

1. History of Archaeology

Value of Archaeology - Development of Archaeological Studies in India- Types of Archaeological investigations - Aerial Photography - Remote sensing for Archaeology - Historical Archaeology - Underwater Archaeology -New Archaeology -Functions of Archaeological Survey of India - State and University Departments of Archaeology.

2. Archaeological Field work

Exploration techniques - Exploration tools - Excavation Methods -Horizontal and Vertical types of Excavations - Recording and Analysis of excavation and artifacts - Preparation of excavation report - Dating methods- Archaeological Research in India- Detailed studies of following excavations in Tamil Nadu : Arikamedu, Kavirippumpattinam, Sanur, Uraiyur, Korkai.

3. Prehistory of India

History of Indian Prehistory - Use of Geology and Sciences -Stone tools and functions -Technology of tool making - Early, Middle and Late Palaeolithic Ages -Tools and distribution, habitation and culture - Cave Art - Mesolithic Age - Neolithic revolution -Tools, Pottery, Distribution of sites -Technology and Development - Chalcolithic period - Harappan Culture -Western Indian Chalcolithic Cultures - Banas and Painted Grey ware Cultures - Iron Age cultures - Northern Black Polished Ware cultures.

4. Prehistoric Studies in Tamil Nadu

Stone Age cultures - Kortalaiyar valley and Attirampakkam - Mesolithic Culture - Neolithic and Chalcolithic Problems in Tamil Nadu - Megalithic Culture- types of graves - Regional distribution - Artifacts and Pottery types - Economy.

5. Epigraphy

Importance of Epigraphy - Early inscriptions of India - Asokan Edicts -Hathighumpha inscription of Kharavela - Importance of Satavahana Inscriptions -Development of Tamil Epigraphy - Tamil - Brahmi, Vatteluttu inscriptions - Copper plates and Hero Stone inscriptions -Types and Forms of Inscriptions - Importance of Pallava, Chola, Pandya, and Vijayanagar inscriptions - Study of the following inscriptions: Tamil - Brahmi Inscriptions from Mangulam -Mandagappattu Inscription of Mahendravarman -Velvikkudi Copper plate inscriptions - Uttaramerur inscription of Parantaka I - Thanjavur inscriptions of Rajaraja I.

6. Development of Indian Palaeography

Ancient Scripts in India - Brahmi and Kharoshti Scripts, Origin and Development- Evolution of Tamil script- Tamil-Brahmi Script - Tamil, Vatteluttu scripts - Grantha and Nagari scripts.

7. Numismatics

Early coinage in India - Tribal coinage - Punch Marked coins, distribution, symbols and interpretation - Coinage of the Indo-Greeks - Roman coinage in India - Gupta coinage - Post Gupta coinage - South Indian coinage - Chalukya, Rashtrakuta, Hoysala and Vijayanagar coinage - Development of Tamil coinage - Sangam coins- Roman coins in Tamil Nadu - Imperial Chola Coinage - Pandya, Vijayanagara and Nayak coinage - Metals and Minting techniques of various coins.

8. Sculptural Art and Architecture

Early Sculptural Art and Architecture - Harappan Art - Mauryan Sculptural Art and Architecture- development of Stupa and Chaitya Architecture - Satavahana Art - Early Art and Architecture of Deccan - Chalukya, Rashtrakuta and Hoysala sculptural Art and Architecture - Vijayanagara Art and Architecture -

Secular Art of the Vijayanagara Period - Early Tamil Sculptural Art and Architecture- Cave Art of the Pallava, Pandyas - Structural Temples - Chola Sculptural Art and Architecture - Descriptive study of temples at Mamallapuram, Kanchipuram, Thanjavur and Gangaikonda Cholapuram.

#### 9. Bronzes, Iconography and Paintings

Development of Bronzes in India - Pallava, Chola bronzes - Iconography and Iconometry - Hindu, Jaina, and Buddhist Icons - Indian Paintings - Ajanta and Bagh caves - Pallava and Pandya paintings - Chola paintings- Vijayanagar paintings - Rajasthan and other regional painting styles.

#### 10. Conservation and Museology

Importance of conservation of Ancient structures- Reasons for decay -Methods of conservation of Brick, stone, mortar, and wooden structures - Removal of plants and other biological materials - Chemical methods of conservation - Preservation techniques - formation of Archaeological gardens and their uses - Mending of artifacts, pottery and other artifacts - strengthening and preservation of artifacts -Terra cotta objects and pottery, metal objects, sculptures and coins, stone and other objects - Purpose of Archaeological Museums - Display methods in museums - Preparation of Museum guide books.