

Syllabus of the RET Examination in Anthropology

University of Calcutta

Biological Anthropology

- I. Neo-Darwinism, Neutral theory of molecular evolution.
- II. Primate evolution: the primate radiations to the hominids; the early hominids: Australopithecus, intermediate hominids, Pleistocene hominid evolution.
- III. Recent theories of human origin
- IV. Physical environment – the potential stressors, the nutritional stress, infections, diseases, modernization and human biological responses.
- V. Extension of Mendelian analysis, twin method of study, family method of study
- VI. DNA and RNA, protein structure, haemoglobin, protein synthesis
- VII. Linkage and chromosome mapping, sex linkage
- VIII. Mutations: chromosomal, genomic, and genic
- IX Polymorphism in Serological (ABO, RhD and HLA), Red cell enzyme (Hemoglobin), Serum Protein (Haptoglobins), molecular (brief outline: VNTRs and STRs, SNPs), Immunological (brief outline of different Immunoglobins in terms of polymorphism).

- X Basic principles of human growth: definition and concept, growth, maturation and development, Prenatal growth and development. Methods of growth study: cross sectional, longitudinal, mixed longitudinal, linked longitudinal - merits and demerits; growth curves - Factors affecting postnatal growth

- XI Nutritional Anthropology: techniques of estimating nutritional status; body composition. The utility of anthropology in studying ethnicity and health. Ethnic factors in health and disease, ethnic differences in the prevalence of common diseases of complex aetiology: coronary heart disease (CHD), non-insulin dependent diabetes mellitus (NIDDM) and hypertension (HT), reproductive health and ethnic differences in the risk factor of the above disease. Reproductive and child health: Concept, Safe motherhood 1985, ICPD 1994, Beijing Congress 1995, MDG goals; Menstruation, Menopause, Reproductive endocrinology.

- XII Anthropological Demography- fertility, mortality, migration, consanguinity and inbreeding, marital distance, selection intensity, Darwinian fitness

- XIII Population genetics: Hardy-Weinberg equilibrium, polymorphism, genetic drift, genetic load, driving forces of evolution

- XIV Forensic Anthropology: Forensics, Forensic Anthropology, medico legal aspects. Identification of ages and sex (skull, pelvis). Human body fluids (blood), fingerprints, brief outline of DNA fingerprinting. Paternity diagnosis.

Social Cultural Anthropology

- I. Kinship, Marriage, Family, Tribe, Community, Demography and Population, Social Stratification, Village, Social Movement, Technology, Material Culture, Cultural Syncretism
- II. Anthropology of Religion, b) Linguistic Anthropology, c) Anthropology of Development, d) Anthropology of Power and Politics e) Economic Anthropology, f) Ecological Anthropology, g) Psychological Anthropology, h) Symbolic Anthropology, i) Medical Anthropology j) Cognitive Anthropology, k) Legal Anthropology and l) Visual Anthropology
- III. Enlightenment Evolutionism, Diffusionism, Historical-particularism, Cultural relativism, Functionalism, Structural-functionalism. Culture and personality, Neo-evolutionism, Materialism, Cultural Ecology, Interpretative Approach, Manchester School, Symbolism, Structuralism, Reflexivity.
- IV. Positivism and Logical positivism, Rationalism and Empiricism, Realism and Nominalism, Idealism, Dialectics, Pragmatism, Hermeneutics, Phenomenology and brief introduction to other philosophical thoughts (e.g. Neo-Platonism, Skepticism, Dualism, Utilitarianism, Essentialism and Constructivism, Reductionism, anti-foundationalism, etc.).
- V. Conflict theory, Liberal feminism, Analytical Feminism, Radical Feminism, Socialist Feminism, Critical theory
- VI. Post-Positivism, Post-structuralism, Postmodernism, Post-colonialism.

Palaeoanthropology-Prehistoric Archaeology

- I. Theoretical development of archaeological thought in global perspective and its position in Anthropology; relation with other discipline like History, palaeoanthropology, etc.
- II. Development of prehistoric culture in old world
- III. Classification of the nomenclature- Archaeology, prehistory, palaeoanthropology, archaeological Anthropology. Ideas on Ethno archaeology, Experimental archaeology, environmental Archaeology, settlement archaeology, Archaeobotany, zoo Archaeology, Salvage Archaeology, Action Archaeology, Primate ethology, Underwater Archaeology, Geoarchaeology.
- IV. Methods and techniques in Archaeology, justification of Geo-Archaeology as a method. Field Survey; study of Toposheet and geological maps
- V. Methods of Archaeological exploration; pre exploration activities, Intensive and extensive exploration, general idea about survey methods, mapping of archaeological sites
- VI. Excavation: Pre excavation activities, actual method of digging and its application in different types of sites, recording and analysis of excavated materials in terms of time and space, interpretation and publication of report.

- VII. Concept of chronology in Archaeology: Datable materials, basic principles, advantages and disadvantages, application and recent developments of different dating methods in Archaeology.
- VIII. Geoarchaeology: Basic principles of Stratigraphy, Historical geology, Ideas and relevance about the litho logical, floral and faunal evidences of Stratigraphic section.
- IX. Palaeoenvironment: Study of glacial, Periglacial, tropical geomorphology and geological evidences with special reference to Neogene and Quaternary environment.

Research Methodology

- I. Types of Research, Methodology, Methods, Research Design, Data, Writing of research report, etc.
- II. Methods, Design & Analysis : Scientific techniques for collecting and analyzing data including research paradigms, measurement, design, etc, The understanding of empirical techniques, Emphasis on theory and application of survey research, measurement, scaling, questionnaire construction, validity and reliability, data reduction and analysis.
- III. Basic statistical methods: sampling techniques, descriptive and inferential statistics (bivariate and multivariate), probability theory, distribution (binomial, normal)