uncle-Niece Marriage; Marriage Payments: Bride Wealth/Bride; Price and Dowry; Divorce; Couvade.

Concept and Definition of Family; Types of Family (by structure): Nuclear/Elementary/Simple Family, Compound Family, Joint family, Extended Family, (by residence), Patrilocal Family, Matrilocal Family, Neo local Family, Virilocal, Uxorilocal, Ambilocal, Amitolocal, Partipotestal Family, Stem Family; Household; Functions of Family.

Kinship: Kin-group: Consanguinal, Affinal, Ambilateral, Unilateral, Bilateral, Agnatic, Uterine, Patrilateral, Matrilateral; Kin Terms: Classificatory, Descriptive; Descent: Unilineal, Bilateral, Double Descent, Filiations; Patriline, Matriline, Patrilineal, Matrilineal, Patriarchy, Matriarchy; Ritual Kin, Fictive Kin; Kinship Behavior: Avoidance, Joking, Teknonymy; Incest, Alliance Theory.

Unit-IV Economic Organization: Principles of production, distribution, consumption in hunting-gathering, pastoral, swidden/ shifting, agricultural and Industrial communities ;

Reciprocity and Redistribution; Barter; Trade and Market, Ceremonial Exchange: Kula Ring and Potlatch. Usufruct Rights;

Political Organization: Concept; State; Stateless Society; Band, Segmentary Society; Primitive Government: Forms and Functions; Law and Justice; Customary Law; Social Control: Forms and Agencies; Social Sanction: Negative and Positive;

Unit-V Assignments, Quiz, Oral test/presentation, Book readings based on the above units as prescribed by the concerned teacher.

Learning Outcomes

The expected learning outcomes of this paper are as follows:

1. The students will learn what is Social and Cultural Anthropology and how it is related to other branches of Anthropology as well as its relationship with other disciplines.
2. They will learn about the key concepts in Social and Cultural Anthropology like social structure, social change, culture, cultural change, socialization, and the like.
3. The students will also learn about social institutions like family, marriage, kinship and religion.
4. They will also learn about the economic and political organization of traditional societies.

Books Recommended:

1. Beattie, John. 1966, *Other Cultures*, London: Routledge and Kegan Paul Ltd.
2. Balandier, George. 1970, *Political Anthropology*, New York: Pantheon Books
3. Bohannan, Paul. 1971, *Social Anthropology*, New York: Holt Rinehart & Winston.
4. Clifton, A.J.(ed.) 1968, *Introduction to Cultural Anthropology*. Houghton Mifflin
5. Carol R. Ember, Melvin Ember, Peter N. Peregrine, 2010, *Anthropology*, NJ: Prentice Hall.
6. Evans-Pritchard, E.E. and Fortes, M. 1940, *African Political Systems*, London: Oxford University Press.
7. Evans-Pritchard, E.E. 1979. *Social Anthropology*. London: Routledge and Kegan- Paul.
8. Firth, Raymond. 1967, *Themes in Economic Anthropology*, London: Tavistock Publications
9. Fox, Robin. 1984, *Kinship and Marriage: An Anthropological Perspective*, London: Cambridge University Press.
10. Gluckman, Max. 1965, *Politics, law & Ritual in Tribal Society*, Oxford: Basil Blackwell
11. Goode, J. 1982, *The Family*, New York: Prentice Hall
12. Haviland, W. A., Harald E. L. Prins, D. Anthropology,
13. Herskovits, M.J. 1958, *Man and His Works*, New York: Alfred A. Knopf.
14. Kapadia, K.M. 1966, *Marriage and Family in India*, London: Oxford University Press
15. Keesing and Keesing, 1971, *New Perspectives in Cultural Anthropology*, Holt: Rinehart and Winston
16. Mair, Lucy. 1972, *An Introduction to Social Anthropology*, London: Oxford University Press,
17. Mair, Lucy. 1962, *Primitive Government*, Vigo Street: Penguin Books
18. Murdock, G.P. 1949, *Social Structure*, London: Macmillan Co.
19. Nash, Manning, 1966, *Primitive & Peasant Economic Systems*, Chandler Pub. and Co.
20. Nayak, P.K. 1989, *Blood, Women and Territory*, New Delhi: Reliance Pub House
21. Needham R. (Ed.). 1971, *Rethinking Kinship and Marriage*. London: Tavistock
22. Norbeck, E. 1961. *Primitive Religion*. Longman Higher Education
23. Radcliffe-Brown, A.R. & Forde, D. (ed.) 1950, *African Systems of Kinship and Marriage*, New York: Oxford University Press
24. Rivers, W.H.R. 1914, *Kinship and Social Organization*, London: Constable and Co. Ltd.

SEMESTER – I
ANTH-C-2
BIOLOGICAL ANTHROPOLOGY
Full Marks: 100 (Theory: 70 + Assessment/Evaluation: 30)
Duration of Examination: 4 hours
(Questions are to be set covering first four units)

Unit - I

Aims and Scope of Biological Anthropology; Historical development, Emerging trends Biological Anthropology. Application of Biological Anthropology in the service of the Mankind.

Theories of organic evolution: Lamarckism, Darwinism, Synthetic theory; Principles of Evolution: Convergence, Divergence, parallelism, adaptive radiation, speciation, irreversibility; Origins of Man: Theories of monogenesis and polygenesis, Multiregional vs. out of Africa evolution model.

Unit – II

Primateology: Living Primate: Characteristics, distribution, and classification of order primate; Primate Behaviour: Social and Reproductive behaviour.

Earliest primates of Oligocene, Miocene and Pliocene: Aegyptopithecus, Propithecus, Dryopithecus and Proconsul;

Stages of Human evolution: Processes of hominization and emergence of hominids; Erect posture and Bi-pedalism. Characteristic features and cultural evidence of (a) Early hominoids : Ramapithecus, Australopithecine, Homo habilis; (b) Later hominids: Homo erectus (Asia, Europe and Africa), Homo-sapien Neanderthalensis(Classic/Conservative), Homo-sapien-sapiens (Cro-Magnon, Chancelade, Grimaldi, Offnet,)

Unit – III

Human Diversity: Living Human Populations and Human Diversity: Concept of Race, Criteria for Racial Classifications: Metric, Non-metric, Dermatoglyphics and Genetic; Distribution and Characteristics of Major races of the world: Caucasoid; Negroid; Mongoloid; Racial classifications by Hooton; Coon, Garn and Birdsell; Racial classification of Indian Population by Risley, Guha and Sarkar; Relevance of race in 21st Century.

Unit-IV Human Genetics: meaning and scope: Mendel's Law of Inheritance and its application to Man; Patterns of inheritance of Autosomal (dominant, recessive and co-dominant) and sex-linked traits, Lethal and sub-lethal genes; modifying genes; suppressor genes. Methods of studying heredity: Twin method, Pedigree method and Sib- pair method; Heritability estimate; Polygenic Inheritance in Man. Human Cytogenetics: Chromosome Karyotypes, Banding Techniques.

Population Genetics: Population Genetics: Hardy-Weinberg Law and its application, Genetic Polymorphism: Balanced and Transient; Natural Selection; Consanguinity and Inbreeding coefficient, Genetic Drift.

Genetic Variation: ABO blood group, Rh factor , MN blood group, Kel and Duffy blood group, ABH Secretor factor; Abnormal Haemoglobin :Sickle cell anaemia,

Thalassemia;G6PD deficiency, Distribution of selected genetic traits in Indian Populations.

Unit-V

Assignments, Quiz, Oral test/presentation, Book readings based on the above units as prescribed by the concerned teacher.

Learning Outcomes

1. The students will learn about the meaning and concepts of biological anthropology and its development.
2. They will learn about various theories of organic evolution.
3. They will also learn about primatology, primate evolution and stages of human evolution, the humanization processes and human diversity.
4. They will learn about the basic concepts of human genetics, population genetics and genetic variation.

Suggested Readings / Books Recommended:

1. Stein P.L. and B.M. Row. 1974. *Physical Anthropology*. McGraw-Hill Inc., USA.
2. Jurmain, R.; H. Nelson, L. Kilgore and W. Trevathan. 2011. *Essentials of Physical Anthropology, Eight Edition*. Wordsworth Cengage Learning, USA.
3. Stern, C. 1960. *Principles of Human Genetics*. W.H. Freeman and Co., San Francisco and London.
4. Buettner Janusch, J. 1969. *Origins of Man: Physical Anthropology*. Wiley Eastern Pvt. Ltd., New Delhi.
5. Buettner Janusch, J. 1973. *Physical Anthropology: A Perspective*. John Wiley & Sons, Inc., New York.
6. Shukla B.R.K. & Rastogi, S. 1990. *Physical Anthropology & Human Genetics: An Introduction*. Plaka Prakashan. Delhi.
7. Das B.M. 2008. *Outlines of Physical Anthropology*. Kitab Mahal, New Delhi.
8. Sarkar, R. M. 2004. *Fundamentals of Physical Anthropology* (New Edition). Book World. Kolkata.
9. Cummings M.R. 2009. *Human Genetics*. Cengage Learning India Pvt. Ltd, New Delhi.
10. Comas, J. 1960. *Manuals of Physical Anthropology*. Charles C. Thomas Publisher, Springfield, Illinois, USA.
11. Darwin, C. 1871. *The Descent of Man, 2 Volumes*, John Murray, London.
12. Boaz N.T. and A.J. Almquist. 1997. *Biological Anthropology – A Synthetic Approach to Human Evolution*. Prentice-Hall, New Jersey, USA.
13. Lewis, B.; R. Jurmain and Lynn Kilgore. *Understanding Physical Anthropology & Archaeology*. Thomson Wadsworth, USA.
14. Lasker, G. B. and R. N. Tyzzer. 1982. *Physical Anthropology, Third Edition*. C. B. S. College Publishing.
15. Montague, M. F. Ashley. 1960. *An Introduction to Physical Anthropology*. Charles C. Thomas Publisher. Springfield, Illinois, U. S. A.
16. Lewis, R. 2009. *Human Genetics: Concepts & Applications, 9th edition*. Mc Graw-Hill Primis, USA.
17. Vogel, F. and Motulsky, A. G. 1997. *Human Genetics: Problems & Approaches, 3rd edition*. Springer-Verlag, Berlin.
18. Cavalli-Sforza, L. L. & W. Bodmer. *Evolution, Genetics and Man*
19. Conroy, G. C. 1997. *Reconstructing Human Origins: A Modern Synthesis*. W. W. Norton & Company, USA.

20. Mascie-Taylor, C. G. N. and G. W. Lasker. 1991. *Application of biological anthropology to human affairs*. Cambridge University Press, Cambridge.
21. Kothari, M. L. ; L. A. Mehta and S. S. Roychoudhury. 2009. *Essentials of Human Genetics, 5th edition*. Universities Press (India), Hyderabad.
22. Mc Kusick V. A. 1998. *Mendelian Inheritance in Man, 11th edition*. John Hopkins University Press, Baltimore.
23. Srivastava, R. P. 2009. *Morphology of the Primates and Human Evolution*. PHI Learning Private Limited, New Delhi.
24. Mandal, Sanjaya. 2007. *Fundamentals of Human Genetics*. New Central Book Agency (P) Ltd; Kolkata.
25. Mange, E. J. And A. P. Mange. 1994. *Basic Human Genetics*, Rostogi Publication, Meerut.

SEMESTER – I

ANTH-C-3

ARCHAEOLOGICAL ANTHROPOLOGY

Full Marks: 100 (Theory: 70 + Assessment/Evaluation: 30)

Duration of Examination: 4 hours

(Questions are to be set covering first four units)

- Unit-I** Archaeology as Anthropology: Definition and Scope of Archaeological Anthropology; Relationship of Archaeological Anthropology (Prehistoric Archaeology) with Natural and Biological Sciences.
Geological Framework: Major Geological Stages (Tertiary, Quaternary, Pleistocene and Holocene) Glacial and Interglacial periods of Europe and India.
Temporal framework: Concept of Chronology / Dating: Relative Dating Methods (Study of Stratigraphy, Pollen Analysis, Paleontology); Absolute Dating Methods (Radiocarbon, Potassium-Argon, Thermoluminescence).
- Unit-II** Cultural framework: Concept of Three Age System (Stone, Copper/Bronze and Iron Ages): Stone Age Culture Chronology.
Lower Palaeolithic Cultures of Africa and South Asia (India): Pebble tool Culture in Africa and India (evidences from Olduvai Gorge and Soan Valley); Acheulian Culture (evidences from Africa and Peninsular India).
Mesolithic Cultures of Europe and South Asia (India): Mesolithic Cultural traditions in Europe (Azilian, Tardenoisian, Maglemosian, Kitchen Midden); Mesolithic Cultures in India (Adamgarh, Bagor, Birbhanpur, Bhimbetka, Chopani Mando, Mahadaha, Sarai Nahar Rai, Tilwara).
- Unit-III** Neolithic Culture of West Asia and South Asia (India): Neolithic Culture of West Asia (evidences from Jericho; Jarmo, Catal Huyuk, Shanidar);
Neolithic Culture of Indian Subcontinent (evidences from major sites of Northern, Southern, Eastern and Northeastern India)
- Unit-IV** Proto-historic Cultures of South Asia (India): Chalcolithic Cultures of India – Central Indian Chalcolithic; Deccan Chalcolithic; Indus/Harappan Civilization: Origin, Extent, Distribution, Salient features, Causes of decline and Chronology of the Indus Civilization. Megalithic Cultures India: Concepts, Types of megaliths (Cairn Circle, Dolmen Cist, Menhir, Sarcophagi, Topical)

Unit-V Assessment / evaluation/ quiz/ oral test /presentation/term paper as prescribed by the concerned teacher.

Learning Outcomes

The learning outcomes of this paper are:

1. The students will learn about archaeological anthropology and its relationship with other branches of anthropology and other related disciplines.
2. They will learn about the techniques of dating prehistoric finds.
3. They will also learn about geological timescale and cultural expressions of each epoch.
4. They will learn about the Palaeolithic, Mesolithic, Neolithic and Protohistoric culture of Africa, Europe and Asia

Books Recommended:

1. Agarwal, D. P.1984, *Archaeology of India*. New Delhi: Select Book Services Syndicate.
2. Agarwal, D. P. and M.G. Yadav 1995, *Dating the human Past. Indian Society for Prehistoric Studies*, Pune: Deccan College.
3. Allchin, Briget. and Raymond Allchin,1982. *The Rise of Civilization in India and Pakistan*. Cambridge: Cambridge University Press.
4. Allchin, B. and R. Allchin, 1997. *Origins of Civilization: The Prehistory and Early Archaeology of South Asia*. New Delhi. Viking by Penguin Books India (P) Ltd.
5. Bhattacharya, D. K.1990, *An Introduction to Prehistoric Archaeology*. Delhi; Hindustan Publishing Corporation
6. Bhattacharya, D. K.1978, *Emergence of Culture in Europe*. Delhi: B. R. Publishing Corporation.
7. Bhattacharya, D. K.2001. *An Outline of Indian Prehistory*. Delhi: Palaka Prakashan.
8. Burkitt, M.C.1985. *The Old Stone Age A Study of Palaeolithic Times*. New Delhi: Rupa & Co.
9. Chakrabarti, D.K. 2001. *India: An Archaeological History: Palaeolithic Beginning to Early Historic Foundation*. New Delhi: Oxford University press.
10. Champion, T., C. Gamble, S. Shennan, A. Whittle 1989. *Prehistoric Europe*. London: Academia Press.
11. Clark, Grahame, 1977, *World Prehistory: A New Outline*: Cambridge, England: The University Press.
12. Clark, J.G.D, 1936, *Mesolithic Settlement in Northern Europe*. London: Cambridge
13. Clark, J.D., 1956, *Prehistory of Southern Africa*. New York.
14. Cole, S.1963, *Prehistory of East Africa*. Pelican Books.
15. Dikshit, K. N. (Ed.), 1985, *Archaeological Prospective of India since Independence*. New Delhi.
16. Fagan, Brian M.1977, *People of the Earth: An Introduction to World Prehistory*. Boston, Toronto: Little Brown and Company.
17. Hole, F. and Robert F. Heizer, 1973. *An Introduction to Prehistoric Archaeology*. New York: Holt, Rinehart and Winston.
18. Jain, V.K.2009, *Prehistory and Protohistory of India*. New Delhi: D.K. Printworld (P) Ltd.
19. Joukowsky, Martha1986. *A Complete Manual of Field Archaeology: Tool and Techniques of Field Work for Archaeologists*. New York: Prentice Hall Press.
20. Lewis, B., R. Jurmain, L. Kilgore, 2007. *Understanding Physical Anthropology and Archaeology*. United States of America: Thomson Wordsworth.
21. McIntosh, Jane 1999. *The Practical Archaeologist*, New York: Checkmark Books, Facts on File, Inc.
22. Nautiyal, K. P.1989. *Protohistoric India*. Delhi: Agam Kala Prakashan.
23. Paddayya, K. (Ed.), 2002, *Recent Studies in Indian Archaeology*. New Delhi.

24. Pappu R. S.2001, *Acheulian Culture in Peninsular India-- An Ecological Perspective*, New Delhi: D.K. Printworld (P) Ltd.
25. Possehl, G. L.1999, *Indus Age: The Beginnings*. New Delhi: Oxford University Press.
26. Phillipson, David. W. 1990. *African Archaeology*. Cambridge: Cambridge University Press.
27. Rajan, K.2002, *Archaeology: Principles and Methods*. Tanjavur, Tamilnadu: Manoo Pathippakam.
28. Rammi Reddy, V.1987, *Elements of Prehistory*. New Delhi: Mittal Publications.
29. Rammi Reddy, V.1989, *Palaeolithic and Mesolithic Cultures*. New Delhi: Mittal Publications.
30. Rammi Reddy, V.1991, *Neolithic and Post-Neolithic Cultures*. New Delhi: Mittal Publications.
31. Renfrew, C. and P. Bahn, 1991. *Archaeology: Theories, Methods and Practice*. USA: Thames and Hudson
32. Sankalia, H.D.1974. *Prehistory and Protohistory of India and Pakistan*. Pune: Deccan College.
33. Sankalia, H.D.1974. *Stone Age Tools: Their Techniques Names and Probable Functions*. Poona: Deccan College.
34. Settar, S. and R. Korisettar (Ed), 2001, *Indian Archaeology in Retrospect*, Vol.1: PREHISTORY Archaeology of South Asia. New Delhi: Manohar in association with Indian Council of Historical Research.
35. Settar, S. and R. Korisettar (Ed), 2001, *Indian Archaeology in Retrospect*, Vol.2: PROTOHISTORY Archaeology of South Asia. New Delhi: Manohar in association with Indian Council of Historical Research.
36. Singh, P. 1976, *Neolithic Cultures of Western Asia*. New York: Seminar Press Ltd.
37. Thapar, B. K., 1985, *Recent Archaeological Discoveries in India*, Paris.
38. West, R. G.1977. *Pleistocene Geology and Biology*. London and New York; Longman
39. Wheeler, Sir, R.E.M.1968. *The Indus Civilization*. London: Longman Publication

SEMESTER – I

ANTH-C-4

RESEARCH METHODOLOGY AND STATISTICS

Full Marks: 100 (Theory: 70 + Assessment/Evaluation: 30)

Duration of Examination: 4 hours

(Questions are to be set covering first four units)

- Unit-I** An Appraisal of Methodological Perspectives in Anthropology;
- i) Holistic Approach in Anthropology
 - ii) Fieldwork and Fieldwork Traditions in Anthropology
 - iii) Comparative Method
 - iv) Synchronic and Diachronic Approaches in Anthropology
 - v) Ethnoscience method in Anthropology: a)Emic and b) Etic Approaches
- Understanding and Explanation in Social Anthropology; Anthropological Approaches to the study of Primitive Societies, Complex Societies and Civilizations.
- Unit-II** Concept, Hypothesis, Inductive and Deductive Logic, testing Hypothesis; Theory and Empiricism in Social Anthropological Research; Model-Building in Anthropology, Research Design, Types: Exploratory, Descriptive, Experimental and Evaluative studies; Methods of Comparison in Anthropology: Illustrative Comparison, Complete Universe Comparison, Hologistic Comparison by Statistical Sampling; Restudy in Anthropology; Monitoring and Evaluation. Report writing.

Unit-III Survey Method in Anthropology: Design and Uses of Survey, Limitations. Types of Sampling: Random Sampling, Systematic Sampling, Purposive Sampling, Stratified and Multistage Sampling, Area and Quota Sampling.

Field Technique:

- i) Observation Technique: Participant and Non-participant;
- ii) Interview Technique: formal and Informal, Key-Informant Interview; Interview Guide,
- iii) Schedules and Questionnaires;
- iv) Life-History and Case Study Method and Extended Case-Studies;
- vi) Audio-Visual Recording
- vii) Projective Techniques

Rating and Ranking Scales – Bogardus Social Distance Scale, Sociometry and sociogram, Lickert Summated Scale and Guttman Scalogram Analysis; Techniques in Visual Anthropology; PRA & RRA techniques. Techniques of Analysis: Content analysis, Discourse analysis and Narratives.

Unit-IV Qualitative and Quantitative studies in Anthropology;
Social and Bio-Statistics;
Data analysis: Frequency Distribution and Graphical Representation: Frequency Polygon and Histogram;
Measurement of Central tendencies: Mean, Mode and Median; Measurement of Dispersion- Mean Deviation, Standard Deviation, Standard Error; Test of Significance: Chi-Square Test, T-test, Z-Test, ANOVA; Co-efficient of Correlation and Regression.

Unit-V Assignments (Use of SPSS, Internet and Bibliography writing), Quiz, Oral test/presentation, Book readings based on the above units as prescribed by the concerned teacher.

Learning Outcomes

1. The students will learn about methodological perspective in anthropology.
2. They will learn about empiricism, methods of comparison, hypothesis testing, monitoring and evaluation in anthropological research.
3. They will also learn about various methods and techniques of data collection.
4. The students will also learn various tools of qualitative and quantitative data collection and its analysis.

Suggested Readings / Books Recommended:

1. Agar, M. 1980, *The professional stranger, an informal introduction to Ethnography*, New York: Academic Press.
2. Bernard, H.R. 1994, *Research Methods in Anthropology*. London: Sage Publication
3. Brewar, J.D. 2000, *Ethnography*. Buckingham: OUP
4. Coffey, A. *The Ethnographic Self: Field Work and the Representation of Identity*. London: Sage.
5. Dey, I. 1993, *Qualitative Data Analysis*, London: Routledge.
6. Eller, R (ed). 1984. *Ethnographic Research: A Guide to General Conduct*. London: Academic Press.
7. Fetterman, M.D., *Ethnography: Step by Step*. London: Sage, 1989.

8. Hammersley, M. And Alkinson, P. 1983, *Ethnography: Principles in Practice*. London: Tavistock.
9. Mc cracker, G. 1989, *The long Interview*. London: Sage.
10. Patton, M.Q. 2002, *Qualitative Research and Evaluation Methods*. London: Sage.
11. Silverman, D. 1993, *Interpreting Qualitative Data*. London: Sage.
12. Stewart. A. 1998, *The Ethnographer's Method*. London: Sage.
13. Singha, K. 1993. "Participant Observation and In-depth Interviewing" in B.Y. Attig, et. al (eds), *Qualitative Methods for Population and Health Research*. Bangkok: Mahidol Univeristy, pp 120-128.
14. Watson, C. W. (Ed). *Being There: Field work in Anthropology*. London: Pluto Press.
15. Hamersley, M. 1992, *What's wrong with Ethnography*. London: Routledge.
16. Moser, C.A. and Kalton, G. 1971, *Survey Methods in Social Investigation*. London: Heinemann.
17. Merton, R.K. 1967. *On Theoretical Sociology*. New York: Free Press.
18. Goode, W.J. and Hatt, P.K. 1952, *Methods of Social Research*. New York: McGraw Hill.
19. Silverman, D. (Eds). *Qualitative Research: The Methods and Practice*. 2nd Edition; London: Sage
20. Bryman .A. and Liao .T.F (Ed). *The Sage Encyclopaedia of Social Science Research Methods*; 3 volumes; Thousand Oaks, Calif ; Sage 2004.
21. Bryman, A. 2008, *Social Research Methods*. 3rd edition Oxford: OUP.
22. Bryman, A. 1988. *Doing Research in organisation*. Routledge.
23. Bryman, A. 1989. *Research Methods and organisational Studies*. London: Rout ledge.
24. Hardy, M. and Bryman. A (eds). 2004. *Handbook of Data Analysis*. London: Sage
25. Bryman, A. 2008. *Qualitative Data Analysis with SPSS 15: A Guide for Social Science*, London Rout ledge.
26. Bryman, A . and Burgess ,R . G (Ed) 1999, *Qualitative Research*, London: Sage.
27. Boulmer, M (Eds) *Social Research Methods*. Macmillan. 1984.
28. Jahoda, M., Deutsch, M, and Cook, S.W., *Research Methods in Social Relations*. New York: Dryde 1951.
29. Junker, B. 1960, *Field Work*, Chicago: University of Chicago Press.
30. Hammersley, M. 1991, *Readings of Ethnographic Research: A Critical Guide*. London: Longman.
31. Pelto, P.J. and Pelto, G.H. 1978. *Anthropological Research: The Structure of Inquiry*. New York. Cambridge University Press.
32. Bernard, H.R. 2008. *Research Methods in Anthropology: Qualitative and Quantitative Approaches* (4th edition). Rawat Publication.
33. Srivastava, V (Ed.). 2005. *Methodology and Fieldwork*. Oxford India Paperbacks, New Delhi.
34. Srinivash, M. N. (Ed.), 1995, *Methods in Social Anthropology*. Hindustan Publishing Corporation, New Delhi.
35. Krishnaswami, O. R. and Ranganatham, M. 2009. *Methodology of Research in Social Sciences*. Himalaya Publishing House, Mumbai,

SEMESTER – I
ANTH-C-5
GENERAL PRACTICAL: BIOLOGICAL AND FORENSIC ANTHROPOLOGY
Full Marks: 100 (Theory: 70 + Assessment/Evaluation: 30)
Duration of Examination: 6 hours
(Questions are to be set covering first four units)

1. **Data handling :** Analysis of demographic and health data from Household Census, NFHS etc. Construction of population pyramid and estimation of sex ratio etc. Preparation of Schedules. (15)

2. (A) Osteology

Each student has to identify and draw with levelling different parts of the following human bones: a) Skull, b) Mandible, c) Clavicle, d) Scapula, e) Humerus, f) Radius & Ulna g) Femur, h) Tibia-fibula, I) a Vertebra. (05)

(B) Craniometry: Each student has to study two human crania / mandible and record the following measurement. The students are to be familiar with different landmarks of the skull and mandible, instruments and methods of taking measurement.

1) Maximum Cranial Length; 2) Nasion -inion Length; 3)Cranial Height; 4) Max Cranial breadth; 5) Nasion-Prosthion height; 6) Bio-zygomatic breadth; 7) Minimum frontal breadth; 8) Nasal Length 9) Nasal Breadth 10) Glabella inion Length 11) Palatal Breadth 12) Palatal Length 13) Breadth of Ramus 14) Length of Ramus 15) Angle of Mandible 16) Facial Angle. (10)

Each student has to draw Sagittal contour of 2 crania in F.H. Plane and construct:

i) Facial Profile Angle ii) Quadrangle of Skull (05)

3. Forensic Anthropology (15)

- a) Determination of age and sex from skull and mandible.
- b) Examination of Blood Stain
- c) Development of Latent print
- d) Identification of finger ball patterns & determination of main-line formula
(Both hands of 5 individuals) or Sole Print.
- e) DNA finger printing (Demonstration through photograph/drawing)

4. Nutritional Anthropology: The students are to be taught on the following aspects of Nutritional Anthropology. (15)

Determination of Nutritional Status:

- a. Each Student is to record dietary intake of household members belonging to three households and calculate intake of different nutrients consumed.(24 hr recall /weighing method)
- b. Nutritional Anthropometry (For assessment of Grades of Malnutrition)
 - (i) Wt for age (ii) Ht for age(iii) Wt /Ht (iv) Mid Arm Circumference
- c. Calculation of Body Mass Index and Conicity Index
- d. Calculation of Total Body Fat

Measurement of Sub-Cutaneous fat: Tricep. Bicep. Sub-scapula

5. Somatotyping: Each student has to take somatotype measurement of subjects as prescribed. (05)

6. Serological, Haematological and Physiological test

(20)

The students are to perform the following serological and bio-chemical tests on five persons and record the results. They are to be familiar with details of each experiment such as aim of the experiment, apparatus required, chemicals needed, procedure, precaution and results of the experiment.

- i) ABO & Rh Blood group typing
- ii) Hemoglobin estimation (Sahalis method)
- iii) Blood Pressure
- iv) Blood Sugar estimation.
- v) Colourblindness test

7. Viva-voce and Record

(15)

Maintaining proper **Laboratory Record** is compulsory. Each student has to submit a proper and complete laboratory record duly signed by the teacher who is assigned to teach this aspect. The students are required to submit their Laboratory Records at least five days before the conduct of practical examination. Defaulters of the same neither are allowed to appear the practical examination nor entitled to get the marks assigned to Practical Records.

Learning Outcomes

1. The students will learn about hands on training on collection of demographic data and its analysis
2. They will learn about basics of human Osteology and craniometry, determination of age and sex from dry bones as well as analysis of fingerprints.
3. They will also learn about various methods and techniques of nutritional anthropometric data collection and its analysis.
4. The students will also learn about how to use the various methods and techniques of physiological data collection and its interpretation.

Suggested Readings / Books Recommended:

1. Weiner J.S. and J.A. Louri. 1981. *Practical Human Biology*. Academic Press, New York.
2. Singh I.P. and M.K. Bhasin. 1989. *A Laboratory Manual on Biological Anthropology: Anthropometry*. Kamal-Raj Enterprises, Delhi.
3. Cummins, H and C. Middel. 1943. *Finger Prints, Palms and Soles: An Introduction to Dermatoglyphics*. Blackistone Co., Philadelphia, USA.
4. Ghoshmaulik, S. K. and B. Rath. 2000. *Techniques in Forensic and Physical Anthropology*. Mayur Publications, Bhubaneswar.
5. Mukherji, D., D. Mukherjee and P. Bharti. 2009. *Laboratory Manual for Biological Anthropology*. Asian Books Pvt. Ltd., New Delhi.
6. Carter, J. and B.H. Heath. 1990. *Somatotyping – Development and Application*. Cambridge University Press, Cambridge.
7. Das, B.M. and R. Deka. 1998. *Physical Anthropology Practical*. Kitab Mahal, Allahabad.
8. Nath, S. 1996. *Forensic Anthropology*. Astham Prakashan, Delhi.
9. Rao, V.K. (Ed.) 1996. *Biostatistics: A Manual of Statistical Methods for use in Health, Nutrition and Anthropology*. Jaypee Brothers Medical Publishers (P) Ltd., New Delhi.
10. Grey, H. 1958. *Anatomy – Descriptive and Applied*. Edited by T.B. Johnson, D.V. Devis and F. Devis, Longman, London.
11. Lohman, T. G.; A. F. Roche and R. Martorell. 1988. *Anthropometric Standardization Reference Manual*. Human Kinetics Books, Champaign, IL.

12. Gopalan C, Ramasastri BV, Balasubramanian SC. 1999. *Nutritive values of Indian foods*. Revises and updated by Rao et al. National Institute of Nutrition, Indian Council of Medical Research, New Delhi.
13. World Health Organization. 1995. *Physical Status: The Use and Interpretation of Anthropometry. Report of a WHO expert committee. Technical Report series 854*. Geneva. Switzerland.
14. Lasker, G. W. and C. G. N. Mascie-Taylor (Ed.). 1993. *Research strategies in Human Biology: field and survey studies*. Cambridge University Press, Cambridge.
15. Ulijaszek, S. J. and C. G. N. Mascie-Taylor (Ed.). 1994. *Anthropometry: the Individual and Population*. Cambridge University Press, Cambridge.
16. Buikstra E. J and D. J. Ubelaker. 1994. *STANDARDS: For Data Collection From Human Skeletal Remains*. Arkansas Archaeological Survey Research Series No.44.

SEMESTER-II

CORE: 5 PAPERS= 20 CREDITS = 500 MARKS

*All Core Papers in Semester-I are also available as Allied Elective Papers for students from specified allied disciplines.

SEMESTER – II

ANTH-C-6

INDIAN SOCIETY AND APPLIED ANTHROPOLOGY

Full Marks: 100 (Theory: 70 + Assessment/Evaluation: 30)

Duration of Examination: 4 hours

(Questions are to be set covering first four units)

- Unit I:** Approaches to study Indian Civilization Composition of Indian society;; geographic, Linguistic and religious, ethnic and racial Divisions. Social stratification (Caste, Scheduled Caste, Scheduled Tribe, Denotified tribes, nomadic and semi nomadic tribes and castes, religious minorities, PVTGs), Caste system in India;
- Unit II:** Early Indian Anthropologists and their contributions to the study of Indian Civilization: McKim Marriot, Milton Singer, Verrier Elwin, M.N Srinivas, L.P.Vidyarthi; N.K.Bose S.C.Dube, D.N.Majumdar, G.S.Ghurye.
- Unit III :** Village Communities – their Types, Integration and Extension; Urban Communities: Structure and Types; Cultural Role of cities; Concept of Jajmani System, Dominant Caste, Folk-Urban and Tribe Caste contrast and continuum Sacred Complex, Nature-Man-Spirit Complex; Little and Great Traditions; Universalisation, and Parochialisation, Social and Cultural change in modern India – Sanskritization, Modernization, Westernization, Urbanization and Industrialization, Globalization;
- Unit IV:** Unresolved Issues and problems of Development of STs (Forest, land alienation, Indebtedness, Poverty, Illiteracy, Displacement, Role of Anthropology in Tribal and Rural Development, Constitutional provisions and safeguard measures for SCs and STs; Development Strategies, Policies, Plans and Programmes for Tribal Development. Community Development Programmes in India;, Tribal Movements in India, Mandal Commission; Dhebar Commission, Bhuria Committee Report; PESA Act.
- Unit-V:** Assessment / evaluation/ quiz/ oral test /presentation/term paper as prescribed by the concerned teacher.

Learning Outcomes

The learning outcomes of this paper are:

1. The students will learn about the origin and growth of Indian anthropology and about the various approaches to understanding Indian society and culture.
2. They will learn about the village communities, castes and tribes in India.

3. They will also learn about the contribution of Indian anthropologists to study the Indian civilization.
4. The students will also learn about the issues and problems, development programmes, movements and committee reports on tribes of India.

Suggested Readings / Books Recommended:

1. Bailey, F.G. 1960. *Tribe, Caste and Nation: A Study of Political Activity and Political Change in Highland Orissa*, UK: Manchester University Press.
2. Beteille, Andre. 1969, *Castes : Old & New, Essays in Social Structure and Social Stratification*, Bombay: Asia Publishing House
3. Bose, N.K., 1967, *Culture and Society in India*, Bombay: Asia Publishing House
4. Cohn, B.S. 1971, *India : The Social Anthropology of a Civilization*, New Jersey: Englewood Cliffs
5. Desai, A.R., 1961, *Rural Sociology in India*, Bombay: The Indian Society of Agricultural Economics.
6. Dube, S.C. 1958, *India's Changing Villages: Human Factors in Community Development*. London : Cornell University Press
7. Epstein, T. 1967, *The Craft of Social Anthropology*, London: Tavistock Publication.
8. Foster, G.M., *Traditional Culture and Impact of Technological Change*
9. Ghurye, G.S. 1959, *The Scheduled Tribe*, Bombay: Popular Prakashan
10. Hutton, J.N. 1951, *Caste in India*, Bombay: Oxford University Press
11. Karve, I, 1953, *Hindu Society: An Interpretation*, Poona: Singam Publications
12. Kothari, Rajni (ed.), 1985. *Caste in Indian Politics*. Orient Longman,
13. Kroeber, A.L. 1948, *Anthropology*, Bombay: G.G Harrap and Co
14. Mahapatra, L.K., *Tribal Development Myth and Reality*
15. Marriott, Mckim, (ed) 1955, *Village India*, Chigaco: Chigaco University Press
16. Mason, Philip (ed.), *India and Ceylon : Unity & Diversity*
17. Mandelbaum, D.G., 1970, *Society in India*, Berkeley: University of California Press
18. Rao, M.S.A., *Urbanisation & Social Change*
19. Redfield, Robert, *Peasant Society and Culture*, Chigaco: Chicago University Press
20. Singer M. 1975, *Traditional India: Structure & Change*, Chigaco: Chicago University
21. Singer, M and B.S.Cohn (Eds.) 1968, *Structure and Change in India Society*, Chicago: Aldine Publishing Company
22. Singh, Y. 1994, *Modernization of Indian Tradition*, Jaipur: Rawat Publications
23. Singh, S.N. 1996, *Reservation Policy for backward Classes*, New Delhi: Rawat Publications.
24. Srinivas, M.N. 1962 (b), *Caste in Modern India & Other Essays*, Bombay: Asia Publishing House
25. Srinivas, M.N. 1955, *India's Villages*, Calcutta: Asia Publishing House
26. Vidyarthi, L.P. 1968, *Applied Anthropology in India*, Allahabad: Kitab Mahal

SEMESTER – II
ANTH-C-7
ECOLOGICAL ANTHROPOLOGY
Full Marks: 100 (Theory: 70 + Assessment/Evaluation: 30)
Duration of Examination: 4 hours
(Questions are to be set covering first four units)

UNIT-I

Ecological Anthropology: Definition and Scope; History and Development of Ecological Anthropology; Current approaches and Perspectives in Ecological Anthropology : Cultural Ecology, Population Ecology, Systems Ecology, Ethno Ecology, Palaeo Ecology, Social Ecology and Ecology and Evolution, political ecology, Historical ecology, Landscape ecology.

UNIT-II

Ecology and Ecosystem: Definition of Ecology; Ecosystem: Concept, meaning, types and components; Adaptation and Evolution : Bio-Cultural Adaptation of Man to Heat, Cold and High Altitude; Eco-niche; Energetic and Human Society: Sources of Energy, Nutritional Value of Foods, Food Chain and Web, Flow of Energy. Concept of Carrying Capacity; Ecological Equilibrium, Ecological Factors influencing Population Growth and Regulation, Population Growth and Environmental Degradation

UNIT-III

Culture Environment Relationship; Environmental Determinism and Environmental Possibilism , Concept of Culture Core and Cultural Area, Cultural Ecology and Concept of Ecosystem; Culture as a Master Variable; Ecological Ethnography of Hunter-Gatherers, Nomads and pastoral, agricultural Communities; Application of Ecosystem in Anthropology

UNIT-IV

Concept of Ecologically/Environmentally Sustainable Development and Common property Resources; Environmentalism: Environmental Movements, ; Effects of Development Projects and Processes on Environment. Indigenous Environmental Knowledge Systems and Development. Environmental Policy in India; Conservation Strategies: JFM and MFP

UNIT-V Assignment:

A book review of 20 marks of any classical Anthropology book has to be submitted by the student before the end semester examination.

Learning Outcomes

The learning outcomes of this paper are:

1. The students will learn about the conceptual aspects of ecological anthropology and adaptation.
2. They will learn about various components of ecology and human Bio-Cultural adaptation.
3. They will also learn about how human body adapts to various ecological conditions.
4. The students will also learn about environmentally sustainable development as well as environment policy in India.

Suggested Readings / Books Recommended:

1. Bennet, J.W. The Ecological Transition
2. Bhss, L.C, Heal, Tundra Ecosystem
O.W. Moore,J.

3. Bresser Human Ecology
4. Butzer, Karl Archaeology as Human Ecology
5. Chapple, D.(ed) Biological Foundation of Individuality and Culture
6. Brock, T.H. Primate Ecology
7. Eckstein Food, People and Nutrition
8. Eckstein, P.R. & Ehrlick, Avne, Holdren, J.P. Human Ecology
9. Greenwood & Edwards Human Environments & Natural Systems
10. O. Hardesty, D Ecological Anthropology
11. J. Owen Jones, and Paul Rogers Human Ecology and the Development of Settlements
Jorgenson, J.G. Biology and Culture in Modern Perspective
12. Kafman, P.B./J.D. Lacroix Plant, People, Environment
13. Krebs, C.J. Ecology(Latest edition)
14. Mortwitz, H.J. Foundations of Bio-energetics
15. Odum, O.P. Ecology
16. Odum, E.P. Fundamentals of Ecology
17. Solomon Katz(ed) Biological anthropology(Scientific American)
18. Sussman, R.W Primate Ecology Watts Johnston & Lasker Bio-social Interrelation in
Population Adaptation
19. Yadab, C.S. Contemporary City Ecology
20. Weiner, J. Harisson, G.A, Barricndt, Tanner, J.M., Human Biology

SEMESTER – II

ANTH-C-8

ANTHROPOLOGICAL THOUGHT

Full Marks: 100 (Theory: 70 + Assessment/Evaluation: 30)

Duration of Examination: 4 hours

(Questions are to be set covering first four units)

UNIT –I

Emergence of Anthropology as an Empirical Discipline; Anthropology as a Social Science; Natural Science and Natural History in Anthropology; Scientific and Historical Methods in Anthropology

Man's Place in Nature; Biological Versus Cultural Evolution: Nature versus Nature; Primate Kin and Human Kinship; Anthropology and the Concept of Race

UNIT- II

Co-operation and conflict in Social Evolution: Social Darwinism and Marxism; Unilinear, Multilinear and Differential Evolution; Energy and Evolution; Evolutionism and Diffusionism; Functional, Structural and Neo-Structural approaches in Anthropology, Post-Structuralism and Post Modernism

UNIT-III

Language, Thought and Culture; Culture Dynamics: Language as a System, Socio-Linguistics, Language and Social Structure

Substantive and Formalistic Approaches; Ecological factors influencing population growth and regulation, Population growth and Environmental degradation

UNIT-IV

Individual, Culture and Society; Personality and Culture; Personality and Social Structure; Configuration of Culture; Methods in Culture and Personality Research

UNIT-V Assignment:

A book review of 20 marks of any classic work in anthropology has to be submitted by the student before the end semester examination.

Learning Outcomes

The learning outcomes of this paper are:

1. The students will learn about the emergence of anthropology as an empirical discipline and the theatrical debates in the discipline.
2. The students will learn about the important classical theories of anthropology.
3. They will learn about theories of language and culture.
4. The students will learn about the theories of personality and culture.

Suggested Readings / Books Recommended:

1. Montagu. M.F. Ashley, 1957, *Anthropology and Human Nature*, Boston
2. Manners, Robert A. and Kaplan David, 1969, *Theory in Anthropology*, London: Routledge and Kegan Paul
3. M.F.Ashley Mantagu, 1974, *Frontiers of Anthropology*
4. W. La. Barre *The Human Animal*
5. N.A. Chagam & W.Irons (eds) *Evolutionary Biology and Human Social Behaviour*
5. C. Darwin *The Descent of Man*
6. E.E.Evans, Pritchard, 1951, *Social Anthropology*, Glencoe
7. R.Fox *Biosocial Anthropology*
8. A.C. Haddon *Theoretical Anthropology*
9. L. Hodder *Reading the Past*
10. Frederick S. Hulse *Man and Nature: Studies in the Evolution of Human Species*
11. C. Kramer *Ethno-archaeology*
12. Annemarie de Wail, Malefjt *Images of Man*
13. Malthus, Hxley Osborn *The Essays on Production*
14. T.K. Penninman *One Hundred Years of Anthropology*
15. T.S. Slotkin *Readings in Early Anthropology*
16. G.W. Stocking(Jr.) *Race, Culture and Evolution*
17. F.W. Voget *History of Ethnology*
18. R.A.Watson & P.J. Watson *Man and Nature: An Anthropological Essay in Human Ecology*
19. J.Wilson *Social Biology*

SEMESTER – II

ANTH-C-9

MEDICAL ANTHROPOLOGY

Full Marks: 100 (Theory: 70 + Assessment/Evaluation: 30)

Duration of Examination: 4 hours

(Questions are to be set covering first four units)

UNIT-I

Medical Anthropology: Central concepts, Historical development and Scope; Theoretical perspectives in Medical Anthropology – Medical ecological theory, Cultural interpretive theory and Critical Medical Anthropological theory

UNIT-II

Medical Systems and Medical Syncretism: Medical systems in Indigenous and Precapitalist State Societies; Ethno-medicine and medical pluralism; Biomedical hegemony in the context of medical pluralism; An outline of different medical systems in India; Ethno-biology and Ethno-pharmacology.

UNIT-III

Disease Transition; Epidemiology of common communicable and non-communicable diseases in World and India; National Health Policy- 2017, National Health Mission, National Nutrition Policy, Occupational health problems, Problems of the Aged. Effects of environmental hazards on human health.

UNIT-IV

Social body and health; Stress, and disease; Social and ethical issues medical biotechnology and new reproductive technology and other advances in science & technology. Medical anthropology of Pharmaceuticals; Medical anthropology and Public Health.

UNIT-V

Assignments, Quiz, Oral test/presentation/seminar, Book readings based on the above units as prescribed by the concerned teacher.

Learning Outcomes

The learning outcomes of this paper are:

1. The students will learn about the development of medical anthropology and basic concepts about health, sickness and disease from anthropological perspectives.
2. They will learn about various different medical systems in India and ethnomedical practices.
3. They will also learn about medical pluralism in India and disease transition and policies.
4. The students will also learn about the social body and health.

Suggested Readings / Books Recommended:

1. Foster G.M. and B.G. Anderson .1978. *Medical Anthropology*. New York: John Wiley and Sons.
2. Good Byron.1994. *Medicine, Rationality and Experience*. Cambridge, England: Cambridge University Press.
3. McElroy, A. and P.K. Townsend.1979. *Medical Anthropology in Ecological Perspective*. Boulder, CO: Westview Press.
4. Singer M. and H.A. Baer.1995. *Critical Medical Anthropology*. Amityville, NY: Baywood Press.
5. Joshi P.C. and A. Mahajan.1990. *Studies in Medical Anthropology* (eds.). New Delhi: Reliance Publishing House.
6. Nichter M. and M. Lock. 2002. *New Horizons in Medical Anthropology – Essays in Honour of Charles Leslie*. London: Routledge.
7. Hahn R. 1995. *Sickness and Healing – An Anthropological Perspectives*. New Haven and London: Yale University Press.
8. Pool R. and W. Geissler. 2005. *Medical Anthropology*. London: Open University Press.
9. Park and Park. 2009. *Community Health and Social Medicine*. M/s Banarasidas Bhanot Publishers, Jabalpur.
10. Hancock P., B. Hughes, E. Jagger, K. Peterson, R. Russell, E. Tulle-Winton and M. Tyler. 2000. *The Body, Culture and Society – An Introduction*. Buckingham, Philadelphia: Open University Press.

SEMESTER – II
ANTH-C-10
GENERAL PRACTICAL: PREHISTORIC ARCHAEOLOGY AND MUSEOLOGY

Full Marks: 100 (Prehistoric Archaeology: 50 + Museology: 50)

(Mid Semester 30+End Semester 70)

Duration of Examination: 6 hours

(Questions are to be set covering all units)

The general practical shall include the following components with distribution of marks indicated against each section:

SECTION (A): PREHISTORIC ARCHAEOLOGY

- | | |
|--|----------|
| 1. 1:1 drawing and description of given Prehistoric lithic tools / artifacts | 20marks |
| 2. One elective question from Prehistoric Archaeology pertaining to stone tool technologies and major typologies of stone tools. | 15marks |
| 3. Identification of 5 types of tools/artifacts and their probable functions | 05marks |
| 4. Practical Records | 05marks |
| 5. Viva-Voce | 05 marks |

SECTION (B): MUSEOLOGY

- | | |
|---|---------|
| 1. Not to scale drawing, labeling, description and conservation of given museum specimens | 20marks |
| 2. One elective question from Museology pertaining to perspectives of Museology and the basic principles of museum. | 15marks |
| 3. Identification and function/use of the given museum | 05marks |
| 4. Practical Records: | 05marks |
| 5. Viva-Voce | 05marks |

PREHISTORIC ARCHAEOLOGY: The students are to be taught on the following aspects of **Prehistoric Archaeology** pertaining to stone tool technologies and typologies of tools of early human industries as:

- (a) Prehistoric Technology: Manufacturing techniques Palaeolithic, Mesolithic and Neolithic industries.
- (b) Tool Typology of Early man: Study of major stone tool types of the Palaeolithic, Mesolithic and Neolithic industries.

Each student has to answer one elective question of **15 marks** from the above aspects of

Prehistoric Archaeology.

The students are required to identify, draw and undertake metrical analysis of lithic artifacts belonging to different cultural periods. They are to describe the nature of (core/flake/ blades) tool types, manufacturing techniques, (flaking, retouching, grinding, polishing etc.), probable functions, effect of rolling, weather effect and patina, condition of the working edges, etc using the **Attribute Analysis Form** supplied by the Department.

Each student has to study:

- | | |
|----------------------|--|
| a. Palaeolithic tool | - 05 numbers (Choppers, Hand axes, Cleavers and Scrapers). |
| b. Mesolithic tool | - 10 numbers (Non-geometric and Geometric microliths). |
| c. Neolithic tool | - 05 numbers (Axe, Adze, Chisel, Ring stones) |

Maintaining proper **Laboratory Record** is compulsory. Each student has to submit a proper and complete laboratory record duly signed by the teacher who is assigned to teach this aspect. The students are required to submit their Laboratory Records at least five days before the conduct of practical examination. Defaulters of the same neither are allowed to appear the practical examination nor entitled to get the marks assigned to Practical Records.

MUSEOLOGY: The students are to be taught on the following aspects of **Museology** pertaining to perspectives of Museology and the basic principles of museum:

- (a) **Museology:** Meaning and scope; History and development of museums in World; Types of Museums; Role of Anthropological and Archaeological museums in education.
- (b) **Museum Administration:** Modes and ways of acquisition of museum specimens; Principles of display and arrangement in museum; Conservation and preservation of museum materials and antiquities.

Each student has to answer one elective question of **15 marks** from the above aspects of Museology.

The students are required to learn the basic principles of museum, documentation, labeling, and display of museum specimens. They are to learn the techniques of conservation and preservation of museum specimens. Each student has to apply the above methods, whichever is applicable, on specimens of following materials.

Composition:

- a. Plant remains: Wood, Bamboo,
- b. Fibre: Cloth / Linen.
- c. Metals: iron, brass, copper, silvers.
- d. Animal remains: Bone, antler, horn, leather/ hide

Maintaining proper **Laboratory Record** is compulsory. Each student has to submit a proper and complete laboratory record duly signed by the teacher who is assigned to teach this aspect. The students are required to submit their Laboratory Records at least five days before the conduct of practical examination. Defaulters of the same are neither allowed to appear the practical examination nor entitled to get the marks assigned to Practical Records.

Learning Outcomes

The learning outcomes of this paper are:

- 1. The students will learn about the skill to scientifically identifying the prehistoric tools and artefacts.
- 2. The will learn about basic principles of museum and identification and use of museum specimens..
- 3. They will also learn about prehistoric techniques and tool typology.
- 4. The students will learn about analysis of lithic artefacts using the attribute analysis form.

Suggested Readings / Books Recommended:

- 1. Aiyappan, A. and S.T. Satyamurti (Ed), 1960, *Handbook of Museum Technique*, Government Museum, Madras.
- 2. Banerjee N. R. *Museum and Cultural Heritage in India*
- 3. BasaK.K., Md. Rehan, R.K. Gupta 2007, *Museology A Comprehensive Bibliography and Webliography*, Serial Publications, New Delhi.
- 5. Behera, B.K. and S.K. Mohanty, 2007 *Museology and Museum Management in India*, Mayur Publications, Bhubaneswar, Orissa.
- 3. Bhattacharya, D.K. *An Introduction to Prehistoric Archaeology*
- 4. Bhattacharya, D.K. , *The Old Stone Age Tools*
- 5. Bhatnagar, A.1999, *Museum, Museology and New Museology*, Sandeep Prakashan, New Delhi.

6. Burkitt, M.C. *The Old Stone Age*
7. Diwvedi, V. P. and G.N. Pant(Ed) 1980, *Museum and Museology: New Horizon*, Agam Kala Prakashan, New Delhi.
8. Ghoshmaulik, and S.K. Mishra 1987, *Practical Anthropology*, SAAS, Orissa.
9. Ghoshmaulik, S.K. and K. K. Basa (Ed) 2001, *Understanding Heritage: Role of Museum, Academic staff Collage*, Utkal University, Bhubaneswar, India.
10. Joukowsky, Martha *Field Archaeology: Tool and Techniques of Field Work for Archaeologists*.
11. Nair, S. M., *Bio-Deteriorations of Museum Materials*, Agam Kala Prakashan, New Delhi.
12. Nigam, M. L., 1985 *Fundamentals of Museology*, Deva Publications, Hyderabad.
13. Oakley, K. P. 1975, *Man the Tool-maker, Trustees of British Museum (Natural History)*, London
14. Rammi Reddy, V. *Elements of Prehistory*
15. Renfrew, C. and P. Bahn *Archaeology: Theories, Methods and Practice*
16. Shankalia, H.D. *Stone Age Tools and Techniques*, Deccan Collage Poona. India

SEMESTER – III

CORE ELECTIVE:	2 PAPERS = 8 CREDITS = 200 MARKS
ALLIED ELECTIVE:	3 PAPERS= 12 CREDITS = 300 MARKS
TOTAL:	5 PAPERS=20 CREDITS = 500 MARKS

*All Core Elective Papers in Semester-III are also available as Allied Elective Papers for students from specified allied disciplines.

SEMESTER – III

ANTH-CE-A1

ANTHROPOLOGICAL THEORIES ON CULTURE

Full Marks: 100 (Theory: 70 + Assessment/Evaluation: 30)

Duration of Examination: 4 hours

(Questions are to be set covering first four units)

Unit I: Science and Humanity in Social Anthropology; Humanistic Tradition and Social Anthropology; Scientific Method in Social Studies.

Unit II: Outline of Approaches to the study of culture: Classical Evolutionism and Neo- Evolutionism.

Unit III: Diffusionism: British, Austro-German and American; Functional Approaches to the study of Culture (Mallinowski).

Unit:IV: Configurational Approach to the study of Culture (S.F.Nadel)
Culturological approach to the study of culture (Leslie White)

Unit:V Assessment/ Evaluation

Learning Outcomes

The learning outcomes of this paper are:

1. The students will learn about the science and humanity in social anthropology.
2. The will learn about approaches to the study of culture.
3. They will also learn about evolutionism, neo evolutionism, diffusionism to study culture..
4. The students will learn about Functional, Configurational, and Culturlogical approach to study culture.

Suggested Readings / Books Recommended:

1. Barth, Frederik. 1981. *Models of Social Organization*, Royal Anthropological Institute, Occasional Paper-23. London: Routledge and Kegan Paul.
2. Behura, N.K. Anthropological thought and Theories
3. Bidney, D. 1964. *Theoretical Anthropology*, New York: Columbia University Press,
4. ChiIde, V. Gordon. 1963. *Social Evolution*, A.A Watt and Co Ltd, 1951, First Meridian printing,
5. Durkheim, E. 1938 (1895). *The Rules of the Sociological Method* (S.Solovay and J. Meuller, trans,) New York: Free Press
6. Geertz, C. 1973. *The Interpretation of Culture*, New York: Basic Books.

7. Gluckman, M. 1949. *An Analysis of the Sociological Theories of Bronislaw Malinowski*. New York and London: Oxford University Press
8. Harris, M. 1969. *The Rise of Anthropological Theory*, London: Routledge and Kegan Paul.
9. Honnigman, J. J. (Ed). 1997, *A Hand Book of Social and Cultural Anthropology*, Vol-II, University of North Carolina, New Delhi: Rawat Publications.
10. Kroeber, A. L. 1953. *Anthropology Today: An Encyclopedic Inventory*. Chicago
11. Kroeber, A. L. 1939, *Cultural and Natural Areas of Native North America*, University of California Press.
12. Kuper, Adam. 1985. *Anthropology and Anthropologists: The Modern British School* (rev. ed.), Boston: Routledge & Kegan Paul.
13. Leach, E. R. 1963. *Rethinking Anthropology*, London: Athlone Press
14. Levi-Strauss, C. 1983, *Structural Anthropology*, Chicago: University of Chicago Press
15. Lowie, R. H. 1937, *The History of Ethnological Theory*, New York.
16. Malinowski, B. 1960 (Originally 1922), *A Scientific Theory of Culture and Other Essays*. New York.
17. Manners and Kaplan (Ed). 1968. *Theory in Anthropology: A Course Book*, Chicago: Aldine Publishing Company .
18. Martindale, Don. 1960, *The Nature and Types of Sociological Theory*. Houghton Mifflin.
19. Martindale, Don. 1965. *Functionalism in social Sciences*. *American Academy of Political & Social Science*,
20. Morgan, L. H. 1963. (Originally 1877), *Ancient Society*, New York.
21. Merton, R. K. 1957, *Social Theory and Social Structure*, New York
22. Nadel, S. F. 1957, *The Theory of Social Structure*, New York.
23. Nagel, E. 1961. *The Structure of Science*. New York
24. Parsons T and E. Shils (Ed.) 1952. *Towards a General Theory of Action*, Cambridge: Harvard University Press.
25. Radcliffe-Brown, A. R. 1952, *Structure and Function in Primitive Society*. New York: Free Press.
26. Radcliffe-Brown, A. R. 1958. *Method in Social Anthropology*. edited by M.N Srinivas, Chicago: University of Chicago Press.
27. Tylor, E. B. 1920 (originally in 1871), *Primitive Culture*, New York: J. P. Puthnam
28. White, L. A. 1949, *The Science of Culture: A Study of Man and Civilization*, Farrar, Strauss and Giroux
29. Voget, Fred W. 1975. *A History of Ethnology*, USA,

SEMESTER – III

ANTH-CE-A2

PSYCHOLOGICAL ANTHROPOLOGY

Full Marks: 100 (Theory: 70 + Assessment/Evaluation: 30)

Duration of Examination: 4 hours

(Questions are to be set covering first four units)

UNIT-1

Concept and Scope of Psychological Anthropology; Psychological Anthropology and Other Behavioural Sciences; History and Development of Psychological Anthropology; Major Approaches in Psychological Anthropology: Ethnopsychology, Psychoanalytic and Psychiatric Anthropology.

Individual, Society and Culture; Personality and Culture; Personality Formation and Determinants; Swaddling, Enculturation and Socialization Construct: Basic Personality Structure, Model Personality, Status Personality, Overt and Covert Personality, Ideal and Manifest personality.

UNIT- II

Personality and Human Nature; Functions of Personality, Methods in Culture Personality Research;
Gestalt Psychology and Configuration of Culture; Ethos, Eidos, Genius, Themes, Counter-Themes, Values and World Views, National Character and Culture Pattern Studies.

UNIT- III

Psychology of Culture Change; Diachronic and Synchronic Study of Culture and Personality; Personality as an Explanatory Concept in Social and Cultural System
Approaches to Childhood, Socialization and Cultural Context, Cross-Cultural Practices of Child Rearing, Socialization for deviance and conformity, Collective Child Rearing, Later Life Socialization, Rites de Passage, Ego Development and Superego control

UNIT -IV

Inter-generational Change in Group and Social Character; Psychology of Revitalization of Culture Movements;
Cultural psychiatry: Illness, Ecology and Epidemiology; Defence against stress, social causes of Suicide.

UNIT-V

A book review of 20 marks of any classical Psychological Anthropology book has to be submitted by the student before the end semester examination.

Learning Outcomes

The learning outcomes of this paper are:

1. The student will learn about the meaning and cope of psychological anthropology.
2. The students will learn about personality and human nature.
3. They will learn about psychology of culture change.
4. They will also learn about inter-generational change and cultural psychiatry.

Suggested Readings / Books Recommended:

1. Benedict, R. Patterns of cultures
2. Benedict, R. The Chrysanthemum and the Sword
3. Carstair, M. The Twice Born
4. Du Bois, C The People of Alore
5. Erikson, E. Childhood and Society
6. Goere, G. The Himalayan Village
7. Halowell, A.T. Culture and Experience
8. Honigmann, J.J. Culture and Personality
9. Hsu, F.L.K. Psychological Anthology
10. Kaplan, D.K(ed) Studying Personality Cross Culturally
11. Kardiner, A (ed) Psychological Frontiers of society
12. Kluckhohn, C. Etal(eds.) Personality in Nature, Culture and Society
13. Kroeber, A.L (ed) Anthropology Today
14. Linton, R. The Cultural Background of Personality
15. Mead and The Study of Culture at a Distance
16. Wallace, A.F.C Culture and Personality
17. Shweder, R.A Thinking Through Cultures
18. Honigmann, J.J Personality in Culture
19. Bock, Philip K. Communities in Psychological Anthropology

SEMESTER – III

ANTH-CE-B1

HUMAN BIOLOGY

Full Marks: 100 (Theory: 70 + Assessment/Evaluation: 30)

Duration of Examination: 4 hours

(Questions are to be set covering first four units)

Unit-I

Human Biology: Meaning and Scope; Structure and Function of Human Cell; Cell Cycle. Perspectives on Nutritional Anthropology, Nutritional Requirement in Man: Carbohydrate, Protein, Fat, Minerals and Vitamins; Carbohydrate and Lipid Metabolism in Man; Digestive system.

Unit-II

Human Anatomy in Connection to Evolution: Skeletal and Muscular System;

Human Physiology in Connection to Evolution: Composition and Function of Blood; Cardiovascular System; Respiratory System, Nervous System; Senses, Endocrine System and Reproductive System.

Unit-III

Concept of Human Growth; Stages of Human Growth: Prenatal (Fertilization, stages of embryonic and fetal development), Infancy, Childhood, Adolescence; Methods of studying Growth – Longitudinal, Cross-sectional, Mixed longitudinal; Growth Curve; Secular Trends in Growth; Senescence.

Factors affecting Growth: Genetic, Hormonal & Environmental.. Analysis of Human Physique and Body Composition- Sheldon, Parnell and Heath- Carter methods of Somatotyping.

Unit-IV

Human Population Biology and the IBP Programme. Human Adaptation: Human Adaptation to Heat, Cold, High altitudes and Nutrition

Bio-chemical Variation in Human Population: Serum Proteins-Haptoglobins, Transferin, Immunologist; Red cell enzymes-G6PD, Phosphoglucomutase, Lactate dehydrogenase

Unit-V

Assignments, Quiz, Oral test/presentation, Book readings based on the above units as prescribed by the concerned teacher.

Learning Outcome

The learning outcomes of this paper are:

1. The student will learn about the meaning and scope of human biology.
2. They also learn about different biological systems and its evolutionary linkages.
3. They will learn about human growth and development.
4. They will also learn about the IBP programmes and human bio-cultural variation and adaptation.

Suggested Readings / Books Recommended:

1. Bogin, B. 1988. *Patterns of Human Growth*. Cambridge University Press, Cambridge.
2. Mader, S.S. (6th Ed.). 2000. *Human Biology*. Mc Graw Hill, New Delhi.
3. Campbell, N.A., J.B. Reece and E.J. Simon (2nd Ed.)S. 2010. *Essential Biology with Physiology*. Pearsons, New Delhi.
4. Harrison, G.A., J.S. Weiner, J.M. Tanner and N.A. Barnicot. 1964. *Human Biology: An Introduction of Human Evolution, Variation and Growth*. Claredon Press, Oxford.
5. Jobling M. A., M. E. Hurles and C. Tyler-Smith. 2004. *Human Evolutionary Genetics: Origins, Peoples & Disease*. Garland Science. New York.
6. Yong J. Z. 1971. *Introduction to the Study of Man*. The English Language Book Society and Oxford University Press, Oxford.
7. Malina, R. M.; C. Bouchard and O. Bar-Or. 2004. *Growth, maturation & physical activity*. Human Kinetics.
8. Harrison, G.A. and H. Morphy. 1998. *Human Adaptation*. Berg Publisher, Oxford.
9. Damon, A.(Ed.). 1975. *Physiological Anthropology*. Oxford University Press, London.
10. Shephard, R. J. 1991. *Body composition in biological anthropology*. Cambridge University Press, Cambridge.
11. Champe, P. C. And R. A. Harvey (3rd Ed). 2005. *Lippincott's Illustrated Reviews: Biochemistry*, Lippincott Williams & Wilkins, Philadelphia.
12. Nelson, D. L and M. M. Cox. 2008. *Lehninger Principles of Biochemistry*, Fifth Edition. W. H. Freeman Company, New York.

13. Harlin, J.; G. Bertoni, L. J. Kleinsmith(8thEd.). 2012. *Becker's World of the Cell*. Pearson Benjamin Cumminga, San Francisco.
14. Tanner, J. M. 1978. *Growth at Adolescence*. Blackwell Science Ltd. London.
15. Carter, J. and B.H. Heath. 1990. *Somatotyping – Development and Application*. Cambridge University Press, Cambridge.
16. Vogel,F. and Motulsky, G. *Human Genetics: Problems &Approaches* , 3rd edition. Springer-Verlag, Berlin.
17. Lewis, R. 2009. *Human Genetics: Concepts & Applications*, 9th edition. Mc Graw-Hill Primis, USA
18. Lasker, G. W. and C. G. N. Mascie-Taylor (Ed.). 1993. *Research strategies in human biology: field and survey studies*. Cambridge University Press, Cambridge.
19. Weiss, K. M. 1993. *Genetic variation and human disease: Principles and evolutionary approaches*. Cambridge University Press, Cambridge.
20. Mascie-Taylor, C. G. N. and G. W. Lasker. 1991. *Application of biological anthropology to human affairs*. Cambridge University Press, Cambridge.

SEMESTER – III ANT-CE-B2

DEMOGRAPHIC ANTHROPOLOGY: MEANING & METHODS OF STUDY

Full Marks: 100 (Theory: 70 + Assessment/Evaluation: 30)

Duration of Examination: 4 hours

(Questions are to be set covering first four units)

Unit-I

Definition, Basic Concepts and Relevance. Relationship between Demography, Population Studies and Anthropology. Paleodemography or Prehistoric Demography. Sources of demographic data (Census, Vital Statistics, UN reports etc)

Unit-II

Population Growth Theories: Pre-Malthusian Theory- John Grant, Malthus Theory, Theory of Optimum Population, Biological Theories, Theory of Demographic Transition. Theoretical challenges: Culture, Political Economy, Gender, and Institutions in relation to Demographic Phenomena

Unit-III

Measures of population composition, distribution and growth, Measures of fertility, Measures of Mortality, Measures of Migration and Measures of Nuptiality. Population structure: Isonomy and Kinship Model, Fertility and Mortality Differentials, Intensity of Natural Selection

Unit-IV

Anthropology of small populations (Africa:Dobe!Kung , Himalaya, Andaman & Nicobar, PVTGs) LGBT community, Refugees and Exile, Aging population. National Population Policy and Family Planning Policies in India, One child policy of China and Issue of Population Decline in the Developed Countries.

Unit-V

Preparation of demographic report on tribes of India/Odisha/Quiz/Tests etc

Learning Outcomes

1. The students will learn about basic concepts of demography and demographic anthropology.
2. They will learn about theories of population growth, measures of population composition structure and dynamics of population change.
3. They will also learn about the methods of collecting demographic data.
4. They will learn about the demography of small populations, LGBT, refugees and policies.

Suggested Readings

Anthropological Survey of India.(1998). Anthropology of Small Populations, AnSI, Gupta Press, Calcutta.

Basu, Alaka Malwade and Peter Aaby, eds. 1998. The Methods and Uses of Anthropological Demography. Oxford: Clarendon Press.

Bhende, Asha A. and Tara Kanitkar (2019). Principles of population Studies. Bombay : Himalaya Pub. House.

Census of India (2001, 2011), SRS bulletin (2013), NFHS (2006), CRS, NSSO, District Gazetteers (Can be seen from browsing net)

Howell, Nancy. 2000. Demography of the Dobe !Kung, 2nd ed. New York: Aldine de Gruyter.

Howell N. (1986) Demographic Anthropology. Ann. Rev. Anthropol. 15: 219-246

Journal: Demography India

Kertzer, David I. and Tom Fricke, eds. 1997. Anthropological Demography: Toward a New Synthesis. Chicago: University of Chicago Press.

NFHS I, II, III, IV & V: 1992, 1998, 2005, 2015, 2019 India : IIPS Bombay

Pathak KB and F. Ram (2016). Techniques of Demographic Analysis. Bombay : Himalaya Pub. House.

Patra P.K. and Kapoor, A.K. (2009) Demography and Development Dynamics in a Primitive Tribe of Himalayas. International Book Distributors, Dehradun

Riley N.E. and Mc Carthy, J. (2003) Demography in the Age of the Postmodern. Cambridge University press. UK.

Satapathy, K C(2010) Refugees Health: a bioanthropological study on emerging health problem of Tibetan in India, Athena Books,

Sinha VC & E Zacharia (2009). Elements of Demography. Allied Publishers Pvt. Ltd, Kolkata, Revised Edition.

Srivastava O.S. (1994) Demography and Population Studies Vikas Publishing House.

World Bank 2000 World Development Report 2000, World Bank Publication.

SEMESTER – III

ANT-CE-C1

PRINCIPLES AND METHODS IN PREHISTORIC ARCHAEOLOGY

Full Marks: 100 (Theory: 70 + Assessment/Evaluation: 30)

Duration of Examination: 4 hours

(Questions are to be set covering first four units)

UNIT-I: Meaning and perspectives: Definition, scope and assumptions of Archaeology, History and development of Archaeology, Kinds of Archaeology.

Prehistoric Archaeology: Meaning, concepts and scope of prehistoric Archaeology, Chronological division of Cenozoic Era and events of the Pleistocene.

UNIT-II: Environmental Archaeology: Main factors of the human environment;

Studying the Landscape: Glaciated landscapes; Varves, Rivers, Cave Sites, Sediments and Soils.

Reconstruction of palaeo-environment of plant (Micro botanical and Macro botanical remains), animal (Micro fauna and Macro fauna) and human (Human modification of the living area, human exploitation of wider environment and human impact on island environment).

UNIT-III: Geo-archaeology: Basic principles and study components in geo-archaeology; analytical procedures in geo-archaeology;

Understanding Soil and Sediments: Physical features, Chemical features, Physical weathering and types of sediments; Chemical weathering and formation of main types of soil.

UNIT-IV: Formation processes in Archaeology and Ethno-Archaeology: Archaeological sites and its formation: Basic categories of Archaeological evidences; Types of sites and their contexts; Cultural formation processes and Natural / environmental formation processes in Archaeology.

Ethno-archaeology: Meaning, scope and approaches of ethno-archaeology; Ethno-archaeology in India with special reference to Orissa.

UNIT-V: Assessment / evaluation/ quiz/ oral test /presentation/term paper as prescribed by the concerned teacher.

Learning Outcomes

The learning outcomes of this paper are:

1. The students will learn about meaning, scope and historical development of prehistoric archaeology.
2. They will also learn about the geo-archaeology and formation processes in archaeology.
3. They will learn about ethnoarchaeology.
4. The students will also learn about ethnoarchaeology of India and Odisha.

Recommended Books:

1. Aitken, M.J. 1974, *Physics and Archaeology*. Oxford: Clarendon Press, London.
3. Binford, S.R. and L.R. Binford 1968, *New Perspectives in Archaeology*. Chicago: Aldine.
4. Burkitt, M.C. 1985. *The Old Stone Age A Study of Palaeolithic Times*. New Delhi: Rupa & Co.
5. Butzer, Karl, W 1971, *Environment and Archaeology, An Ecological Approach to Prehistory*. Chicago: Aldine.
6. Butzer, Karl, W. 1987. *Archaeology as Human Ecology: Methods and theory for a contextual approach*. Cambridge: Cambridge University Press.
7. Childe, V. G *Piecing Together the Past*
8. Clark, J. G.D. *Archaeology and Society*
9. Clarke, D. L. 1968 *Analytical Archaeology*. Methuen: London.
10. Coles, J. M. and E.S. Higgs 1969, *The Archaeology of Early Man*. London
11. Daniel, Glynn, E. 1967 *The Origin and Growth of Archaeology*. Pelican: Harmondsworth.
12. Daniel, Glynn, E. 1975. *150 Years of Archaeology*. Duckworth: London.
13. Daniel, Glynn, E. 1980. *A Short History of Archaeology*. Thames and Hudson Ltd. London & New York.
14. Daniel, Glynn, E. and Renfrew, A.C. 1988. *The Ideas of Prehistory. (Rev. Ed.)* Edinburgh Univ. Press; Columbia Univ. Press: New York.
15. Dancey, William, S. 1985. *Archaeological Field Methods: An Introduction*. Delhi: Surjeet Publications.
16. Davidson, D.A. and M.L. Shackley (Eds) 1975, *Geo-archaeology: Earth science and the past*. London: Duckworth.
17. Evans, John, G. 1981. *An Introduction to Environmental Archaeology*. London: Paul Elek-Granada Publishing.
18. Ghilardi, M. and Desruelles, S. 2008. *Geoarchaeology: where human, social and earth sciences meet with technology. S.A.P.I.EN.S.* 1 (2)
19. Gould, R.A. (Ed.). 1978. *Explorations in Ethno-archaeology*. Albuquerque: University of New Mexico Press.
20. Hardesty, D.L. 1977. *Ecological Anthropology*. New York: John Wiley & Sons.
21. Hole, F. and Robert F. Heizer, 1973. *An Introduction to Prehistoric Archaeology*. New York: Holt, Rinehart and Winston.

22. Hodder, Ian 1982. *The Present Past: An Introduction to Anthropology for Archaeologists*. London: Bastford.
23. Joukowsky, Martha 1986. *A Complete Manual of Field Archaeology: Tool and Techniques of Field Work for Archaeologists*. New York: Prentice Hall Press.
22. Limberly, S. 1975. *Soil science and Archaeology*. London: Academic Press.
24. Longacre, W.A. 1970. *Archaeology as Anthropology: A Case study*. Tucson: University of Arizona Press.
25. Renfrew, C. and P. Bahn 1996 *Archaeology: Theories, Methods and Practice*. Thames and Hudson Ltd. London & New York.
26. Rajan, K. 2002. *Archaeology: Principles and methods*. Tanjavur, Tamilnadu: Manoo Pathippakam.
27. Schiffer, M.B. 1983-84 *Advances in Archaeological Method and Theory (Vol. 1 to 9)*. Academic Press: New York and London.
28. Schiffer, M. B. 1987, *Formation Processes of Archaeological Record*. Albuquerque: University of New Mexico Press.
29. Shackley, Myra L. 1981. *Environmental Archaeology*. London: George Allen & Unwin.
30. Shackley, Myra L. 1975. *Archaeological sediments: a survey of analytical methods*. London: Butterworths.
31. Yelen, John E. 1980. *Archaeological Approaches to the Present*. New York: Academic Press.
32. West, R. G. 1977. *Pleistocene Geology and Biology*. London and New York; Longman

SEMESTER – III

ANTH-CE-C2

PREHISTORIC ARCHAEOLOGY AND PALAEOANTHROPOLOGY OF AFRICA AND EUROPE

Full Marks: 100 (Theory: 70 + Assessment/Evaluation: 30)

Duration of Examination: 4 hours

(Questions are to be set covering first four units)

UNIT-I Pleistocene events and Early Human :

Pleistocene events in the Glaciated area, Periglacial area and Pluviated area.
Land and Records of Early Human in Africa and Europe.

UNIT-II Prehistory of Africa (Palaeolithic Cultures):

Lower Palaeolithic Pebble Tools Culture – evidences from Hadar, Laetoli, Olduvai Gorge, Koobi Forra;
Acheulian Culture in Africa – Evidences from Olduvai Gorge, Isimila, Kalambo Falls, Olorgesailie; Middle and Late Palaeolithic culture of North Africa.

UNIT-III Prehistory of Europe (Palaeolithic Period):

Acheulian Culture in South Western Europe – evidences from Terra Amata, Torralba Ambrona, Pech-de-l'Aze
Middle Palaeolithic Cultures in Western and Central Europe.

UNIT IV Upper Palaeolithic and Mesolithic Cultures of Europe:

Upper Palaeolithic Cultures of Western and Central; Upper Palaeolithic habitations; economy and art in Europe.
Mesolithic Cultures of Europe: Mesolithic Cultural traditions, People, Subsistence and Settlements

UNIT-V Assessment / evaluation/ quiz/ oral test /presentation/term paper as prescribed by the concerned teacher.

Learning Outcomes

The learning outcomes of this paper are:

1. The students will learn about Pleistocene events and early humans.
2. They will also learn about prehistory of Africa.
3. They will learn about prehistory of Europe.
4. The students will also learn about the Upper Paleolithic and Mesolithic culture of Europe.

Recommended Books:

1. Barry, Cunliffe (Ed.) 1987. Prehistoric Europe: An Illustrated History. New York: Oxford University Press
2. Bhattacharya, D.K. Palaeolithic Europe.
3. Bhattacharya, D.K. 1978. The Emergence of Culture in Europe. Delhi: B.R. Publishing Corporation
4. Champion, T., Clive Gamble, Stephen Shennan, Alsadair Whittle 1989. Prehistoric Europe. New York: Academic Press, Harcourt Brace Jovanovich, Publishers.
5. Bonsall, C. (Ed.), 1989. The Mesolithic Europe. Edinburgh
6. Grahame Clark 1977. World Prehistory: In New Perspective. Cambridge University Press
7. Clark, Grahame, World Prehistory: A New Outline: Cambridge, England: The University Press.
8. Clark, J.G.D, 1936. Mesolithic Settlement in Northern Europe. London: Cambridge
9. Clark, J.D., 1956, Prehistory of Southern Africa. New York.
10. Cole, S. 1963, Prehistory of East Africa. Pelican Books.
11. Cole, J. M. and E.S. Higgs. 1969, The Archaeology of Early Man. London.
12. Fagan, Brian M. 1977, People of the Earth: An Introduction to World Prehistory. Boston, Toronto: Little Brown and Company.
13. Lewis, B., R. Jurmain, L. Kilgore, 2007. Understanding Physical Anthropology and Archaeology. United States of America: Thomson Wordsworth.
14. Phillipson, David. W. 1990. African Archaeology. Cambridge: Cambridge University Press.
15. Potts, Richard 1988. Early Hominid Activities at Olduvai. New York: Aldine.
16. Rammi Reddy, V. 1989, Palaeolithic and Mesolithic Cultures. New Delhi: Mittal Publications.
17. Rammi Reddy, V. 1991, Neolithic and Post-Neolithic Cultures. New Delhi: Mittal Publications.
18. Wenke, Robert J. 1990. Patterns in Prehistory: Humankind's First three Million Years. (3rd Ed.). New York: Oxford University Press.
19. West, R. G. 1977. Pleistocene Geology and Biology. London and New York; Longman.
20. Wolpoff, Milford H. 1999. Palaeoanthropology. (2nd Ed.). New York: McGraw-Hill.

SEMESTER – III
ANTH-CE-D1
PRINCIPLES IN DEVELOPMENT ANTHROPOLOGY
Full Marks: 100 (Theory: 70 + Assessment/Evaluation: 30)
Duration of Examination: 4 hours
(Questions are to be set covering first four units)

- UNIT I:** Development as a historical process: Pre-capitalist societies; Capitalism and development; Western model of development in the colonial and post-colonial contexts; socialist models of development; post-war restructuring and Bretton Woods Institutions; the human factor in development; the Millennium Development Goals.
Competing views on development : Neo liberalism, structuralism and interventionism ; Anthropology as an Applied Science ; applied development roles for anthropologists ; Development Anthropology ; concepts of Endogenous, Sustainable and Human Development.
- UNIT II:** Meaning of Economic development and Economic growth; characteristics of Economic development; Social and Cultural Characteristics of economic development; Indices of Economic development; Development and underdevelopment: The Third World Profile; Defining the developing world: the structural diversity of developing economics; common characteristics of developing countries.
- UNIT III:** The concept of developmental state; democratic transitions of the developmental state: economic development and democratization, civil society and democratization; development outcomes in the developing countries; concept of Regionalism in the developing world: First Wave of Regionalism and Second wave of Regionalism; Regional co-operation between developing countries.
- UNIT IV:** Concept of Globalization as a highly differentiated process of change; Locating development in the context of Globalization; Strategic political responses of the developmental state: regulation, regionalism and resistance; Economic liberalization; A new Global Ethics; Globalization, Identity and Local cultures.
- UNIT V:** A **Project of 20 marks** on any of the above topics has to be submitted by the student before the end semester examination.

Learning Outcomes

The learning outcomes of this paper are:

1. The students will learn about development as a historical process.
2. They will learn about Meaning of Economic development and Economic growth.
3. They will also learn about the concept of developmental state.
4. They will learn about the concept of Globalization as a highly differentiated process of change.

Suggested Readings / Books Recommended:

1. Denise Goulet, *The Cruel Choice: A New Concept in the Theory of Development*, New York, Atheneum, 1971.
2. Selo. Soemardjan & Kenneth W. Thompson (eds), *Culture, Development and Democracy*, New York, United Nations University Press, 1994.
3. Dudley Seers, "The meaning of Development", in Nancy Bastor (ed.) *Measuring Development: The Role and Adequacy of Development Indicators*, London: Cass, 1972.
4. Gardner. K and David Lewis, *Anthropology, Development and the Post-Modern Challenge*, London: Pluto Press, 1996.

5. Jeffrey Jenson Arnett, *Human Development: A cultural Approach*, Pearson, 2012.
6. John Rapley, *Understanding Development*, Boulder, London : Lynne Rienner Publishers, 2007
7. Arturo Escobar, *Encountering Development: The making and unmaking of the Third World*, N. J. Princeton University Press, Princeton, 1995.
8. Edward Green, *Anthropology in Practice: Case Studies in Development Anthropology*, West View Press, Boulder, Colorado, 1986.
9. Schurmann, Frans (eds) *Beyond the Impasse: New Directions in Development Theory*, London: Zed, 1993.
10. Robert, J. Timmons and Amy Hite (eds), *From Modernization to Globalization. Perspectives on Development and Social Change*, Malder, M.A: Blackwell, 2000.
11. Richard Peet, *Theories of Development*, New York: Guilford Press, 1999.
12. Allen, T and A. Thomas, *Poverty and Development into the 21st century*, the open university: OUP, 2000.
13. Haynes, J., *Development Studies*, Palgrave Macmillan, 2005.
14. Mathur, H.M, *Anthropology in the Development Process*, Vikas Publishing House Pvt. Ltd., New Delhi, 1977.
15. Cochrane, G., *Development Anthropology*, New York: OUP 1971.
16. Cochrane, G., (eds), *what we can do for each other: An Interdisciplinary Approach to Development Anthropology* B. R Gruner Publishing Co., Amsterdam, 1976.
17. Bauman, Z., *Globalization. The Human Consequences*, Cambridge: Polity Press, 1998.
18. Hulsemeyer, A., (eds), *Globalization in the Twenty-First Century: Convergence or Divergence?*, London : Palgrave 2003.
19. Haggard, S. and Kaufman, R., *The Political Economy of Democratic Transitions*, Princeton, NJ : Princeton University Press, 1995.
20. Handelman, H., *The Challenges of the Third World Development*, 3rd edition, upper Saddle River, New Jersey : Prentice Hall, 2003.
21. Jaan Valsiner, *Culture and Human Development*, SAGE, 2000.
22. Margaret, Khalakdina, *Human Development in Indian Context: A Socio-cultural Focus*, Sage, 2008.
23. Nirupama Nagar & Preeti, Phuskele, *Millennium Development Goals: Achievements and Roads Ahead*, ICEFI University Press, 2009.
24. Omen, C., *Globalization and Regionalization: The Challenges for Developing Countries*, Paris, OECD, 1994.
25. Krause, L., and Kihwan, K., (eds), *Liberalization in the process of Economic Development*, Berkeley, CA : university of California Press, 1991.
26. Rist, G., *The History of Development*, London: Zed, 1997.
27. Robinson, M., and White, G., *The Democratic Developmental State: Political and Institutional Design*, Oxford: OUP, 1999.
28. Meier, G. and Stiglitz, J., (eds), *Frontiers of Development Economics*, New York : OUP, 2001.
29. Sakiko Fukuda-Parr & Shivkumar, A.K., *Handbook of Human Development: Concepts, Measures and Policies*, Oxford University Press, 2010.
30. UNPD, *Human Development Reports*, Oxford: OUP, 2001, 2002, 2003.

SEMESTER – III
ANT-CE-D2
THEORIES AND METHODS IN DEVELOPMENT ANTHROPOLOGY
Full Marks: 100 (Theory: 70 + Assessment/Evaluation: 30)
Duration of Examination: 4 hours
(Questions are to be set covering first four units)

UNIT – I: Outline of the theories of Classical Economic development: Adam Smith, David Ricardo, Thomas Malthus, John Stuart Mill; Marxian Theory of Economic development; Neo-Classical Economics of Alfred Marshall; Keynesian Theory of Economic development.

UNIT – II:
W. W. Rostow's stages of Growth Concept ; theoretical concept of underdevelopment of Harvey Leibenstein ; Non-economic determinants in development planning of Gunnar Myrdal ; concept of endogenous development emphasizing entrepreneurship of Joseph Alios Schumpeter ; E. E. Schumacher's concept of Intermediate Technology with a Human Face ; Amartya Sen's concept of Development as capability expansion.

UNIT – III
Preparation of Development Action Plans; Logical Framework Analysis (LFA) ; Objective-Oriented Intervention Planning (OOIP) ; Cost-Benefit Analysis (CBA) and Cost Effective Analysis (CEA) ; Strength, Weakness, Objectives, Constraints (SWOC) Analysis ; Participatory Research Methods (PRM) ; Monitoring and Evaluation.

UNIT – IV
Problems of Development: Famine and Hunger; Overpopulation; Diseases; Unemployment; Migration; Involuntary Displacement and Rehabilitation; War; Environmental degradation.

UNIT – V
A **Book Review of 20 marks** of any work on theory mentioned in Unit-I & II has to be submitted by the student before the end semester examination.

Learning Outcomes

The learning outcomes of this paper are:

1. The students will learn about outline of the theories of Classical Economic development.
2. They will learn about stages growth and neo-economic determinants
3. They will also learn about Preparation of Development Action Plans, Cost-Benefit Analysis, and Participatory Research Methods.
4. They will learn about the Problems of Development.

Suggested Readings / Books Recommended:

1. Myrdal, G., Asian Drama: An Enquiry into the Poverty of Nations (3 vols), New York : Harper and Brothers, 1968.
2. Marx, K and Engels, F., The Communist Manifesto, Harmondsworth : Penguin, 1967.
3. Rostow, W. W., The stages of Economic Growth: A Non-communist Manifesto, Cambridge: Cambridge University Press, 1960.
4. Schumacher, E. F., Small is Beautiful, London: Blond and Briggs, 1973.
5. Allen, T. and Thomas, A., (eds), Poverty and Development into the 21st century, The Open University, OUP, 2000.
6. Dreze, J and Sen, A., Hunger and Public Action, London: Clarendon Paper backs, 1989.

7. Schumpeter, J., Capitalism, Socialism and Democracy, 3rd edition, London: Allen and Unwin, 1950.
8. Sen, A., Commodities and Capabilities, North Holland, Amsterdam, 1985.
9. Raphael, D.D., Winch, D., Lord Skidelsky., Three Great Economists, Penguin Publication.
10. Sen, A., "Development as Capability Expansion", in Griffin, K. and Knight, J., (eds) Human Development and the International Strategy for the 1990's, Macmillan, London, 1990.
11. Dessalegn, R., Famine and Survival Strategies: a case study from Northeast Ethiopia, Addis Ababa University, Institute of Development Studies, Addis Ababa, 1987.
12. Sen, A., Poverty and Famines: an essay on entitlement and deprivation, Oxford: OUP, 1981.
13. Keen, D., The Benefits of Famine: a political economy of famine and relief in Southwestern Sudan, 1983-89, Princeton: Princeton University Press, 1994.
14. Macral, J. and Zuri, A., (eds), War and Hunger, Zen Books, London, 1994.
15. Mc. Dowell, C., (eds), understanding Impoverishment: The consequences of Development-Induced Displacement, Oxford: Berghahn, 1996.
16. Indra, D., (eds), Engendering Forced Migration: Theory and Practice, Oxford: Berghahr, 1999.
17. Keegar, I., War and our World, Hutchinson, London, 1998.
18. Lappe, F.M. and Schurman, R., Taking Population seriously/ Earth scan Publications, London, 1988.
19. Mikkelsen, B., Methods for Development Work and Research, Sage, London, 2005.
20. Bryman, Alan., Social Research Methods, OUO, London, 2001.
21. Cernea, M. M., Putting People First. Sociological variables in Rural Development, New York. OUP, 1991.
22. Estrella, M., (eds), Learning from change, Issues and Experiences in Participatory Monitoring and Evaluation, IT Publication, London, 2000.
23. Mukherjee, N., Participatory Learning and Action – with 100 Field Methods, Concept Publishing House, New Delhi, 2002.
24. Chambers, R., Participatory Workshops. A Source Book of 21 sets of Ideas and Activities, Earth Scan, London, 2002.
25. Oakley, P., and Marsden, D., (eds), Evaluating Social Development Projects, Development Guidelines NO 5, 1991.
26. UNPD, Population, Resources and Environment: The Critical Challenges, New York: United Nations, 1991.
27. Todaro, M. P., and Smith, S.C., Economic Development Eighth Edition, Pearson Education, New Delhi, 2003.
28. Hunt, D., Economic Theories of Development. An Analysis of Competing Paradigms, London: Harvester / Wheatsheaf.
29. Todaro, M., Economic Development, 7th edition, New York: Addison-Wesley, 2000.
30. Myrdal, G., The Challenges of World Poverty, New York : Partheon, 1970

SEMESTER – III

ANTH-CE-E1

PRINCIPLE IN POPULATION STUDIES

Full Marks: 100 (Theory: 70 + Assessment/Evaluation: 30)

Duration of Examination: 4 hours

(Questions are to be set covering first four units)

Unit-I

Definition, Meaning, and Scope of Demography; Relevance of Demography; History and Development of Demography/Population Studies; Relation of Demography with other Disciplines: Sociology, Human Ecology, Economics, Geography; Anthropology.

Unit-II

Population Growth: Concepts, Definition and Theories (Biological, Social and Economic); Stages of Population Growth (Population Transition); Concepts of Stable Population, Optimum Population, Population Explosion, Threshold Population and Population Threshold.

Unit-III

Sources of Demographic Data: Census - History of Census; Significant features of Census; Problems connected with Census; Census techniques – de facto and de jure methods; Census in India.

Registration of Vital Events, Sample Registration system; Dual Report System, National Sample Survey, Population Registers, National and International Publications; Methods of Collection of Demographic Information.

Unit IV

Techniques of Population Analysis: Estimation of Mid-year Population and Person Year; Population Growth Rate, Age-sex structure, Sex-Ratio, Dependency Ratio, Age at Marriage, Literacy rate, life expectancy.

Measurements of fertility, mortality and migration; Crude-Birth Rate; General Fertility Rate; Total Fertility Rate; Age-Specific Fertility Rate; Gross-Reproductive Rate; Total Fertility Rate Child-Women Ratio, Couple Protection Rate, Crude-Death Rate, Age-specific Death Rate, Infant and Child Mortality Rate, Maternal Mortality Rate, Migration Rate, Population Projection.

Unit-V

Assignments, Quiz, Oral test/presentation, Book readings based on the above units as prescribed by the concern teacher.

Learning Outcomes

The learning outcomes of this paper are:

1. The students will learn about the Meaning, and Scope of Demography.
2. They will learn about the concept of Population Growth
3. They will also learn about the various Sources of Demographic Data.
4. They will learn about the Techniques of Population Analysis.

Suggested Readings / Books Recommended:

1. Barclay, G. W.-Techniques of Population Analysis
2. Bhende A,T.Kanitkar- Principles of population studies
3. Bouge Donald, J. W.-Principles of Demography
4. Cox, Peter. R. -Demography
5. Dak, T. M.-Sociology of health in India
6. Hauser, P. & Duncan, D.-The Study of Population
7. Jain, Anrudh, K.-Infant Mortality in India
8. Mathur, R. N.-Population Analysis and Studies
9. Mishra, B. D.-Population Analysis
10. Park, D.-Preventive and Social Medicine
11. Premi, M. K.-Society and Population
12. Raj. Hans-Fundamentals of Demography
13. Sinha, V. C. & Zacharia, E.-Elements of Demography
14. Spiegelman, M.-Introduction to Demography.
15. Srivastava, O. S.-Demography
16. Visaria, Pravin-Differentials and Determinants of Fertility

SEMESTER – III
ANTH-CE-E2
POPULATION THEORIES AND WORLD POPULATION GROWTH
Full Marks: 100 (Theory: 70 + Assessment/Evaluation: 30)
Duration of Examination: 4 hours
(Questions are to be set covering first four units)

Unit-I

Early Thinkers on Population Issues: Greek Thinkers, Roman Thinkers, Chinese Thinkers; Classical and Neo-Classical Schools of Thought on Population; Optimum Population Theory; Marxist and Socialist Schools

Population Theories: Pre-Malthusian, Malthusian, and Post-Malthusian; Theory of Population Transition; Sadler's Density Principle; Theory of Thomas Doubleday; Spencer's Theory

Unit-II

World Population Growth: History of World Population Growth; Growth rate, Causes of Population growth, Distribution of World Population; Distribution of Population (concentration) in Developed and Developing countries; Reasons of Uneven Distribution; World Population: Structure, Size, Density, Age-Sex Structure and Composition, Education and Life Expectancy; levels and trends of fertility and mortality, future prospects of world population

Unit-III

Population and Environment: Interrelation of Population Growth and Environment (Biotic, Social, Cultural, Carrying Capacity); the Problem of Overpopulation and Environmental Degradation

Unit IV

Health and Environment: Concept of Health and disease, Primary Health Care Approaches and Practices; Population Health: Endemicity, Disability, Women and Children, Problems of HIV /AIDs in India.

Unit-V

Assignments, Quiz, Oral test/presentation, Book readings based on the above units as prescribed by the concern teacher.

Learning Outcomes

The learning outcomes of this paper are:

1. The students will learn about Early Thinkers on Population Issues and population theories.
2. They will learn about world population and its growth.
3. They will also learn about Population and Environment.
4. They will learn about Health and Environment.

Suggested Readings / Books Recommended:

1. Barclay, G. W.-Techniques of Population Analysis
2. Bouge Donald, J. W.-Principles of Demography
3. Cox, Peter. R.-Demography
4. Dak, T. M.-Sociology of health in India
5. Hauser, P. & Duncan, D.-The Study of Population
6. Jain, Anrudh, K.-Infant Mortality in India
7. Mathur, R. N.-Population Analysis and Studies
8. Mishra, B. D.-Population Analysis

9. Park, D.-Preventive and Social Medicine
10. Premi, M. K.-Society and Population
11. Raj,. Hans-Fundamentals of Demography
12. Sinha, V. C. & Zacharia, E.-Elements of Demography
13. Spiegelman, M.-Introduction to Demography.
14. Mahadevan, K.-Fertility and *Mortality*
15. Mohadevan, K.-Sociology of Fertility
16. Mitra, Ashok-India's *Population* Vol. I & II
17. Sandhya, S.-Socio-Economic and *Cultural* Correlates
of Infant mortality
18. Sinha, V.-Dynamics of Indian Population Growth
19. Souza, Victor, C. D.-Economic Development, Social Structure and Population Grow,"
20. Thompson, Ralph-Demographic Problems
- 21 Visaria, Pravin-Differentials and Determinants of fertility

SEMESTER-IV

CORE ELECTIVE:	3 PAPERS= 16 CREDITS = 300 MARKS
(2 Theory papers x 4 credits= 8 credits; 1 fieldwork and dissertation = 8 credits)	
FREE ELECTIVE:	1 PAPER= 4 CREDITS = 100 MARKS
TOTAL:	4 PAPERS=20 CREDITS = 400 MARKS

*All Core Elective Papers in Semester-IV are also available as Allied Elective Papers for students from specified allied disciplines.

SEMESTER – IV

ANTH-CE-A3

ANTHROPOLOGICAL THEORIES ON SOCIETY

Full Marks: 100 (Theory: 70 + Assessment/Evaluation: 30)

Duration of Examination: 4 hours

(Questions are to be set covering first four units)

Unit-I	Outline of approaches to the study of Society: Evolutionary, Social Action Approach; Marxian Approach; Structure-Functional Approach and its limitations. Structuralism and Post- Structuralism
Unit-II	Historical Particularism: Franz Boas, C.Wissler and A.L Kroeber; Contributions of Raymond Firth, Max Gluckman and E.R Leach.
Unit- III	Symbolic and Interpretative Anthropology: Victor Turner, Schneider and Clifford Geertz;
Unit- IV	Post-modern Anthropology: Contributions of Raheja, Apadurai, Bruno, Bordeu
Unit- V	Assessment/Evaluation

Learning Outcomes

The learning outcomes of this paper are:

- 1.The students will learn about approaches to the study of society.
- 2.They will learn about anthropological theories on society.
- 3.They will also learn about symbolic and interpretative anthropology.
- 4.They will also learn about the contribution of postmodern anthropologist.

Suggested Readings / Books Recommended:

1. Barth, Frederik. 1981. *Models of Social Organization*, Royal Anthropological Institute, Occasional Paper-23. London: Routledge and Kegan Paul.
2. Behura, N.K. Anthropological thought and Theories
3. Bidney, D. 1964. *Theoretical Anthropology*, New York: Columbia University Press,
4. ChiIde, V. Gordon. 1963. *Social Evolution*, A.A Watt and Co ltd, 1951, First Meridian printing,
5. Durkheim, E. 1938 (1895). *The Rules of the Sociological Method* (S.Solovay and J. Meuller, trans,)

New York: Free Press

6. Geertz, C. 1973. *The Interpretation of Culture*, New York: Basic Books.
7. Gluckman, M. 1949. *An Analysis of the Sociological Theories of Bronislaw Malinowski*. New York
and London: Oxford University Press
8. Harris, M. 1969. *The Rise of Anthropological Theory*, London: Routledge and Kegan Paul.
9. Honnigman, J. J. (Ed). 1997, *A Hand Book of Social and Cultural Anthropology*, Vol-II, University
of North Carolina, New Delhi: Rawat Publications
10. Kroeber, A. L. 1953. *Anthropology Today: An Encyclopedic Inventory*. Chicago
11. Kroeber, A. L. 1939, *Cultural and Natural Areas of Native North America*, University of
California
Press
12. Kuper, Adam. 1985. *Anthropology and Anthropologists: The Modern British School* (rev. ed.),
Boston: Routledge & Kegan Paul.
13. Leach, E. R. 1963. *Rethinking Anthropology*, London: Athlone Press
14. Levi-Strauss, C. 1983, *Structural Anthropology*, Chicago: University of Chicago Press
15. Lowie, R. H. 1937, *The History of Ethnological Theory*, New York.
16. Malinowski, B. 1960 (Originally 1922), *A Scientific Theory of Culture and Other Essays*. New
York
17. Manners and Kaplan (Ed). 1968. *Theory in Anthropology: A Course Book*, Chicago: Aldine
Publishing Company
18. Martindale, Don. 1960, *The Nature and Types of Sociological Theory*. Houghton Mifflin
19. Martindale, Don. 1965. *Functionalism in social Sciences*. *American Academy of Political & Social
Science*,
20. Morgan, L. H. 1963. (Originally 1877), *Ancient Society*, New York
21. Merton, R. K. 1957, *Social Theory and Social Structure*, New York
22. Nadel, S. F. 1957, *The Theory of Social Structure*, New York
23. Nagel, E. 1961. *The Structure of Science*. New York
24. Parsons T and E. Shils (Ed.) 1952. *Towards a General Theory of Action*, Cambridge: Harvard
University Press
25. Radcliffe-Brown, A. R. 1952, *Structure and Function in Primitive Society*. New York: Free
Press
26. Radcliffe-Brown, A. R. 1958. *Method in Social Anthropology*. edited by M.N Srinivas,
Chicago:
University of Chicago Press
27. Tylor, E. B. 1920 (originally in 1871), *Primitive Culture*, New York: J. P. Puthnam
28. White, L. A. 1949, *The Science of Culture: A Study of Man and Civilization*, Farrar, Strauss and
Giroux
29. Voget, Fred W. 1975. *A History of Ethnology*, USA,

SEMESTER – IV
ANT-CE-A4
LINGUISTIC ANTHROPOLOGY
Full Marks: 100 (Theory: 70 + Assessment/Evaluation: 30)
Duration of Examination: 4 hours
(Questions are to be set covering first four units)

UNIT-I

Concept and Scope of Linguistic Anthropology; Linguistic Anthropology and other Behavioural Sciences; Universals of Language, Types: Descriptive and Historical Linguistic; Origin and Evolution of Language.

Language, Dialect and Idiolects: Definitions and Interrelations; Ethno linguistics, Socio-Linguistics; Language and the Brain. Linguistic Variations: Distinct Languages, Dialects and Pidgins and Creoles.

UNIT-II

Language as a System: Phonetic Sub System, Morphophonemic Sub System, Syntactic Sub System and Semantic Sub System; Generalization Linguistic Methodology; Comparative Method and historical Linguistics

Language and Culture: Cultural Influence on Language and Linguistic Influence on Culture Sapir–Whorf Hypothesis; Linguistic and Culture Change; taxonomy of languages and cultures. Socio- cultural contexts of linguistic acculturation

UNIT-III

Classification of Languages: Typological and Genealogical; Synchronic and Diachronic study of Languages; Functional study of Languages; Glottochronology

India as a Linguistic Area; Standard languages and Nationalism; speech variation and the study of Indian civilization; study and sacred language.

UNIT-IV

Languages and the Analysis of Social Laws; Language and Social Structure; Structural Analysis in Linguistics and Anthropology; Linguistics and Ethnology

Language and Communication: Verbal and Non-Verbal (Signs and Symbols); Communication and Sociability; Language and Speech; Linguistic Contact: Patterns of Contacts, Diglossia and Multilingualism; Ethnography of Speaking; speech and personality; Communication and functions speech; literate and illiterate speech

UNIT-V

A book review of 20 marks of any classical anthropology book (preferably linguistic anthropology book) has to be submitted by the student before the end semester examination.

Learning Outcomes

The learning outcomes of this paper are:

- 1.The students will learn about what language and what its place in anthropology.
2. They will learn about classification of language and the influence of language and linguistics on culture.
- 3.They will also learn about how language makes sense only in its social context.
- 4.They will also learn about how to conduct a language survey and prepare a report on the same.

Suggested Readings / Books Recommended:

1. Ardver ,E.(ed) Social Anthropology and Language
2. Bloomfield, L. Language
3. Bright, W. Socio-linguistics
4. Burling, R. Man's Many voices-Language in its Cultural Context
5. Gleason, H.A. An Introduction to Descriptive Linguistics
6. Gumperz and Hymas(eds.) The Ethnography of Communication
7. Hockett,C.F. A Course in Modern Linguistics
8. Hoijer, H. (ed) Language in Culture
9. Hymes, D.(ed) Language in Culture and Society
10. Kroeber, A.L. (ed) Anthropology Today
11. Lehmann, H.P. Historical Linguistics
12. Levi Strauss,C. Structural Anthropology (Selected chapters)
13. Mishra, K.K. Anthropological Linguistics
14. Sapir, E. Language

SEMESTER – IV
ANTH-CE-A5
PRACTICAL: RESEARCH METHODS AND ETHNOGRAPHY READINGS
Full Marks: 100 (Theory: 70 + Assessment/Evaluation: 30)
Duration of Examination: 6 hours
(Questions are to be set covering first four units)

- | | |
|---|-----------------|
| 1. Research Methodology: | 40 Marks |
| (i) Preparing for field work: Choosing a topic, narrowing the focus. | |
| (ii) Research techniques: Participant Observation, Questioning, Interviewing, Scheduling, Sampling. | |
| (iii) Conduct of field work: Gaining Entry, Survival
Acquiring a broader world view | |
| (iv) Scientific field work: The positivist approach and its application in Anthropology
The Dialectic of Fieldwork | |
| 2. Ethnographic Readings: | 30 Marks |
| 3. Review of Literature: | 30 Marks |

Learning Outcomes

The learning outcomes of this paper are:

1. The student will learn importance of scientific fieldwork.
2. They will learn about the steps to be taken before starting the fieldwork.
3. The students will learn about the research techniques and conduct of field work.
4. They will also learn about field works by ethnographic readings and review of literature.

SEMESTER – IV
ANTH-CE-A6
FIELDWORK AND DISSERTATION
Total marks: 100
(Fieldwork, Dissertation and Field Diary: 70 + Assessment/Evaluation (Seminar Presentation): 30)
Duration of Examination: 6 hours

Empirical study among the tribes and castes of Odisha is to be conducted for a minimum periods of 30 days in semester IV under the guidance of a teacher or teachers. Two copies of dissertation are to be submitted for examination after the 30 days field work and presentation of seminar. The Examination of Dissertation shall be conducted by an internal and an external examiner.

Dissertation based on 30 days fieldwork	50 Marks
Seminar Presentation (based on fieldwork)	30 Marks
Viva voce test on dissertation and Field Dairy	20 Marks

The Dissertation has to be submitted by the student positively before the end semester examination.

Learning Outcomes

The learning outcomes of this paper are:

- 1.The students will learn the skill doing of fieldwork in anthropology in natural settings.
- 2.They will learn about the steps to be taken before starting the fieldwork and collection of in depth primary data.
- 3.They will also learn about how to use the various methods and techniques of data collection.
- 4.They will also learn about presentation and interpretation of data and preparation of the report.

SEMESTER – IV

ANT-CE-B3

MEDICAL GENETICS

Full Marks: 100 (Theory: 70 + Assessment/Evaluation: 30)

Duration of Examination: 4 hours

(Questions are to be set covering first four units)

Unit-I

Medical Genetics: Meaning and Scope; History and impact of genetics in medicine; Genetic factors in Common Diseases: Gene- Disease-Environment interaction; Genetic susceptibility to Common Diseases: Diabetes, Hypertension, Coronary Heart Diseases. Single Gene Disorder and Chromosomal Disorders in Man.

Unit-II

Biochemical Genetics: Inborn Error Metabolism; Disorder of Amino Acid Metabolism. Disorder of Carbohydrate Metabolism, Disorder of Lipid Metabolism.

Haemoglobin & Haemoglobinopathies: Structure of Haemoglobin, Development and expression of haemoglobin, Disorder of haemoglobin: Sick Cell Anaemia, Thalassemia; Clinical variation of the haemoglobinopathies.

Pharmacogenetics: Definition, evolutionary origin of variation in drug responses, pharmacogenomics, ecogenetics

Unit-III

Immunogenetics: Immunity, Innate and acquired immunity, Inherited immunodeficiency disorder: HLA and Disease; Blood groups.

The genetics of Cancer: Differentiating between genetic and environmental factors in cancer; Oncogens, Tumour suppressor genes, genetics of familial cancer.

Unit-IV

Application of Medical Genetics: Prenatal diagnosis & Genetic Counseling, Gene Therapy; Stem cell therapy and Bone marrow transplantation.

Population Screening and community genetics.

Ethical, Legal & Social (ELSI) issues in Medical Genetics.

Unit-V

Assignments, Quiz, Oral test/presentation, Book readings based on the above units as prescribed by the concern teacher.

Learning Outcomes

- 1.The students will learn about meaning and scope of medical genetics.
- 2.They will learn about biochemical genetics and haemoglobinopathies.
- 3.They will also learn about applications of medical genetics.
- 4.They will learn about population screening, ethical issues and challenges.

Suggested Readings / Books Recommended:

1. Crawford, M. (Ed). 2006 *Anthropological Genetics*. Cambridge University Press.
2. Brown, T. A. 2002. *Genomes 2 Edition*. Wiley-Liss, UK.
3. Jobling M. A., M. E. Hurles and C. Tyler-Smith. 2004. *Human Evolutionary Genetics: Origins, Peoples & Disease*. Garland Science. New York.
4. Sudbery, P. 2009. *Human molecular genetics*, 2nd Edition. Pearson (LPE).
5. Cummings, M. R. 2009. *Human Genetics*. Cengage Learning.
6. Vogel, F and Motulsky, G. 1998. *Human genetics: Problems & Approaches*. Springer, Berlin.
7. Tamarin, R. H. 2002. *Principles of Genetics*. Tata Mc Graw-Hill Edition.
8. Gelehr, T. D., F. S. Collins and D. Gineburg. 1998. *Principles of Medical Genetics*. Williams & Wilkins, USA
9. Li, Wen-Hsiung. 1997. *Molecular Evolution*. Sinauer Associates, Inc., Publishers, USA.
10. Page, R. D. M. and E. C. Holmes. 1998. *Molecular Evolution: A Phylogenetic Approach*. Blackwell Science, London.
11. Cavalli-Sforza, L., P. Menozzi, and A. Piazza. 1996. *The History and Geography of Human Genes*. Princeton University Press.
12. Klung S. W, M. R. Cummings and C. A. Spencer. 2007. *Essentials of Genetics*, Sixth Edition. Pearson Education International.
13. Muller R. F. and I. D. Young. 2001. *Emery's Elements of Medical Genetics*. Churchill Livingstone, London.

SEMESTER – IV**ANTH-CE-B4****HUMAN GENOMICS: METHODS AND PRINCIPLES****Full Marks: 100 (Theory: 70 + Assessment/Evaluation: 30)****Duration of Examination: 4 hours**

(Questions are to be set covering first four units)

Unit-I The Human Genome Projects and Genomics

The Human Genome: Nuclear genome and Mitochondria genome,
Mapping of the Human Genome: Physical mapping and genetic mapping;
Evolution of Human Genome: The origins of genome;
Patterns of acquisition of New Genes, Non-coding DNA and Genome Evolution;

Unit-II Molecular markers in Anthropological genetics studies (Autosomal, Y chromosome, mt DNA)

Ancient DNA and its application to the reconstruction of Human Evolution
Application of Molecular Genetics to Forensic Sciences and Pharmacogenomics

Unit-III The Human Diaspora: Human Origins Within and Out of Africa, Genome Diversity Studies: Indian and Odisha Populations (MtDNA, Y-Chromosome, Alu, STR).**Unit-IV Evolutionary Anthropology: meaning and scope. Molecular phylogenetics: methods and examples; Role of mutation and selection in molecular evolution; evolution by transposition and horizontal transfer, Genome organization and evolution.**

Unit-V Assignments, Quiz, Oral test/presentation, Book readings based on the above units as prescribed by the concern teacher.

Learning Outcomes

1. The students will learn about genomics and human genome project (HGP).
2. They will learn about various molecular markers used in anthropological genetics studies.
3. They will also learn about the human origin and its dispersal.
4. They will learn about meaning and perspectives of evolutionary anthropology.

Suggested Readings / Books Recommended:

1. Crawford, M. (Ed). 2006 *Anthropological Genetics*. Cambridge University Press.
2. Brown, T. A. 2002. *Genomes 2 Edition*. Wiley-Liss, UK.
3. Jobling M. A., M. E. Hurles and C. Tyler-Smith. 2004. *Human Evolutionary Genetics: Origins, Peoples & Disease*. Garland Science. New York.
4. Sudbery, P. 2009. *Human molecular genetics*, 2nd Edition. Pearson (LPE).
5. Cummings, M. R. 2009. *Human Genetics*. Cengage Learning.
6. Gardener, A.; R. T. Howell and T. Davies. 2008. *Human Genetics*. Viva Books Private Limited, New Delhi.
7. Vogel, F and Motulsky, G. 1998. *Human genetics: Problems & Approaches*. Springer, Berlin.
8. Tamarin, R. H. 2002. *Principles of Genetics*. Tata Mc Graw-Hill Edition.
9. Gelehrter, T.D., F. S. Collins and D. Gineburg. 1998. *Principles of Medical Genetics*. Williams & Wilkins, USA
10. Li, Wen-Hsiung. 1997. *Molecular Evolution*. Sinauer Associates, Inc., Publishers, USA.
11. Page, R. D. M. and E. C. Holmes. 1998. *Molecular Evolution: A Phylogenetic Approach*. Blackwell Science, London.
12. Cavalli-Sforza, L., P. Menozzi, and A. Piazza. 1996. *The History and Geography of Human Genes*. Princeton University Press.
13. Li Wen-Hsiung. 1997. *Molecular Evolution*. Sinauer Associates, Inc., Publishers, USA.
14. Page R.D.M. and E.C. Holmes. 1998. *Molecular Evolution – a phylogenetic approach*. Blackwell Science Ltd., USA.

SEMESTER – IV

ANTH-CE-B5

ADVANCED PRACTICAL IN DEMOGRAPHY & HUMAN GENETICS

Full Marks: 100 (Theory: 70 + Assessment/Evaluation: 30)

Duration of Examination: 6 hours

(Questions are to be set covering first four units)

(Practical, Laboratory Visit)

The Examination of Practical shall be conducted by an internal and an external examiner.

A. Human Genetics

30 Marks

I. Each student has to conduct the following practical:

- a. Estimation of pH and Molarity of given solution
- b. G6PD Deficiency
- c. Extraction of DNA: Methodology
- d. Identification of Human Chromosome karyotype.

(Details of procedure of WBC culture, Metaphase arrest, Incubation, Staining etc/photographic analysis)

C. Analysis of Demographic Data

30 Marks

- a. Preparation of schedules for collection of demographic data
- b. Compilation and presentation of data on population studies – age-sex composition, fertility measures, mortality measures, with special reference to Tribal population of India
- c. Pictorial comparison of health indicators
- d. Analysis of NFHS (I to V) data

II. Instrumentation and Laboratory Visit.

20 Marks

Students are to learn functioning of Instruments: Electrophoresis, Colori-meter, Spectrophotometer, PCR, Gel-Doc imaging system as well as bioinformatics (NCBI, ENSEMBL and PRIMER)

The students are to visit Laboratories of National Institutes /Allied Departments within/outside the State for training on advanced Human Genetics practical and instrumentation at least for a period of 10 days.

Practical Records

10 Marks

Viva voce test on Practical

10 Marks

Learning Outcomes

The learning outcomes of this paper are:

1. The students will learn hands on training on analysis of demographic data.
2. They will also learn about analysis of human blood.
3. The will also learn about DNA extraction methodology.
4. The students will also learn about the methods and techniques of identification of human chromosome.

Suggested Readings / Books Recommended:

1. Weiner J.S. and J.A. Louri. 1981. *Practical Human Biology*. Academic Press, New York.
2. Mukherji, D., D. Mukherjee and P. Bharti. 2009. *Laboratory Manual for Biological Anthropology*. Asian Books Pvt. Ltd., New Delhi.
3. Rao, V.K. (Ed.) 1996. *Biostatistics: A Manual of Statistical Methods for use in Health, Nutrition and Anthropology*. Jaypee Brothers Medical Publishers (P) Ltd., New Delhi.
4. Bryman, A. 2009. *Social Research Methods*. Oxford University Press, New York.
5. Madrigal L. 1998. *Statistics for Anthropology*. Cambridge University Press, UK.
6. Malhotra, K. C. (Ed.) 1988. *Statistical Methods in Population Genetics in India*. ISI, Kolkata.
7. Tembhare, D. B. 2008. *Techniques in Life Sciences*. Himalaya Publishing House. Mumbai.
8. Lesk. A. M. 2007. *Introduction to Bioinformatics*, 2nd Edition. Oxford University Press.
9. Mohanty, D. And R. Colah. 2008. *Laboratory Manual for screening, Diagnosis and Molecular Analysis of Haemoglobinopathies and Red Cell Enzymopathies*. Bhalani Publishing House, Mumbai.
10. Agrawal, S. 2004. *Molecular Techniques and Bioinformatics Tools*. DBT Sponsored National Workshop on Molecular Techniques in Transplant Biology (Sept.15th-Oct.5th). Sanjaya Gandhi Postgraduate Institute of Medical Sciences. Lucknow, UP, India.

SEMESTER – IV

ANTH-CE-B6

FIELDWORK AND DISSERTATION

Full Marks: 100

(Fieldwork, Dissertation and Field Diary: 70 + Assessment/Evaluation (Seminar Presentation): 30)

Duration of Examination: 6 hours

The Students are to conduct fieldwork for a period of 20 days for preparation of dissertation on topics relating to biological anthropology and human genetics under the guidance of teachers. The Examination of Dissertation shall be conducted by an internal and an external examiner.

Dissertation based on 20 day's fieldwork	50 Marks
Seminar Presentation	30 Marks
Viva voce test on dissertation and Field Dairy	20 Marks

The Dissertation has to be submitted by the student positively before the end of semester examination.

Learning Outcomes

The learning outcomes of this paper are:

- 1.The students will learn how to collect primary data in natural settings.
- 2.They will also learn about data analysis and field dairy writing.
- 3.They will also learn about drawing inferences from the data and seminar presentation.
- 4.The students will also learn about dissertation writing, submission and defence.

SEMESTER – IV

ANTH-CE-C3

FIELD TECHNIQUES AND METHODS IN PREHISTORIC ARCHAEOLOGY

Full Marks: 100 (Theory: 70 + Assessment/Evaluation: 30)

Duration of Examination: 4 hours

(Questions are to be set covering first four units)

Unit-I Typology and Technology in Prehistoric Archaeology:

Understanding Typology and Functions Prehistoric Artifacts and Tools: Terms of specifics in artifact analysis (artifacts, tools, industry, association, assemblage, aggregate, attribute type and typology); Types of Artifacts--Core, Flake, Blades ; Tool Typology--Pebble tools, Bifaces, Blade Tools, Borer/Awl, Burin, Points, Denticulate, Notch; Microliths (Geometric types, Non-geometric types); Ground and polished tools; Prehistoric Technology: Manufacturing techniques of Prehistoric tools (lithic, bone and antler/horn); Experimental Archaeology: Lithic Use-Wear Analysis.

Unit-II Methods of Dating in Archaeology:

Relative Dating Methods: Stratigraphy, Typological sequence, Palynology, Varve Analysis;
Absolute Dating Method: Radio Carbon Dating, Potassium-Argon Method, Thermo luminescence Dating, Fission Track Dating;
Calibrated Relative Dating Methods: Obsidian Hydration, Amino-Acid Racemization, Cation ratio dating, Archaeomagnetic Dating.

Unit-III Field Methods in Archaeology:

Exploration: Purpose, Classes and surveying equipments; Methods of exploration – Researching Maps, Ground Reconnaissance; Aerial Reconnaissance; Geophysical Prospecting Methods.

Excavation : Meaning and objectives; Instruments used in excavation; Methods of Excavation – Trial Trenching or Sondages, Vertical Excavation, Horizontal Excavation; Excavation of Rock shelter and caves.

Unit-IV Specialized Field Methods in Archaeological Research:

Emergence of Computer Application in Archaeology (i) Application of Remote Sensing in Archaeology; (ii) Application of Geographic Information System for spatial analysis and archaeological resource management.

Unit-V Assessment / evaluation/ quiz/ oral test /presentation/term paper as prescribed by the concerned teacher.

Learning Outcomes

The learning outcomes of this paper are:

1. The students will learn about the importance of fieldwork methods in prehistoric archaeology and data collection.
2. They will learn about the typology and technology in Prehistoric Archaeology.
3. They will also learn about methods of dating.
4. From the practical component they will learn about presentation and interpretation of archaeological data and preparation of the report.

Suggested Readings / Books Recommended:

1. Agarwal, D. P. and M.G. Yadav 1995. Dating the human Past. Indian Society for Prehistoric Studies, Pune: Deccan College.
2. Allen, K.M.S., S.W. Green and E.B.W. Zubrow (Eds).1990. Interpreting Space: GIS and Archaeology New York: Taylor and Francis.
3. Alexander, John, 1970, The Directing of Archaeological Excavation. London: John Baker.
4. Atkinson, R.J.C. 1953, Field Archaeology (2nd ed.) Methuen, London.
5. Barker, Philip 1993, Techniques in Archaeological Excavation. London: Bastford.
6. Borthwell, Don R. 1977, Digging up Bones: The Excavation Treatment and Study of Human Skeletal Remains (2nd ed) London: British Book Centre.
7. Burkitt, M.C. 1985. The Old Stone Age A Study of Palaeolithic Times. New Delhi: Rupa & Co.
8. Conolly, J. and Lake, M. 2006. Geographical Information Systems in archaeology. Cambridge: Cambridge University Press.
9. Cornwall, I.W. 1958, Soils for the Archaeologist, London: Phoenix House.
10. Colwell, R.N. (ed.), 1983. Manual of Remote Sensing (2 volumes). American Society of Photogrammetry, Falls Church Virginia.
11. Cox, C. 1992, Satellite Imagery, Aerial Photography and Wetland Archaeology, World Archaeology 24:249-367.
12. Dancey, William S. 1985, Archaeological Field Methods: An Introduction. Delhi: Surjeet Publication
13. Deo, S. G. and P.P. Joglekar, 1996-1977, Geographic Information System (GIS) for Archaeology (In Puratattva-27,)
14. Deo, S.G. and P.P. Joglekar, 1994. Satellite Remote Sensing in Archaeology (In Man and Environment XIX (1-2) ISPQS, Pune: Deccan College.
15. Harris, Edward 1989 Principles of Archaeological Stratigraphy (2nd Ed.) New York: Academic Press.
16. Hole, Frank, and Robert F. Heizer 1973, An Introduction to Prehistoric Archaeology. New York: Holt, Rinehart and Winston.
17. Joukowsky, Martha 1986. A Complete Manual of Field Archaeology: Tool and Techniques of Field Work for Archaeologists. New York: Prentice Hall Press.
18. Lock, G. 2003. Using Computers in Archaeology. London: Routledge.
19. McIntosh, Jane 1999. The Practical Archaeologist, New York: Checkmark Books, Facts on File, Inc.

20. Rice, Patricia C. 1997, Doing Archaeology –A Hand- on Laboratory Manual. London: Mayfield Publishing Company.
21. Rajan, K.2002, Archaeology: Principles and Methods. Tanjavur, Tamilnadu: Manoo Pathippakam.
22. Rammi Reddy, V.1987, Elements of Prehistory. New Delhi: Mittal Publications.
23. Renfrew, Colin. and Paul Bahn1996, Archaeology: Theories, Methods and Practice, Thames and Hudson, United States of America.
24. Sankalia, H.D.1982.Stone Age Tools--Their Techniques Names and Probable Functions. Poona: Deccan College.
25. Vaughan, Patrick1985.Use- Wear Analysis of Flaked Stone Tools. Tucson:University of Arizona Press.
26. Wheatley, D.W. and M. Gillings 2002. Spatial technology and archaeology: a guide to the archaeological applications of GIS. London: Taylor & Francis.

SEMESTER – IV

ANTH-CE-C4

PREHISTORY AND PROTOHISTORY OF EASTERN INDIA AND SOUTH EAST ASIA

Full Marks: 100 (Theory: 70 + Assessment/Evaluation: 30)

Duration of Examination: 4 hours

(Questions are to be set covering first four units)

- Unit-I** Prehistory of Eastern India: An Ecological perspective of Stone Age
Palaeolithic Cultures of Eastern India (with special reference to Bihar, Bengal and North Eastern Regions)
Mesolithic and Neolithic Culture of Eastern India (with special reference to Bihar, Bengal and North Eastern Regions)
- Unit-II** Prehistoric Archaeology of Odisha and Protohistory of Eastern India:
Prehistoric Archaeology of Odisha: (i) Palaeolithic (Lower, Middle, Upper) Cultures, (ii) Mesolithic Culture and Neolithic Culture.
Protohistoric Archaeology of Eastern India: Metal Age Culture (Chalcolithic) of Odisha, Bihar, Bengal and Northeast.
- Unit-III** Pleistocene and Holocene Events in Southeast Asia:
Pleistocene Events : Land and Records of Early Human in South East Asia; Pleistocene Epoch in Southeast Asia; Stone tool Industries of the Middle Pleistocene and Upper Pleistocene periods.
Holocene Events in Southeast Asia:
Early Holocene Stone tool industry – the Hoabinhian Techno-complex of the Southeast Asian main land.
- Unit-IV**
Neolithic Culture in Southeast Asia:
Neolithic Cultures of the Southeast Asia Mainland and
Neolithic Cultures of Southeast Asian Islands.
- Unit-V** Assessment / evaluation/ quiz/ oral test /presentation/term paper as prescribed by the concerned teacher.

Learning Outcomes

The learning outcomes of this paper are:

1. The students will learn about prehistory and ecological perspective of Stone Age.

2. The students will learn about prehistoric and protohistory culture of Odisha and India.
3. The students will learn about stone tool industry.
4. The students will learn about Neolithic culture.

Suggested Readings / Books Recommended:

1. Agarwal, D.P.1984, Archaeology of India. New Delhi: Select Book Services Syndicate.
2. Agrawal, D.P. 1971. The Copper-Bronze in India.New Delhi.
3. Agrawal,D.P. and Chakrabarti D.K. (Eds.) (1979). Essays in Indian Protohistory. Delhi: B. R. Publishing Corporation.
4. Allchin, Briget and Raymond Allchin1982.The Rise of Civilization in India and Pakistan. Cambridge: Cambridge University Press.
5. Banerjee, N. R.1965.The Iron Age in India. Delhi.
6. Basa, K. K. 1994, Problems and Perspectives in Archaeology of Orissa, India. Occasional Paper 4, DSA- Anthropology, Utkal University, Bhubaneswar.
7. Basa, K.K. & P. Mohanty (Eds) 2000, Archaeology of Orissa. New Delhi: Pratibha Prakashan.
8. Bellwood, P.S.2007.Prehistory of Indo-Malaysian Archipelago. Australian National University Press.
9. Bhattacharya, D. K.2001.An Outline of Indian Prehistory. Delhi: Palaka Prakashan.
10. Bhattacharya, M. 1999.Prehistory of West Bengal. Calcutta: Action Research Institute.
11. Bose, N. K. & D. Sen, 1948, Excavations in Mayurbhanj: Calcutta University.
12. Chakrabarti D.K. 1992. The Early Use of Iron in India. Delhi: Oxford University Press.
13. Chakrabarti D.K. 1993. Archaeology of Eastern India: Chhotanagpur Plateau and West Bengal. Delhi: Munshiram Manoharlal Publishers Private Limited.
14. Chakrabarti D.K. 1999. India: An Archaeological History: Palaeolithic Beginnings to Early Historic Foundations. Delhi: Oxford University Press.
15. Clark, Grahame. 1969. World Prehistory: A New Outline. Cambridge University Press.
- 16.Dennell, Robin 2009. The Palaeolithic Settlement of Asia. Cambridge: Cambridge University press.
17. Dikshit, K. N. (Ed.), 1985, Archaeological Prospective of India since Independence. New Delhi.
18. Higham, C.1991. Archaeology of Mainland South East Asia: From 10,000 BC to the Fall of Angkor. Cambridge: Cambridge University Press.
19. Jain, V. K.2009.Prehistory and Protohistory of Indian.New Delhi: D.K. Printworld (P) Ltd.
- 20.Narayan, B. 1999.Emerging Issues of Prehistory in Bihar. Kolkata: Centre for Archaeological Studies and Training, Eastern India.
21. Nautiyal, K. P.1989. Protohistoric India. Delhi: Agam Kala Prakashan.
22. Peregrine, Peter Neal and Melvin Ember.2001.Encyclopedia of Prehistory: East Asia and Oceania, Volume 3.USA: Human Relations Area Files. Inc.
23. Petraglia, Michael D. and Briget Allchin (Eds.) 2007.The Evolution and History of human Populations in South Asia. Netherlands: Springer.
24. Sankalia, H.D.1974.Prehistory and Protohistory of India and Pakistan. Pune: Deccan College.
- 25.Settar, S. and R. Korisettar (Ed), 2001 Indian Archaeology in Retrospect Vol.1: PREHISTORY Archaeology of South Asia. New Delhi: Manohar in association with Indian Council of Historical Research.
26. Settar, S. and R.Korisettar (Ed), 2001 Indian Archaeology in Retrospect Vol.2: PROTOHISTORY Archaeology of South Asia. New Delhi: Manohar in association with Indian Council of Historical Research.

27. Thapar, B. K., 1985, Recent Archaeological Discoveries in India, Paris.
28. Varma, A.K.1988.Neolithic Culture of eastern India. Delhi.

SEMESTER – IV
ANTH-CE-C5
ADVANCED PRACTICAL IN PREHISTORIC ARCHAEOLOGY

Full Marks: 100 (Theory: 70 + Assessment/Evaluation: 30)

Duration of Examination: 6 hours

(Questions are to be set covering first four units)

The Examination on Practical shall be conducted by an internal and an external examiner.

Each student has to conduct the following practical: **Marks**

- | | |
|--|----|
| 1. Artefacts Analysis (identification, drawing, metric analysis, calculation of indices of lithic / bone tools/ metal objects) | 20 |
| 2. Ceramic Analysis (drawing, morphology and metric reconstruction of remains pottery) | 15 |
| 3. Physical and Chemical Analysis of soil | 10 |
| 4. Identification, preservation and conservation of antiquities and museum specimen (bone/horn/ivory/food grains/terracotta and metal objects) | 10 |
| 5. Survey of micro-region with the aid of Maps (Topo-sheet reading) | 20 |
| 6. Practical Record | 15 |
| 7. Viva Voce | 10 |

Learning Outcomes

The learning outcomes of this paper are:

- 1.The students will learn about the identification, drawing and analysis of artefacts.
2. The students will learn about preservation and conservation of antiquities.

Suggested Readings / Books Recommended:

1. Atkinson, R.J.C. 1953, Field Archaeology (2nd Ed.) Methuen, London.
2. Borthwell, Don R.1977, Digging up Bones: The Excavation Treatment and Study of Human Skeletal Remains (2nd ed) London, British Book Centre
3. Chaplin, R.E.1971, The Study of Animal Bones from Archaeological sites, New York: Seminar Press.
4. Cornwall, I.W.1956, Bones for the Archaeologist. Phoenix House, London.
5. Cornwall, I.W.1958, Soils for the Archaeologist, Phoenix House, London.
6. Cookson, M.B.1954, Photography for Archaeologists Max Pavrish, London.
7. Ghoshmaulik, S.K. and S.K. Mishra 1986, Practical Anthropology. Society for Anthropological and Archaeological Studies, Bhubaneswar.
8. Greene, Kevin 1983, Archaeology. An Introduction. Barnes and Noble Totowa, New Jersey.
9. Heizer, Robert F. and John A. Graham1968, A Guide to Field Methods in Archaeology. The National Press. Palo Alto. California.

10. Jackson, M.L.1958, Chemical Analysis of Soil, Prentice Hall, Englewood Cliffs, New Jersey.
11. Joukowsky, Martha 1986, A Complete Manual of Field Archaeology: Tools and Techniques of Field Work for Archaeologists. Prentice Hall Press, London.
12. Krishnan, M.S. 1949, Geology of India. New Delhi: C.B.S. Publishers and distributors.
- 13.Sankalia, H.D. 1982. Stone Age Tools--Their Techniques, Names and Probable Functions. Poona: Deccan College.
- 14.Whitaker, John C.1994. Flint knapping: Making and Understanding Stone Tools. Austin: University of Texas Press.

SEMESTER – IV
ANTH-CE-C6
FIELDWORK AND DISSERTATION

Full Marks: 100

(Fieldwork, Dissertation and Field Diary: 70 + Assessment/Evaluation (Seminar Presentation): 30)

Duration of Examination: 6 hours

Each student is required to submit a dissertation based on at least 20 days fieldwork on topics relating to archaeological exploration and/or excavation of Prehistoric or Protohistory sites, ethno-archaeology, and ethno-technology of ethnic groups: tribal or rural community under the guidance of the concerned teacher or teachers. The concerned teacher will finalize the field site in consultation with the Head of the Department. The Examination on Dissertation shall be conducted by an internal and an external examiner.

The students are to visit National and State Museums/Museums of Allied Departments within/ outside the State for collection of data/information on ethnography and ethno-technology of tribal/ rural community at least for a period of 10 days.

- | | |
|---|----------|
| 1. Dissertation based on 20 day's fieldwork | 50 Marks |
| 2. Seminar Presentation | 30 Marks |
| 3. Viva voce test on dissertation & Field Dairy | 20 Marks |

The Dissertation has to be submitted by the student positively before the end semester examination.

Learning Outcomes

The learning outcomes of this paper are:

- 1.The students will learn about the fieldwork and its importance in Anthropology.
2. The students will study about the new community people and dissertation writing.

SEMESTER – IV
ANTH-CE-D3
CULTURE AND DEVELOPMENT
Full Marks: 100 (Theory: 70 + Assessment/Evaluation: 30)
Duration of Examination: 4 hours
 (Questions are to be set covering first four units)

Unit-I

Tradition, modernization and development; symbiotic relationship between culture and development; development in the framework of culture; objectives of UNESCO's World Decade of Cultural Development (WDCD); culture as homeostatic and as a vehicle of change; interaction dynamics between culture and development: slow and fast variables.

Unit-II

Integration of cultural factors into development: a cultural approach to development planning, policies and processes; tools to decision-making; instruments for work in the field; multi-disciplinary approach and the creation of a cultural awareness for development; participation as condition for consideration of the cultural dimension.

Unit-III

Cultural impact in some priority areas of application in development: technology; cultural industries and cultural entrepreneur; agriculture and food security; health; women development; mass media; urban development; human rights.

Unit-IV

The role of the state in development; the state and the politics of development: interests and influences, political agents and institutions; the decline of the state as a development agency; other official development agencies: the United Nations and its six principle organs, other UN programmes and specialized agencies; the World Bank and International Monetary Fund; official Aid programmes; other multilateral and bilateral organisations; non-governmental organisations.

Unit-V

A review paper of 20 marks on the recent findings of cultural application in development in one of the priority areas stated in Unit-III has to be submitted by the student before the end semester examination.

Learning Outcomes

The learning outcomes of this paper are:

- 1.The students will learn about the symbiotic relationship between culture and development; development.
- 2.They will also learn about Integration of cultural factors into development.
- 3.They will also learn about the impact of culture on some priority areas of application in development.
- 4.They will also learn about the role of the politics of development.

Suggested Readings / Books Recommended:

1. Allen, P., and Thomas, A., Poverty and Development into the 21st Century, The Open University: OUP, 2000.
2. Anheier, H. and Yudhishtir, R.I., (Eds.) The Cultural Economy (The Cultures and Globalization Series, 2) Sage, 2008.
3. Anthony, D. King, Colonial Urban Development: Culture, Social Power and Environment, Taylor and Francis, 2010.
4. Baidyanath, Saraswati, Integration of Endogenous Cultural Dimension in Development, Indira Gandhi National Centre For Arts, 1997.
5. Baidyanath, Saraswati, Interface of Cultural Identity and Development, Indira Gandhi National Centre For Arts, 1997.
6. Bartoli, H., Rethinking Development: Putting to an End to Poverty, UNESCO, 1999.
7. Carol, K. Sigelman& Elizabeth, A. Rider, Human Development, WADSWORTH CENGAGE Learning, 2003.
8. Cernea, M. Putting People First, World Bank, Oxford University Press, 1985.
9. Claxton, M., Cultural Dimension of Development, Paris, UNESCO, 1994.

10. Cultural Dimension of Development: Towards a Practical Approach, UNESCO, 1995.
11. Culture and Development, Centre for Cultural Resources and Traing, New-Delhi, 1997.
12. Edwards, N., and Hulme, D. (Eds.) Non-governmental Organization: Performance and Accountability, Earthscan, 1995.
13. Ellen, F. Davis, Scripture, Culture and Agriculture, Cambridge University Press, 2008.
14. John Potts, Andrew Murphie, John Potts, Culture and Technology, Palgrave MacMillan, 2003.
15. Jonathon Glover & Martha Craven Nussbaum, Women, Culture and Development, Oxford University Press, 1996.
16. Karren Willis, Shandell Elmer, Society, Culture and Health, Oxford University Press, 2011.
17. Maider Marana, Culture and Development: Evolution and Prospects, UNESCO Etxea working Paper, No.1, 2010.
18. Malcolm, Maclachlan, Culture and Health, John Wiley and Sons, 1997.
19. Mark Nowottny, Andrew F., Putting Culture First: Commonwealth Perspectives on Culture and Development, Commonwealth Secretariat, 2008.
20. Masini, E. The Cultures of Development, UNESCO, 1991.
21. Mexico City Declaration on Cultural Policies, Preamble and Articles 10-16, MONDIACULT, Final Report, UNESCO, 1982.
22. Moss, D., Cultivating Development: An Ethnography of Aid Policy and Practice, Pluto Press, 2005.
23. Paul, Hodgkinson, Media, Culture and Society: An Introduction, Sage Publications, 2010.
24. Sarah A. Radcliffe, Culture and Development in a Globalized World: Geographies, Actors and Paradigms, Rutledge, 2006.
25. Susan, Schech, Schech& Jane Hagis, Culture and Development: A Critical Introduction, John Wiley and Sons, 2000.
26. The Futures of Culture: Meeting of the Working Group on The Futures of Cultures, Vol.I, UNESCO, 1990.
27. UNDP, Guidelines for Development Projects, 1991.
28. UNESCO, Guidelines for Fund-in-Trust Project, 1991.
29. UNESCO, Our Creative Diversity, Report of the World Commission on Culture and Development, 1995.
30. Yeh, Stephen, H. K. Understanding Development: Modernization and Cultural Values in Asia and the Pacific Region, UNESCO, 1989.

SEMESTER – IV

ANTH-CE-D4

ANTHROPOLOGY OF ORGANISATIONAL AND BUSINESS DEVELOPMENT

Full Marks: 100 (Theory: 70 + Assessment/Evaluation: 30)

Duration of Examination: 4 hours

(Questions are to be set covering first four units)

Unit-I

Historical development of business anthropology; principles of management in anthropological perspective; dimensions of national culture; cultural differences in work related values; national culture and management, cross-cultural management; organizational ethnography.

Unit-II

Cultural ecology of organizations; dynamics of organizational culture; anthropological perspectives on organizational culture ; etics and emics approaches in the study of organizational culture; anthropological dimension in organizational behaviour; Impact of culture in human resource management, cultural diversity and cross-cultural human resource management.

Unit-III

Anthropological aspects of market and marketing; use of anthropological knowledge in marketing management: specific knowledge, awareness of themes, sensitivity to taboos, symbolism; anthropological approach to consumer behaviour; consumption anthropology; ethnography in market research.

Unit-IV

Marketing and multi-cultural diversity; cross-cultural marketing; cultural dimension in market segmentation; cultural approach to branding in the global market place; culture specific product design, cross-cultural design ; business advertising appeals as a mirror of cultural dimensions, matching advertising appeals to cultures: the influence of product's use conditions.

Unit-V

A **Project of 20 marks** concerned with qualitative business and organizational analysis employing an anthropological approach and ethnographic research methods has to be submitted by the student before the end semester examination.

Learning Outcomes

The learning outcomes of this paper are:

1. The students will learn about the development of business anthropology.
2. They will also learn about cultural ecology of organizations.
3. They will also learn about anthropological aspects of market and marketing.
4. They will also learn about consumption anthropology and business advertising.

Suggested Readings / Books Recommended:

1. Alberto, Corsin Jimenez, The Anthropology of Organisations, ASHGATE, 2010.
2. Alison J. Clarke, Design Anthropology: Object Cultures in the 21st Century, Springer Vienna Architecture, 2010.
3. Ann Jordan & Ann Jordan, NAPA Bulletin, Practicing Anthropology in Corporate America: Consulting on Organisational Culture, John Wiley and Sons, 1994.
4. Ann T. Jordan, Business Anthropology, Waveland Pr Inc., 2002.
5. Bhattacharyya, Dipak Kumar, Cross-cultural Management, Text and Cases, PHI Learning Private Limited, 2010.
6. Burton Dawn, Dawn Burton, Cross-cultural Marketing: Theory, Practices and Relevance, Routledge, 2009.
7. Carl, Rodrigues, International Management: A Cultural Approach, Sage Publications, 2008.
8. Dianna, L. Stone, Eugene, F., & Stone Romero, The Influence of Culture on Human Resource Management Processes and Practices, Lawrence Erlbaum Associates, 2007.
9. Geert Hofstede, Culture's Consequences: Comparing Values, Behaviours, Institutions across Nations, SAGE, 2001.
10. Geert Hofstede, Cultures and Organisations: Software for the Mind, McGraw Hill, 2004.
11. Geert Hofstede, Cultures consequences: International Differences in Work Related Values, SAGE, 1980.
12. Gert Jan Hofstede, Paul B. Pedersen & Geert Hofstede, Exploring Culture: Exercises, Stories and Synthetic Cultures, Intercultural Press, 2002.

13. Grant McCracken, Culture and Consumption II: Markets, Meanings and Brand Management, Indiana University Press, 2005.
14. Grant McCracken, Culture and Consumption: New Approaches to the Symbolic Character of Consumer Goods and Activities, Indiana University Press, 1988.
15. Helen B. Schwartzman, Ethnography in Organisations, Sage, 1992.
16. Jean- Claude Usnier, Marketing Across Cultures, Pearson, 2011.
17. Liz, McFall, Advertising: A Cultural Economy, Sage Publications, 2004.
18. Marietta, L. Baba, NAPA Bulletin, No.2, Business and Industrial Anthropology: An Overview, John Wiley and Sons, 2006.
19. Mary Douglas, The World of Goods: Towards Anthropology of Consumption, Routledge, 2002.
20. Peter, J. Buckley, International Business: Economics and Anthropology, Theory and Methods, Palgrave MacMillan, 1998.
21. Richie Moalosi, Integration of Culture in Product Design, Vdm Verlag, 2009.
22. Robert Guang Tian, Alfons Van Marrewijk, Daming Zhou, Advanced Readings in Business Anthropology, North American Business Press, 2012.
23. Robert Rugimbana, & Sonny Nwankwo, Cross-cultural Marketing, Thomson, 2003
24. Robert Tian, Michael Lillis & Alfons Van Marrewijk, General Business Anthropology, , North American Business Press, 2010.
25. Roxanne Hovland and Joyce, M. Wolburg, Advertising, Society and Consumer Culture, Ess Publications, 2011.
26. Sherry, John. Jr. Contemporary Marketing and Consumer Behaviour: An Anthropological Sourcebook, Sage, 1995.
27. Shobhana Madhaban, Cross-cultural Management, Oxford University Press, 2011.
28. Susan Wright, The Anthropology of Organizations, Routledge, 1994.
29. Timothy De Wall Malefyt, Robert J. Morais , Malefyt, Advertising and Anthropology: Ethnographic Practice and Cultural Perspectives, Berg Publishers, 2012.
30. Tomoko Hamada & Willis S. Sibley, Anthropological Perspectives on Organisational Culture, University Press of America, 1994.

SEMESTER – IV

ANTH-CE-D5

ADVANCED PRACTICAL IN COMMUNITY AND ORGANISATIONAL DEVELOPMENT

Full Marks: 100 (Theory: 70 + Assessment/Evaluation: 30)

Duration of Examination: 6 hours

(Questions are to be set covering first four units)

The Examination on Practical shall be conducted by an internal and an external examiner.

Module-1: Relationships Tools.	30 Marks
1. Stakeholder identification.	
2. Stakeholder analysis.	
Module-2: Planning Tools.	20 Marks
3. Community and organizational mapping	
4. Institutional analysis.	
5. Development opportunity ranking.	
Module-3: Assessment Tools.	20 Marks
6. Social baseline study.	
7. Social impact and opportunities assessment.	
8. Competencies assessment.	
Module-4: Monitoring and Evaluation Tools.	20 Marks

9. Indicator development.
10. Goal attainment scaling.

Viva Voce

10 Marks

Learning Outcomes

The learning outcomes of this paper are:

1. The students will learn about relationship tools.
2. The students will learn about planning tools.
3. The students will learn about how to make institutional analysis and expose to various assessment tools.
4. The students will learn the tools for monitoring and evaluation of different development programmes.

References:

1. Community Development Toolkits (Vol.1), The World Bank, 2005.
2. Community Development Toolkits (Vol. 2): The Background Volume, The World Bank, 2005.
3. DFID, Tools for Development: A Handbook for those Engaged in Development Activity, 2003.
4. Kumar, S., Methods for Community Participation: A Complete Guide for Practitioners, ITDG, London.
5. Rietbergen-McCracken, J. and Narayan. D., Participation and Social Assessment Tools and Techniques, The World Bank, Washington, DC. 1998.
6. The World Bank Participation Sourcebook, World Bank, 1996.

SEMESTER – IV

ANTH-CE-D6

FIELDWORK AND DISSERTATION

Total marks: 100

(Fieldwork, Dissertation and Field Diary: 70 + Assessment/Evaluation (Seminar Presentation): 30)

Duration of Examination: 6 hours

A dissertation has to be submitted by the student after one month field work. The concerned teacher will finalize the field site in consultation with the Head of the Department. The Dissertation shall be examined by an internal and an external examiner which will be followed by a viva voce examination.

Dissertation based on 30 day's fieldwork 50 Marks

Seminar Presentation 30 Marks

Viva voce test on dissertation and Field Dairy 20 Marks

The Dissertation has to be submitted by the student positively before the end semester examination.

Learning Outcomes

The learning outcomes of this paper are:

1. The students will learn how to collect primary data in natural settings.
2. They will also learn about data analysis and field dairy writing.
3. The will also learn about drawing inferences from the data and seminar presentation.
4. The students will also learn about dissertation writing, submission and defence.

SEMESTER – IV
ANTH-CE-E3
POPULATION DYNAMICS IN INDIA
Full Marks: 100 (Theory: 80 + Assessment/Evaluation: 20)
Duration of Examination: 4 hours
(Questions are to be set covering first four units)

Unit-I

Demographic Profile of Indian Population: Population Size, Decadal Growth Rate, Population distribution in different States and Rural-Urban distribution, Causes of uneven distribution.

Unit-II

Structure and Composition of Indian population: Age-Sex Structure, Sex ratio, Marital Status, Educational status, Labour force participation, Language, Religion, Ethnic groups and minorities.

Unit -III

Population growth in Orissa: size, density, Decadal growth rate, District-wise and Rural-Urban distribution, Causes of Uneven distribution

Demographic profile of Orissa: population composition by Age –Sex Structure, sex ratio, marital status, Labour force participation, Education and religion, Ethnic groups and minorities

Unit-IV

Factors Influencing Population Dynamics in India: Fertility - Differential Fertility; Level and Trend of Fertility; Factors affecting Fertility in India;

Present Trend of Mortality; Infant and Child Mortality, Maternal Mortality; Causes of High Infant Mortality;

Unit-V

Assignments, Quiz, Oral test/presentation, Book readings based on the above units as prescribed by the concern teacher.

The learning outcomes of this paper are:

- 1.The students will learn about the demographic profile of Indian population.
- 2.They will also learn about the population profile and growth in Odisha.
- 3.The will also learn about various factors influencing population dynamics in India.
- 4.The students will also learn about trends of mortality in India.

Suggested Readings / Books Recommended:

1. Agarwals, S. N.-India's Population Problem
2. Arora, Gomti-Social Structure & Fertility
- 3 Bhenda, Asha, A. & Kanetkar Tara-Principles of Demography
- 4.. Bose, Ashish-India's Urbanization 1901-2001
- 5 Chand, Gyan-Population in Perspective
6. Council for Social Development Publication-Aspects of Population Policy in India
7. Davis-Kingsley- The Population of India and Pakistan
- 8.. Driver, E. R.-Differential Fertility in Central India
- 9.. Kesarwani, Barburam-Fertility and Differential Fertility
- 10 Kumarg, T. K. Vimala-Infant Mortality among the Fishermen
11. Mahadevan, K.-Fertility and Mortality
12. Mohadevan, K.-Sociology of Fertility
- 13 Mitra, Ashok-India's *Population* Vol. I & II

- 14 Sandhya, S.-Socio-Economic and *Cultural* Correlates of Infant mortality
15.Senapati R.N,P.K.Nayak,P.K.Das-Population profile of Odisha
16.Sinha, V.-Dynamics of Indian Population Growth
17.Srivastav, O- Demography

SEMESTER – IV
ANTH-CE-E4
POPULATION PROBLEMS AND POLICIES IN INDIA
Full Marks: 100 (Theory: 80 + Assessment/Evaluation: 20)
Duration of Examination: 4 hours
(Questions are to be set covering first four units)

Unit-I

Problems of Population Growth in India: Density, Food, Housing, Education, Employment, Health, Environment, Economic Condition, Over-Crowding Communicable and non-communicable diseases.

Unit-II

Concept and types of Migration in India; Trends of migration; Rural-Urban Migration; Effects of migration; Causes of Migration: Social, Economic and Political.

Unit-III

Problems of the Vulnerable Sections of the Indian Population: Biological, Socio-cultural and Psychological Problems of Children, Women and the Aged.

Problems of Tribal Populations of Orissa: Growth rate, Fertility rate, Sex ratio, Literacy, Labour force participation, MMR and IMR.

Unit-IV

Population Policy in India: A Historical Review; Fertility Influencing Policy, Mortality Influencing Policy, Migration Influencing Policy

Development of Health Care Policy in India; Preventive and Curative Health Care programme for Women, Children, Aged; Family welfare measure in India.

Unit-V

Assignments, Quiz, Oral test/presentation, Book readings based on the above units as prescribed by the concern teacher.

Learning Outcomes

The learning outcomes of this paper are:

1. The students will learn about the issues and challenges of population growth.
2. They will also learn about the concept of migration.
3. The will also learn about how to addresses the population issues of vulnerable sections and tribal population of India.
4. The students will also learn about population policy in India.

Suggested Readings / Books Recommended:

1. Agarwals, S. N.-India's Population Problem
2. Alam, S. Manzoor & Alikhan Falima-Perspectives on Urbanisation & Migration
3. Arora, Gomti-Social Structure & Fertility

4. Bhenda, Asha, A. & Kanetkar Tara-Principles of Demography
5. Bose, Ashish-India's Urbanization 1901-2001
6. Chand, Gyan-Population in Perspective
7. Clarka, John, I.-Population Geography Vol. I & II
8. Council for Social Development Publication-Aspects of Population Policy in India
9. Davis-Kingsley- The Population of India and Pakistan
10. Driver, E. R.-Defferential Fertility in Central India
11. Kapadia,K.M.- Marriage and family in India
12. Kumarg, T. K. Vimala-Infant Mortality among the Fisherman
13. Lowis and Thompson-Population Problem
14. Mahadevan, K.-Fertility and *Mortality*
15. Mohadevan, K.-Sociology of Fertility
16. Mitra, Ashok-India's *Population* Vol. I & II
17. Sandhya, S.-Socio-Economic and *Cultural* Correlates of Infant mortality
18. Sinha, V.-Dynamics of Indian Population Growth
19. Souza, Victor, C. D.-Economic Development, Social Structure and Population Grow,"
20. Thompson, Ralph-Demographic Problems

SEMESTER – IV

ANTH-CE-E5

PRACTICAL: ANALYSIS OF CENSUS, NFHS AND NSS DATA AND REPORT WRITING

Full Marks: 100 (Theory: 80 + Assessment/Evaluation: 20)

Duration of Examination: 6 hours

(Questions are to be set covering first four units)

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

1. Make a Schedule on Health and Demography.
2. Calculation of Infant Sex ratio, Fertility rate, Total fertility rate, Mortality rate, Birth rate, crude birth rate, crude death rate, Mortality rate, life expectancy, immigration rate, population growth rate.
3. Identification and Characteristics of Various diseases.
4. Case Studies of Traditional and Modern healers.
5. The students will visit a NGO or corporate office or census office in Odisha and its adjoining areas and write principal observations on the same.
6. Write a project on the demographic profile from secondary data.
7. Collect data on bio-social problem and design counseling and give the analysis and interpretation.

Learning Outcomes

The learning outcomes of this paper are:

1. The students will learn how to make a demographic/health schedule.
2. They will also learn about demographic data analysis.
3. The will also learn about how to use qualitative technique in demographic and health studies.
4. The students will also learn about report writing from secondary sources.

Suggested Readings / Books Recommended:

1. Bhende A. and Kaniikar, T. (2006) *Principles of Population Studies*. Himalaya Publishing House. Mumbai (All Units, It covers most topics)
2. Caldwell J.C. (2006). *Demographic Transition Theory*. Springer.
3. Census of India (2001,2011), SRS bulletin (2013), NFHS (2006), CRS, NSSO (Can be seen from browsing net)
4. Gautam R.K., Kshatriya, G.K. and Kapoor A.K. (2010) *Population Ecology and Family Planning*. Serials publications. New Delhi.
5. Howell N. (1986) Demographic Anthropology. *Ann. Rev. Anthropol.* 15: 219-246
6. Kshatriya G.K. (2000). Ecology and health with special reference to Indian tribes. *Human Ecology special volume* 9:229-245.
7. Kshatriya G.K., Rajesh,G. and Kapoor , A.K. (2010) Population Characteristics of Desert Ecology.VDM Verlag Dr. Muller Gmbh and Co., Germany.
8. Misra BD (1982). *An introduction to the study of population*. South Asia publ. ltd. New Delhi.
9. National Population Policy <http://populationcommission.nic.in/npp.htm>
10. Park K. (2000) *Text book of Preventive and Social Medicine*. Banarsidas Bhanot, Jabalpur.
11. Patra P.K. and Kapoor, A.K. (2009) *Demography And Development Dynamics in a Primitive Tribe of Himalayas*. International Book Distributors, Dehradun
12. Riley N.E. and Mc Carthy, J. (2003) *Demography in the Age of the Postmodern*. Cambridge University press. UK. Pages 1-13 and 32-98
13. Sharma A.K. (1979) Demographic transition: A Determinant of Urbanization. *Social Change* 9: 13-17.
14. Srivastava O.S. (1996) *Demographic and Population Studies*. Vikas Publishing House, India
15. Zubrow E.B.W. (1976) *Demographic anthropology. Quantitative approaches*. University of New Mexico Press, Albuquerque.
16. <http://human-nature.com/dm/chap3.html>
17. <http://biography.yourdictionary.com/john-graunt>
18. <http://www.marathon.uwc.edu/geography/demotrans/demtran.htm>

SEMESTER – IV**ANTH-CE-E6****FIELDWORK AND DISSERTATION****Full Marks: 100****(Fieldwork, Dissertation and Field Diary: 70 + Assessment/Evaluation (Seminar Presentation): 30)****Duration of Examination: 6 hours**

A dissertation has to be submitted by the student after one month field work. The concerned teacher will finalize the field site in consultation with the Head of the Department. The Dissertation shall be examined by an internal and an external examiner which will be followed by a viva voce examination.

Dissertation based on 30 day's fieldwork	50 Marks
Seminar Presentation	30 Marks
Viva voce test on dissertation and Field Dairy	20 Marks

The Dissertation has to be submitted by the student positively before the end semester examination.

Learning Outcomes

The learning outcomes of this paper are:

- 1.The students will learn how to collect primary data in natural settings.
- 2.They will also learn about data analysis and field dairy writing.
- 3.The will also learn about drawing inferences from the data and seminar presentation.
- 4.The students will also learn about dissertation writing, submission and defense.

ALLIED ELECTIVE / FREE ELECTIVE

ANTH-AE-1A&1D / ANTH-FE-1

TRIBES IN INDIA: THEIR PROBLEMS AND DEVELOPMENT

Full Marks: 100 (Theory: 70 + Assessment/Evaluation: 30)

Duration of Examination: 4 hours

(Questions are to be set covering first four units)

Unit-I

Evolution, nature and scope of tribal Studies in India, Conceptualizing Scheduled Tribe, Social Organization, Economic Organization, Political and Religious Organization, and Language among the Tribes. Folklore, Art and Crafts, Gender and Class Stratification of the Indian Tribal Society;

Unit-II

Concept of Difference and Inequality, Tribal Self Image and Identity; Patterns of Inter-Tribal Relations; the World View of Indian Tribes; Tribe-Caste Contrast Versus Continue, Ethnic Relation, Conflict and Change.

Unit-III

Tribal Problems in India and their remedial measures, Barriers and Stimulants to Tribal Development; Tribal Administrations: 5th and 6th Schedules, Scheduled Area and Tribal Area. Constitutional Provisions and Safeguards for the Scheduled Tribes, Role of NGOs, Government and Anthropologist in Tribal Development

Unit-IV

Overview of Tribes of East India, South India, Central India, North and North East Regions of India, Western India and Andaman and Nicobar Regions

Unit-V

A book review of 20 marks of any Classical Anthropology book has to be submitted by the student before the end semester examination.

Learning Outcomes

The learning outcomes of this paper are:

1. The students will learn about the scope of tribal studies in India.
2. They will also learn about the concept of differences and inequality among the tribes in India.
3. They will also learn about the tribal problems in Indian and their remedial measures taken by different agencies.
4. The students will also learn about the distribution of tribal communities in India.

Suggested Readings / Books Recommended:

1. Mathur, Hari Mohan (Ed.) Anthropology in Development Process
2. Foster, G.M Traditional culture and impact of technological Change
3. Singh. K.S. Tribal Situation in India
4. Upadhyay, V.S. Tribal development in India: A critical Appraisal
and Pandey, Gaya
5. Bhandari, J.S. & Channa, S, M.(Ed.) Tribes and Government policies
6. Pati, R.N. & Dash, J (Ed.) Tribes and Indigenous People of India: Problems and Prospects.
7. Cochrane, Glyn Development Anthropology

- | | |
|---------------------|---------------------------------|
| 8. Schumacher, E.F. | Small is Beautiful. |
| 9. Vidyarthi, L.P. | Applied Anthropology in India |
| 10. Sharma, B.D. | Planning for Tribal development |
| 11. Dube, S.C. | Tribal Heritage of India |

ANTH-AE-1B/ ANTH-FE-2
FORENSIC ANTHROPOLOGY AND CRIMINOLOGY
Full Marks: 100 (Theory: 80 + Assessment/Evaluation: 20)
Duration of Examination: 4 hours
(Questions are to be set covering first four units)

Unit-I

Definition, Scope and methods of Forensic Anthropology.
Criminology: Concept and meaning. Theories of crime, types and definitions of crime, causes and correlates of crime. Anthropological criminology.

Unit-II

Basics of Human Osteology and Odontology
Study of Skeletal Material: Human and animal remains. The study of bone fragments. Attributes of sex, estimation of age and reconstruction of stature from the skeletal remains and their medico-legal implication.

Forensic Odontology: tooth structure and growth, estimation of age in young and adult. Population difference in size and morphology. Bite marks. Individualization of tooth pulp.

Unit-III

Establishment of partial and complete identity of skeletal material and dead bodies-morphometric techniques.

Personal identification of living persons: Identification through somatometric and somatoscopic observations, nails, occupation marks, scars, tattoo marks and deformities; handwriting and mannerism.

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. Sole prints.

Unit-IV

Forensic Haemogenetics: Pattern of blood splashes. Identification of blood stains and determination of species of origin. Individualization of blood stains: Determination of blood group, sex, age and racial origin from dried bloodstains. Identification and individualization of body fluids like semen, saliva and urine.

DNA profiling and individualization.

Disputed parentage: role of Anthropological traits in solving such cases.

Forensic Anthropologist's as an expert witness under section 45 of the Indian Evidence Act.
Ethical responsibilities in Forensic Science.

Unit-V

Assignments, Quiz, Oral test/presentation, Book readings based on the above units as prescribed by the concern teacher.

Learning Outcomes

The learning outcomes of this paper are:

1. The students will learn about forensic anthropology and its growing importance.
2. They will learn about forensic odontology.
3. They will also learn about identification on the individuals on the basis of tooth, skeleton, finger prints, blood, etc.
4. They will also learn about identification on the basis of various biological materials like bones, finger prints, blood stains, hair, semen, urine, saliva, etc and ethics.

Suggested Readings / Books Recommended:

1. Sharma B.R. *Forensic Science in Criminal Investigation & Trials* (4th Edition) universal Law publishing Co. Pvt. Ltd 2003.
2. Byere S.N. *Anthropology to Forensic Anthropology- A Text Book* (2nd Edition) Pearson Newyork.2005.
3. Chatterjee S.K. *Finger, Palm and Sole Print*. Calcutta,17. Lake Avenue.1967.
4. Nath S; *An Introduction to Forensic Anthropology* Gain Publishing House, New Delhi, 1989.
5. Bask R. *Fundamentals of Forensic Medicine and Toxicology* (2nd Edition) Books and Allied Pvt. Ltd. Kolkata.2009.
6. Treadwell, James. *Criminology*. Sage Publicashing Ltd. London. 2006.
7. Freell J, Hayward K, Morrison W, Presee, M. C. *Cultural Criminology*. The Glass House Press, London. 2004.
8. Klepinger L. L. *Fundamentals in Forensic Anthropology*. Wiley –Liss. 2006.
9. Buikstra E. J and D. J. Ubelaker. 1994. *STANDARDS: For Data Collection From Human Skeletal Remains*. Arkansas Archaeological Survey Research Series No.44.
10. Weiner J.S. and J.A. Louri. 1981. *Practical Human Biology*. Academic Press, New York

ANTH-FE-3

ANTHROPOLOGY FOR ARCHAEOLOGY

Full Marks: 100 (Theory: 80 + Assessment/Evaluation: 20)

Duration of Examination: 4 hours

(Questions are to be set covering first four units)

- Unit-I** An outline on meaning of Anthropology and Archaeology and their interrelationships. Human Biological Evidences (Fossil Remains of Pleistocene Times): Australopithecines, Homo erectus, Homo sapiens Neandarthalsensis, Homo sapiens sapiens-Grimaldi, Cro-Magnon, Chancelade.

Unit-II Ethno archaeology: Meaning, Direct Historical approach General Comparative approach. Ethnoarchaeology in India (Settlement, Subsistence, Mortuary practice, Art and Crafts).

Unit-III Social Archaeology: Establishing the Nature and Scale of the Society--Bands, Tribes (Segmentary Society), Chiefdoms, and Early States.
Techniques of Study for Band Societies, Tribes (Segmentary Societies), Chiefdoms and States.

Unit-IV Anthropological theories in Archaeology: Evolutionism and Diffusionism, Processual and Post-Processual Archaeology

Unit-V Assessment / evaluation/ quiz/ oral test /presentation/term paper as prescribed by the concerned teacher.

Learning Outcomes

The learning outcomes of this paper are:

1. The students will learn about archaeological anthropology and its growing importance in the field of Archaeology.
2. They will learn about Ethnoarchaeology its meaning and methods.
3. They will also learn about various aspects of social Archaeology.
4. The students will learn the importance of anthropological theories in

archaeology.

Suggested Readings / Books Recommended:

1. Basa, K.K.1992, *Ethnoarchaeology of Orissa: A Review*. Man in Society6:79-106, Department of Anthropology, Utkal University,
2. Renfrew, Colin1984, *Approaches to Social Archaeology*, Edinburgh University Press, Edinburgh.
3. Renfrew, Colin. and Paul Bahn1991, *Archaeology: Theories, Methods and Practice*, Thames and Hudson, United States of America.
4. Shanks M. and C.Tilley1987, *Social Theory and Archaeology*, Polity Press: University of New Mexico Press.

ANTH-AE-1C / ANTH-FE-4

ARCHAEOLOGY OF ODISHA

Full Marks: 100 (Theory: 70 + Assessment/Evaluation: 30)

Duration of Examination: 4 hours

(Questions are to be set covering first four units)

Unit-I Stone Age Cultures and Rock arts of Odisha: Palaeolithic and Mesolithic Cultures in Odisha.
Rock Art Traditions of Odisha.

Unit-II Neolithic and Metal Age Cultures of Odisha: Evidences of Neolithic cultures in Odisha.
Metal Age (Chalcolithic and Iron Age) Cultures in Odisha.

Unit-III Early Historic Archaeology of Odisha: Emergence of Urbanization in Odisha, Early Urban Centres- (Evidences from Sisupalgarh, Jaugarh, Asurgarh, Radhanagar, Manamunda).

Cultural Relations between Odisha and South East Asia.

Unit-IV Early Mediaeval Archaeology of Odisha: Evidences from Lalitgiri, Ratnagiri, Udayagiri.
Mediaeval Archaeology of Odisha: Evidences from Barbati, Khalkatpatna.

Unit-V Assessment / evaluation/ quiz/ oral test /presentation/term paper as prescribed by the concerned teacher.

Learning Outcomes

The learning outcomes of this paper are:

1. The students will learn about the Stone Age culture and rock arts of Odisha.
2. They will also learn about the emergence of metal age in Odisha.
3. The students will learn about the early historic archaeology of Odisha.
4. The students will learn about the cultural relations between Odisha and

South East Asia.

Suggested Readings / Books Recommended:

1. Basa, K.K.1992, Ethnoarchaeology of Orissa: A Review. Man in Society6:79-106, Department of Anthropology, Utkal University,
2. Basa, K.K.1994, Problems and Perspectives in Archaeology of Orissa, India: Occasional Paper 4, Department of Special Assistance, Anthropology, Utkal University.
3. Basa, K.K. and P.K. Mohanty (Ed) 2000, Archaeology of Orissa, Delhi: Pratibha Prakashan.
4. P.K. Mohanty and B. Mishra, 1998, Recent Archaeological Researches in Orissa with Special reference to the Early Historic Phase,
5. Mohapatra, R.P.1986, Archaeology in Orissa (Sites and Monuments) 2Vols. Delhi: B.R. Publishing Corporation.
5. Panda, S.K., 1991 Medieval Orissa: A Socio-Economic Study. New Delhi: Mittal Publications.
6. Pradhan, S. (Ed), 1999, Orissan History, Culture and Archaeology. New Delhi: D. K. Print world
7. Renfrew, Colin1984, Approaches to Social Archaeology, Edinburgh University Press, Edinburgh.
8. Renfrew, Colin. and Paul Bahn1991, Archaeology: Theories, Methods and Practice, Thames and Hudson, United States of America.
9. Shanks M. and C.Tilley1987, Social Theory and Archaeology, Polity Press: University of New Mexico Press.

ANTH-FE-5

ANTHROPOLOGY OF GENDER

Full Marks: 100 (Theory: 80 + Assessment/Evaluation: 20)

Duration of Examination: 4 hours

(Questions are to be set covering first four units)

Unit- I: Studies on Gender; Theories and Concepts, Gender, sex, Patriarchy, Masculinity, Feminism. Theories of Feminism: Liberal, Marxist, Radical, Socialist, Postmodern Feminism

Unit- II: Gender and Development: Theories and Concepts, Human Development Paradigms, Practical and strategic needs, Women's movement in India (Pre Independent and post Independent Periods) and its impact on Gender issues. Women in tribal movements in Odisha.

Unit- III: Gender and Society, Indian Family system, women in caste, tribe, religion, Women in Odishan History.

Unit- IV: Gender, Power and Politics: Empowerment of Women: Theories and Concepts, Government Policies and Programmes, Implementation in Odisha (Mission Shakti and State Commission for women), Women and Human rights

Unit- V: Evaluation (Field work & Project Report)

Learning Outcomes

The learning outcomes of this paper are:

1. The students will learn about the origin and growth of anthropology of gender.
2. The students will learn about the concepts and theories of gender and development.
3. They will learn about the gender and society.
4. They will also learn about the gender, power and politics.
5. The students will learn more about the contributions of feminist Anthropologists.

Suggested Readings / Books Recommended:

1. Afshar, Haleh "Women and Empowerment: Illustration from the Third World(ed). WSY. Women's studies at York. Macmillan Press Ltd. Great Britain. 1998
2. Boserup, E. 'Women's role in Economic Development' Allen and Unwin, London 1970.
3. Chakrapani, C and S. Vijaykumar 'Changing Status and Role of Women in Indian Society' .M.D Publications Pvt. Ltd. New Delhi, 1994.
4. Das, Mansingh Gupta and S. Vijaykumar. ' Social Status of Women in Indian Society' M.D. Publications Pvt. Ltd. New Delhi, 1995.
5. Dutta Rekha and Kornberg Judith 'Women in Developing Countries: Assessing Strategies for Empowerment' Lynne Rienner Publishers, London, UK. 2002.
6. Kabeer, N. 'Reversed Realities: Gender Hierarchies in Development Thought' Verso, London. 1994.
7. Nalini Vishvanathan and co. 'Women, Gender and Development' Zed Books, London. 1997.
8. Samanta R. K . 'Empowering Women: Key to Third World Development' (ed). M.D. Publications Pvt. Ltd. New Delhi, 1999.
9. Seth, Mira 'Women and Development: The Indian Experience'. Sage, New Delhi Thousand Oaks London. 2000.
10. Schech, Susanne and Jane Haggies 'Culture and Development: A Critical Introduction' Malden, M.A: Blackwell Publishing. 2000.

ANTH-FE-8
MUSEOLOGY AND CULTURAL RESOURCE MANAGEMENT
Full Marks: 100 (Theory: 70 + Assessment/Evaluation: 30)
Duration of Examination: 4 hours
(Questions are to be set covering first four units)

Unit-I Museum, Museology, Museum Movement and New Museology

Museum and Museology: Meaning, Definition of Museum; Museology: Concept, Nature and Scope; **Museum Movement:** History and Development of Museum Movement in the World. History of Museum Movement in India; Classification of Museums in India-- National Museum, State Museum, university Museum, Specialized Museums in India.

New Museology: Museum as Social institution, New Museology or New Museum Movement, New Models/New Museum Typology--Neighbourhood Museum, Community Museum, Living History Museum, Integral Museum; The Eco-Museum, Functions of Eco-Museums, Difference between Eco-Museum and Ecology Museums.

Unit-II Museum Administration, Acquisition and Arrangement, Documentation and Labels of Museum Specimens

Museum Administration: Staff, Planning of Museum Buildings, Planning for Museum Gallery, Lighting of Museum Galleries; **Acquisition and Arrangement of Specimens:** Modes and ways of Acquisition of Museum Specimens, ICOM Ethical Acquisition Code, Guidelines for Loans; Principles of Display and Arrangement in Museums.

Documentation and Labels of Museum Specimens: Need, Method of Documentation, Safeguards of Records; Documentation of Ethnographic and Archaeological Specimens, Development of Computer based Documentation; Museum Labels; Dioramas, Models and Charts; Museum Photography.

Unit-III Management (Museum Storage and Security in Museum and Conservation) of Cultural Resources in Museum

Museum Storage: Location of the storage, Storage Furniture, Lighting and Ventilation in Storage, Methods of Storage, Visual Storage. **Security in Museum:** Security Risks of Museum Objects, Preventive Measures.

Conservation of Cultural Resources in Museum: Causes of Decay and Deterioration, Care and Handling, Cleaning and Repairing, Packing and Shifting of Museum Objects; Preservation of Organic and Inorganic Objects in Museums.

Unit-IV Protection of Movable Cultural Property, Tourism and Education in Museum

Protection of Movable Cultural Property: Legislative Measures: a Review in Global Context, History of Antiquarian Laws in India, the Indian Treasure-trove Act-1878, the Ancient Monuments and archaeological Sites and Remains Act-1958 and 1959, the Antiquities and Art Treasures Act-1972, Recommendation for the Protection of Movable Cultural Property.

Tourism and Education in Museum: Tourism and Museums, Museum Education, Museum Exhibition, Museum Publication, Museum Publicity and public Relations, Museum Library.

Unit-V Assessment / evaluation/ quiz/ oral test /presentation/term paper as prescribed by the concerned teacher.

Learning Outcomes

The learning outcomes of this paper are:

1. The students will learn about the basic concept of museum and museum movements.

2. The students will learn about the history and development of museums in India and museum administration.
3. They will learn about acquisition, documentation and display of museum specimens.
4. They will also learn about storage and conservation.
5. They will also learn about tourism and education in museum.

Suggested Readings / Books Recommended:

1. Agrawal, O. P. and Shashi Dhawan 1985 Control of Biodeterioration in Museums. National Research Laboratory for Conservation of Cultural Property, Lucknow.
2. Agrawal, O. P. and Mandana Barkeshli 1997 Conservation of Books, Manuscripts and Paper Documents. INTACH, Indian Council of Conservation Institutes, Lucknow.
3. Aiyappan, A. and S.T. Satyamurti (Ed), 1960, Handbook of Museum Technique, Government Museum, Madras.
4. Banerjee, N. R. 1990, Museum and Cultural Heritage in India. Agamkala Prakashan, Delhi.
5. Basa, K.K., Md. Rehan, R.K. Gupta 2007, Museology A Comprehensive Bibliography and Webliography, Serial Publications, New Delhi.
6. Behera, B.K. and S.K. Mohanty, 2007, Museology and Museum Management in India, Mayur Publications, Bhubaneswar, Orissa.
7. Bhatnagar, A.1999, Museum, Museology and New Museology, Sandeep Prakashan, New Delhi.
8. Diwvedi, V. P. and G.N. Pant(Ed) 1980, Museum and Museology: New Horizon, Agam Kala Prakashan, New Delhi.
9. Ghoshmaulik, S.K. and K. K. Basa (Ed) 2001, Understanding Heritage: Role of Museum, Academic staff Collage, Utkal University, Bhubaneswar, India.
10. Nair, S. M., 1970. Bio-Deteriorations of Museum Materials, Agam Kala Prakashan, New Delhi.
11. Nigam, M. L., 1985 Fundamentals of Museology, Deva Publications, Hyderabad.
12. Sarkar, H.1981, Museums and Protection of Monuments and Antiquities in India, Sandeep Prakashan, New Delhi.
13. Stone, P.G. and B. L. Molyneaur1994, The Present Past: Heritage Museums and Education, Routledge, London.
15. Thompson, J.M. (Ed.) 1992, Manual of Curatorship: A Guide to Museum Practice, Butterworth-Heinemann Ltd. Oxford.

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6.5 Course-Level Learning Outcomes

The programme learning outcomes are attained by learners through the essential learning's acquired on completion of selected courses of study within a programme. The term 'course' is used to mean the individual courses/papers of study that makes up the scheme of study for a programme. Course learning outcomes are specific to the learning for a given course of study related to a disciplinary or interdisciplinary/multi-disciplinary area. Course-level learning outcomes will be aligned to programme learning outcomes. Course level learning outcomes are specific to a course of study within a given programme of study. All course-level learning outcomes will also be performance/outcome oriented. The achievement by students of course-level learning outcomes leads to the attainment of the programme learning outcomes. A course map would indicate the linkage between course learning outcomes and each programme learning outcome, as shown in the following table with indicative learning outcomes.

PG Programme Outcomes/Papers	1	2	3	4	5	6	7	8	9	10	11	12
Basic Concepts	x	x	x	x	x	x	x	x	x	x	x	x
Procedural Knowledge	x	x	x	x	x	x	x	x	x	x	x	x
Specialized Skills				x	x	x				x	x	x
Identification of appropriate issues							x		x			
Problem-solving Skills				x	x	x				x	x	
Investigative Skills						x		x		x	x	
ICT Skills	x	x	x	x	x	x	x	x	x	x	x	x
Communication Skills	x	x	x	x	x	x	x	x	x	x	x	x
Professional/ethical behaviour	x	x	x	x	x	x					x	

2. Teaching-Learning Process

Every discipline and programme of study lends itself to systematic exposition and the ordered and structured acquisition of knowledge and skills. Practical skills, including an appreciation of the link between theory and data, will constitute an important aspect of the teaching-learning process. Teaching methods may include lectures followed by Q&A session or group discussion, practical

work, use of prescribed textbooks, electronic resources and other self-study materials, project work, which may be individual or team-based, activities devoted to subject-specific and interdisciplinary skills development, internship and visits to industrial or other research facilities etc.

One of the reasons why the content of the various courses has been deliberately kept light is to allow teachers to spare enough time to check out if the students have understood what they have read on their own or what they have been taught in the class. There is usually little or no time for this under the semester system, as the semester system keeps everyone on their toes. Hence, the following steps for teaching-learning process are proposed here:

One, a teacher announces the topics of his/her lectures for the entire unit well in advance and also provides references and reading materials for each topic.

Two, if reading materials are not easily available a teacher may circulate the outline of his/her lecture through emails to his/her students and ask them to read the same when they come to class.

Three, a teacher lectures on the pre-determined topic for not longer than half an hour, highlighting the main points about the topic and highlighting the point(s) that may be discussed during the next half an hour.

Four, the second half of the class should be devoted to question-answer session. Where students are shy of asking questions, such as in Northeast Indian universities, roster of two/three students per class may be prepared for the question-answer session. This helps the students to prepare themselves mentally about the questions to be asked as well as the structure of the questions to be asked. This may however not be an issue in universities where students ask questions in the class, but even in such cases a teacher should encourage everyone to ask questions rather than a few students asking questions all the time and a majority of them never asking any question. This care should be taken particularly in classes that are large, say about 100, where it is not easy to keep track of who are asking questions and who are not.

Five, if a teacher is not able to elicit any questions from the students who are scheduled to raise questions in a particular class, he/she should instead ask them questions and while doing so the questions must be related to the topic already decided for the class and the question should be asked to test their knowledge and not their ignorance. Encouraging the students to ask questions should be considered as one of the professional duties of a teacher for it is only through the questions they ask does a teacher get to know whether or not they have learnt what they are supposed to have learnt. Asking questions also helps students to learn better not just about the subject but also about communication skills which are equally important for successful career. But if a teacher is not in a position to answer the questions satisfactorily, which is quite natural sometimes, he/she should give the answer in the next class before starting a new topic scheduled for that day.

Six, the practice of conducting written tests on predetermined dates, which is the usual practice in most Indian universities today, may be discontinued because generally the students read for a couple of days prior to the test and forget about it soon after the test is over. Instead internal evaluation of students may be based partly or fully on the basis of their performance during the question-answer session.

Seven, where conducting written tests is unavoidable, it may be done without prior notice. Their performance at such tests is a better test of what they know than evaluating their performance at pre-announced tests, which only shows how much they have read during the past few days. Unannounced tests also compel the students to be more regular and attentive in their classes. However, the end-term examination may be held on pre-determined dates.

Eight, it may be remembered that there are basically two factors that influence teaching-learning process and they are reading habit and command in the medium of instruction. If they are not in the habit of reading, which may be due to lack of opportunity or interest, learning becomes that much more difficult. But reading is not something the students most naturally prefer to do. Hence, it has to be incentivized by linking reading with the evaluation process of the university. Similarly, if a student has poor command in the medium of instruction a teacher he/she will not be able to learn as satisfactorily as the one with better command in the same. Therefore, it is suggested that every university should conduct tutorials for those students who lack reading habit and/or command in the medium of instruction. If the students are not empowered in this manner the dream of a learner-centric curriculum framework cannot be materialized. In order to make learning a meaningful and fruitful exercise enabling conditions must be created for the learners and that should be one of the priorities of every college or university of the twenty-first century India.

Finally, a word on the teachers whose role becomes even more important when education becomes learner-centric than when it is teacher-centric. Incidentally, they become teachers in colleges and universities without any training while even a mason or a barber cannot be what they are without training. Anyone who is appointed as a faculty member in any higher educational institution – whether public or private – must therefore be asked to undergo at least three months training on how to teach, how to plan lectures, how to identify standard texts, how to communicate the same ideas in different ways, how to draw appropriate examples, how to make the classes interesting and enjoyable for students, how to evaluate students objectively, how to monitor the progress in their learning abilities, how to encourage students to read, write and speak correctly in the medium of instruction, how to use the ICT facilities to make the learning experience more rewarding, how to access Internet sources for reliable information, and so on and so forth. It is indeed not at all difficult to prepare a training manual for them if the UGC is serious about enhancing quality of higher education in India. The existing HRDCs may be mandated to facilitate this instead of routinely holding RCs and OCs that contribute precious little to improving the quality of teachers in our country today.

3. Assessment Methods

A variety of assessment methods that are appropriate within a given disciplinary area and a programme of study will be used. Priority will be accorded to formative assessment. Learning outcomes will be assessed using techniques such as the following: time-constrained examinations, closed-book and open-book tests, problem-based assignments, practical assignment laboratory reports, observation of practical skills, individual project reports (case-study reports), team project reports, oral presentations, seminar presentation, viva voce interviews, computerized adaptive testing, peer and self-assessment, etc.

For Core, CE, AE, and FE courses the methods of assessment shall include the following:

- a. Unscheduled Written Test
- b. Unscheduled Oral Test
- c. Unscheduled Open Book/Article Test
- d. Problem-solving skills test
- e. Practical assignment
- f. Laboratory reports
- g. Observation of practical skills
- h. Individual project reports
- i. Group project reports

- j. Term papers
- k. Seminar presentation
- l. Computer skills testing
- m. Literature review skills
- n. Literature search skills
- o. Brief report writing tests
- p. Writing abstracts of published articles
- q. Anthropological GK tests (Name of the author, year of publication, title of the book, subject matter of the book, place of publication of book, name of journal editor, place of publication, current volume number, etc.)
- r. Current events awareness
- s. Media awareness (mass, print and social)
- t. Debating skills tests on ethical issues like fabrication, falsification, misrepresentation of data, committing plagiarism, not respecting IPR, environmental sustainability, teamwork, etc.
- u. Extempore speech on anthropological topics like family, clan, lineage, moiety, phratry, etc.
- v. Team work.

4. Keywords

- i. Ageing
- ii. Altruism
- iii. Analytical reasoning
- iv. Anthropological methods
- v. Anthropology
- vi. Anthropology of Food
- vii. Applied Anthropology
- viii. Archaeological Anthropology
- ix. Assessment methods
- x. Biological Anthropology
- xi. Biological variation
- xii. Biostatistics
- xiii. Communication skills
- xiv. Communication skills
- xv. Community engagement
- xvi. Critical thinking
- xvii. Curriculum framework
- xviii. Curriculum planning
- xix. Demography
- xx. Digital literacy
- xxi. Disciplinary knowledge
- xxii. Fieldwork
- xxiii. Human genetics
- xxiv. Human growth
- xxv. Leadership readiness
- xxvi. Learning outcome
- xxvii. Lifelong learning
- xxviii. Linguistic Anthropology
- xxix. Master's degree
- xxx. Medical Anthropology
- xxxi. Molecular Anthropology
- xxxii. Moral awareness

- xxxiii. Multicultural competence
- xxxiv. Museum studies
- xxxv. Neuro-Anthropology
- xxxvi. Physiological Anthropology
- xxxvii. Population genetics
- xxxviii. Postgraduate attributes
- xxxix. Postgraduate programme
- xl. Prehistory
 - xli. Problem solving
 - xl.ii. Qualification descriptors
 - xl.iii. Reflective thinking
 - xl.iv. Reproductive health
 - xl.v. Scientific reasoning
 - xl.vi. Self-directed learning
 - xl.vii. Social-Cultural Anthropology
 - xl.viii. Symbolic Anthropology
 - xl.ix. Teaching-learning process
- l. Team work