UNIVERSITY GRANTS COMMISSION
NET BUREAU

Code NO: 67

Subject: ARCHAEOLOGY

SYLLABUS

Unit - I

Introduction to Archaeology:
Definition; aims, scope and ethics of archaeology; history and growth of Archaeology. History of Indian archaeology.
Relationship of archaeology with social and natural sciences.
Type and nature of archaeological data.
Retrieval of archaeological data: Methods of explorations and excavations. (Random and systematic prospections; subsurface investigations using modern techniques such as remote sensing, resistivity surveys). Recording and documentation.
Methods of artefact analysis: categorization, classification and characterization.
Methods of interpretation and related issues: Application of sociological and anthropological models: Ethnography and experimental replication studies;
Traditional, Processual and Post-Processual approaches.
Preparation of archaeological reports.

Conservation and preservation of archaeological remains/sites: Aims and Methods; Antiquarian laws.

Chronology and Dating Methods:
Relative dating: Cultural stratigraphy, biostratigraphy, typology, Fluorine, Nitrogen and Phosphate analysis; Soil analysis
Chronometric methods: Radiocarbon (C^{14}), Potassium/Argon, Fission track, Luminescence dating (TL and OSL), Dendrochronology, Palaeomagnetic dating Varve analysis, ESR dating, Obsidian hydration, Cosmogenic nuclides method of dating.

UNIT – II:

Introduction to Prehistory
Prehistoric beginning: Geological, biological and cultural dimensions of humans.
Human origin and Geological time scale: Late Tertiary (Miocene and Pliocene) and Quaternary Periods; Plio-Pleistocene boundary, Paleomagnetic records, Pleistocene and Holocene epochs. Major environment and climatic changes of Pleistocene; Pleistocene and Marine Isotopic Stages (MIS).
Biostratigraphy of the Pleistocene: Pleistocene flora and Fauna.
Main stages of human evolution and important fossil records: Hominin ancestors of the Late Miocene, Pliocene and the Pleistocene: Pre-Australopiths, Australopiths and Homo; Hypotheses on modern human dispersal.

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Cultural backdrop: Evolution of stone implements and development of lithic technologies: The Oldowan, Acheulian and the Flake and Blade based industries of the Stone Age.

Palaeolithic cultural development in the world context:
Africa, Europe and South East Asia and China.
Early Stone Age, Middle Stone Age and Late Stone Age of Africa; Lower Palaeolithic, Middle Palaeolithic and Upper Palaeolithic of Europe and West Asia.
Palaeolithic cultural developments in China and South East Asia.

Prehistoric Art: antiquity, significance, distribution.

Unit - III
Palaeolithic cultural developments in the Indian subcontinent:
Geo-chronology and Stone Age cultures of India: The Sohan Valley and the Potwar Plateau sites in the Sivalik hills, The Belan and Son valleys, Didwana dune 16R in Rajasthan, Kortlayar valley/Attirampakkam in Tamilnadu and Jwalapuram in Andhra Pradesh.

Lower Palaeolithic culture: Tool types and lithic technology; The Sohan industry and its antiquity; The Acheulian industry and its spread into major river valleys: Sites in the Narmada and the Sabarmati valleys, the Belan and the Son valley sites, sites in the Hunsgi and Baichabal valleys, sites in the Krishna and the Godavari valleys, sites in the Kortlayar valley; sites associated with the Playas of Rajasthan.

Middle Palaeolithic culture and geographical spread; Tool types and lithic technology of the Middle Palaeolithic: the prepared core techniques/Levallois technique.

The Upper Palaeolithic culture: Tool types and lithic technologies of the Upper Palaeolithic: Blade and bone implements; geographic distribution and major sites.

Prehistoric Art in the Indian context: Antiquity, significance and distribution

Unit – IV
Mesolithic and Neolithic cultures:
Mesolithic in Europe; Epi-Palaeolithic developments in West Asia
Neolithic and Food Production: Neolithic stage in West Asia and China.

Mesolithic culture of the Indian subcontinent: Characteristic features; Tool types and micro-blade technology; regional variations in tool assemblages; Evidence of incipient stages of food production. Patterns of ecological adaptation and distribution: Sites in the alluvial plains, horseshoe lakes, coastal sites, sand-dune sites, sites in the plateaus and rock-shelter sites.

Neolithic cultures of the Indian subcontinent: Early farming communities of Baluchistan: Mehrgarh and Kili-Gul-Muhammad. Neolithic culture in Kashmir.

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Neolithic culture in the Central Ganga and Vindhyan region: Koldihwa, Mahagara, Lahuradewa etc. Eastern Neolithic sites: Chirand, Chechar Senuwar, Kuchai, and Baidyapur and the Neolithic culture of the North-Eastern region: Sarutaru, Selbalgiri, Daojali Hading, Marakdola.

Neolithic cultural development in the southern peninsular India: Sanganakallu, Pikhlihal, Uttnur, Kodekal, Teklakota, Hallur, Nagarjunakonda and Ash-mound sites.

Unit – V

Proto-history:

Courses towards urbanization: The Harappa culture.

Formative stages of the Harappa culture: Emergence of village farming/ Chalcolithic settlements and beginning of regional cultures in the North and North-Western India and Pakistan. Contemporary developments in the Gagghar-Saraswati system and in Gujarat (Pre-Urban /Pre and Early Harappan cultural development).

Early Harappan and the emergence of the Urban Harappan cultural ethos.

Urban Harappan and geographical spread; settlement features; town planning and architecture; Economic production: the urban-rural dichotomy, agriculture and craft production. Trade and subsistence; standardisation of craft and the Harappan script, evidence of overseas contacts. Socio-political organization; art and evidence of religious beliefs; Authors? Important excavated sites: Mohanjodaro, Harappa, Kalibangan, Lothal, Dholavira, Surkotada, Banawali, Rakhigarhi, Bagasra, Rojdi, Rangpur.

Regional variations within the material culture: the concept of Sorath and Sindhi/Classical Harappan in Gujarat.

Post-Urban Harappan

Decline of the Urban Harappan: causes of decline and different theories on decline .

Post-Urban phase: evidence from the Indus valley, Gagghar-Saraswati system and from Gujarat (Post-Urban or Late Harappa cultures of Sindh, Punjab, Haryana, Gujarat and Western Uttar Pradesh).

Other Chalcolithic Cultures of India:

The Copper Hoard and Ochre Coloured Pottery; Chalcolithic cultural remains in the Ganga plain.

The Banas/Ahar cultural developments in southern Rajasthan and its antiquity and distribution.

The Kayatha assemblage of Madhya Pradesh.

The Malwa culture of the Narmada valley and its geographic distribution.

Chalcolithic cultures of the Deccan region (Savalda, Malwa, Jorwe cultures).

UNIT – VI

The Iron Age and growth of new urban centres. Antiquity of Iron in India: Early stages of Iron Age, new evidence from Malhar, Dadupur, Raja Nal-ka-tila,

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Hallur, Kumaranahalli and Kodumanal.

Painted Grey Ware culture: Extent, and Chronology and characteristic traits.

Northern Black Polished Ware culture: Extent, chronology and characteristic traits.

Iron Age in Peninsular India:
The Megalithic culture in peninsular India and beyond: Geographical spread, typology, chronological contexts, cultural artefacts and authors of Megalithic tradition.

The beginning of Early Historic period and the emergence of Urban centres in the Ganga Valley and Peninsular India.

Multiple modes of economic production, expansion of trade and development of trade routes, Maritime trade; emergence of new Urban centres.

Emergence of urban centres:
Important city sites: Rajghat, Ujjain, Vaisali, Taxila, Mathura, Sravasti, Kausambi, Sisupalgargh etc.

Important sites of Historical period:
Sringaverpura, Ahichhatra, Atiranjikhera, Hasthinapur, Khairadih, Chandarketugarh, Nasik, Adam, Satanikota, Nagarjunakonda, Arikamedu, Kodumanal, Pattanam.

Unit – VII
Architecture: A significant source of Indian history
The Stupa architecture: Structural Stupas: Origin and development: North and South Indian stupas.
Development of Rock-cut architecture: Origin and Development - Buddhist Brahmanical and Jain.

Temple Architecture: Origin and development of temples, Main features of the temple architecture, features and development of distinct architectural styles of Nagara, Vesara, Dravida and Bhumija temples.
Gupta, Chalukyan, Pallava and Rashtrakuta temples. Regional styles: Khajuraho temples, Temples of Odisha and Chola temples.

Art and Iconography
Sculptural Art: Stone and Bronze: Antiquity and development: The Mauryan pillar capitals, early Yaksha-Yakshi images, Shunga, Western Kshatrapa, Satvahana sculptures; the Kushana sculptures: Mathura and Gandhara Schools; Gupta sculptures: Saranath school; Chalukya, Pallava; Pala, Chandela, Chola and Hoysala sculptures.

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Iconography
Brahma, Vishnu, Shiva, Kartikeya, Ganesha, Surya, Shakti, Tirthankara (Rishabh dev, Parshvanath and Mahavira), Buddha, Bodhisattva and Tara.

Terracotta Art: Mauryan to the Gupta period
Paintings: Rock-cut cave paintings: Ajanta, Bagh and Sittanavasal

Unit – VIII
Palaeography and Epigraphy:
Epigraphy as a source of Indian history:
Origin and antiquity of writing in India;
Origin and development of Brahmi and Kharosthi scripts: Various theories.
Study of selected inscriptions: Asokan Edicts: Rock Edicts II, X, XII, XIII; Lumbini inscription of Asoka; Minor rock edict of Bairat; Besnagar Garuda pillar inscription; Hathigumpha inscription of Kharvela, Ushavadata inscription in Nasik cave 10, Junagadh inscription of Rudradaman, Nasik cave III inscription of Vasishtaputra Pulmavi Year 19; Swat relic casket inscription; Saranath Buddha image inscription, Lucknow museum Jain image inscription of the time of Huviska; Allahabad pillar inscription of Samudragupta; Bhitri inscription of Skandagupta, Aihole pillar inscription of Pulkesin II; Gwalior inscription of Mihir Bhoja; Khalimpur copper plate of Dharmpala; Sanjan copper plate of Amoghavarsha, Mandsor inscription of Yeshovaran; Truvalangad copper plates of Rajendra Chola year 6 and Sangli copper plate of Govinda IV, Tharsapalli copper plates.

Unit – IX
Numismatics: Coins as an important source of history
Origin and antiquity of coinage in ancient India.
Technique/Methods of manufacturing coins: Silver, copper, gold and alloys.
Main type of coins: Punch marked coins, inscribed and un-inscribed cast coins. Janpada and tribal coins, Indo-Greek coins. Saka-Kashtrapa, Kushana and Satavahana coinage; Coins of the Gupta dynasty; Roman coins. Brief account of Early Medieval Indian coinage.

Unit – X
Methodology of archaeological research.
Role and characteristics of research, research ethics, methods of research; case studies and field investigations; Hypothesis formulation and research design; data collection and processing: Primary and secondary sources, use of Information and Communication Technologies (ICT) in archaeological research; Methods of systematic referencing; Systematic presentation of data and results

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