# CURRICULUM OF ARCHAEOLOGY

**M.A. ARCHAEOLOGY** 

DEPARTMENT OF ARCHAEOLOGY | UNIVERSITY OF PESHAWAR

# DEPARTMENT OF ARCHAEOLOGY UNIVERSITY OF PESHAWAR

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# Paper-I

# Field Archaeology and Management of Cultural Heritage

#### 1. Introduction

- Concept, definition and scope of Archaeology
- The New Archaeology
- History of archaeological research in South Asia to the present
- The role of Archaeology in national development
- Qualification of an archaeologist
- Archaeology and Anthropology
- Archaeology and History
- Archaeology and Social Sciences
- Archaeology and Natural Sciences
- Archaeology as a scientific discipline

#### 2. Time

- The "Three age system"
- Relative and absolute chronology
- Stratigraphy and law of superimposition
- Pleistocene geochronology
- Pollen analysis
- Varve analysis
- Ordering of artefacts
- Cross-dating with objects of known age
- Dendrochronology
- Thermoluminiscence dating
- Radiocarbon dating
- Potassium-Argon dating
- Obsidian-hydration dating
- Fission-track method
- Archaeomagnetic dating

#### 3. Discovery

- How the ancient sites got buried
- Avenues leading to the discovery of a site
- Chance finds
- Aerial reconnaissance: satellite imagery, aerial photography

#### 4. Survey

- Geographical Information System (GIS)
- Global Positioning System (GPS)
- Map reading
- Interpretation of aerial photographs
- Photogrammetry
- Survey at ground level
- Chain survey
- Contour map
- Use of compass and theodolite
- Electron Distance Measurer (EDM) /Total Station
- Electrical resistivity survey
- Proton magnetometer

• Sound-wave survey

# 5. Excavation

- Organisation of an archaeological excavation
- Excavation tools
- Lay-out of an excavation
- Excavation methods: sondages, grid-strip, quadrant, etc.
- Types of Excavation: vertical, horizontal, rescue, etc.
- Sampling
- Trial trench
- Demarcation of layers
- Sample collection: soil, pollen, wood, charcoal, bones, etc.

# 6. Excavation Problems

- Open hunting camps
- Caves and rock-shelters
- Villages and towns
- Religious buildings: monastery, Hindu temple, mosque, etc.
- Stupa
- Burials
- Mud-brick structures
- Wooden structures
- Pit excavation

# 7. Recording

- Three dimensional measurements
- Graph plotting
- Record card
- Computer recording
- Field diary
- Archaeological photography
- Archaeological drawing

# 8. Pottery-yard

- Layout of pottery-yard
- Washing/cleaning and registration
- Classification
- Typology
- Pottery tabulation
- Pottery distribution map
- Frequency chart

# 9. Registration, Cataloguing and Publication

- Antiquity registers
- Registration and cataloguing of antiquities
- Antiquity distribution map

# 10. Reconstruction of Environment and Subsistence Patterns

• Reconstructing ancient environments

- Palynology
- Subsistence patterns
- Animal bones
- Vegetal remains
- Agriculture
- Domestic and wild animals
- Birds, fish, and molluscs
- Rock art
- Prehistoric diet
- Trade

#### 11. Ordering and Interpretation

- Seriation
- Typology
- Ethnographic analogy and comparative method
- Probability theory, statistical techniques
- Culture change: invention, migration and diffusion

# 12. Computer Application in the Analysis of Archaeological Data

#### **Management of Cultural Heritage**

#### 1. Cultural Heritage

• Definitions of UNESCO, ICOM, ICCROM, etc.

#### 2. Museum and Its Function

- Definition and its scope
- Functions: collection, recording, preservation, exhibition and education
- Different types of museums
- History of Museology in Pakistan
- Problems and prospects of museums in Pakistan

#### 3. Museum Administration

- General organisation
- Staff and their functions: Curator, technical, public-relation, educational, clerical, security, and contingent
- Collections: Primary documentation, study, research, storage and display

#### 4. Documentation

- Record keeping: Registers/Computer punch cards
- Temporary accession
- Permanent accession
- Record of storage
- Gallery record

#### 5. Care and Storage of Museum Objects

- Objects on display
- Objects in stores
- Storage conditions

- Accessibility
- Record of movement of museum exhibits & reserve
- Care against theft, dampness, dust, temperature, and light
- Care and repair of museum objects

# 6. Museum Architecture

- Requirement of museum building
- Plan for a museum
- Storage facilities
- Display galleries
- Service facilities: Library, photography, offices, workshops, Laboratories, etc.
- Public facilities: Cafeteria, gift-shop, lavatories

# 7. Museum Exhibition

- Permanent exhibition
- Planning and setting up an exhibition
- Showcase designing
- Labels
- Lighting
- Background of exhibits
- Mounting objects
- Temporary exhibition
- Travelling exhibition

# 8. Museum Education Research Programme

- Educational programme of a museum: Lectures, seminars, film-shows and cultural-shows.
- Research and publications
- Research facilities in a museum
- Museum library

# Paper-II Anthropology and Environmental Archaeology

#### **Physical Anthropology**

#### Theory

- 1. Introduction
  - Concept, definition, main features and scope of Anthropology
  - Main divisions of Anthropology: physical, cultural and social
  - Relation of Anthropology with biological and social sciences
  - Application of Anthropology in today's world

# 2. Life on the Earth

- Life on earth
- Animal-kingdom
- Mammals, characteristic features of mammals
- Primate group, behaviour of primate group
- Apes, characteristic features of apes

#### 3. Evolution Theories

- Religious theories
- Scientific theories

#### 4. Early Ancestors of Man

- Ramapithecus
- Bipedalism
- Early hominid foot prints

# 5. Australopithecines

- Australopithecus Afarensis
- Australopithecus Africanus
- Australopithecus Robustus
- Australopithecus Boisei
- Zinjanthropus
- 6. Homo
  - Homo Habilis
  - Homo Erectus: Pithecanthropus, Sinanthropus

#### 7. Neanderthalman

8. Homo Sapien (Modern man)

# **Cultural Anthropology**

- 1. Introduction
  - Concept, definition and scope of Prehistory
  - Effects of physical environment on the growth of cultures
  - Geological strata and interpretation of associated finds
  - Chronological periods in the history of the earth.
  - Pleistocene chronology
  - Principal features of the Pleistocene and Holocene Periods

# 2. Concept of Culture

- Man, culture and society
- The evolution of culture
- Culture is learned
- The concept and method of cultural ecology
- Culture and language
- Culture and personality

# 3. Lower Palaeolithic Culture

- Characteristic features
- Cultures of Lower Palaeolithic Period
- Principal tool-types, their manufacturing techniques and probable functions

# 4. Middle Palaeolithic Culture

- Characteristic features
- Cultures of Middle Palaeolithic Period
- Principal tool-types, their manufacturing techniques, and probable functions
- Intellectual developments: art and religion

# 5. Upper Palaeolithic Culture

- Characteristic features
- Cultures of Upper Palaeolithic Period
- Principal tool-types, their manufacturing techniques and probable functions
- Intellectual developments: art and religion

# 6. Mesolithic Culture

- Characteristic features
- Cultures of Mesolithic Period
- Principal tool types, their manufacturing techniques and probable functions
- Intellectual developments: art and religion

# 7. Neolithic Revolution

- Domestication of plants and animals
- Evolution of stone-tool technology
- Introduction of ceramics
- Evolution of permanent settlements
- Evolution of related arts and crafts
- Early Neolithic Cultures

# 8. Prehistory of Pakistan

# Paper-III

# Early Urbanisation in Pakistan and the Emergence of Indus Civilisation

# Indus Civilization

# 1. Introduction

- Terminology of the Indus Civilisation
- Environmental background.
- Discovery of Indus Civilisation
- Present state of research on Indus valley

# 2. Early Indus Period (from Mehrgarh to the Rise of Mature Indus Period)

- Distribution of Settlements (Tochi-Gomal/Hakra/Amrian/Kot Dijian/Harappan)
- Development of art and architecture
- Major settlements of Early-Indus Civilisation

# 3. Mature Indus Period

- Settlement pattern.
- Art and architecture
- Town planning
- Seals
- Major crafts
- The Indus script
- Trade relations
- Indus Civilisation ---- new perspectives
- Decline of the Indus Civilisation

# 4. Late Indus Period

- Settlement pattern
- Late Indus Cultures in Sindh, Punjab, Baluchistan, Gujrat

# 5. Preservation/Conservation of Mohenjo Daro: A critical appraisal

# Paper-IV Ancient World Civilisations

#### 1. Concept of Civilisation

- Concept of culture and civilisation
- Elements of civilisation
- Basic conditions of civilisation

#### 2. Mesopotamian Civilisation

- Environmental background
- Chronology (3500–600 BC)
- Socio-political set-up of the Sumerians, Akkadians, Babylonians, Assyrians and Chaldeans
- Various aspects of civilisation: art, architecture, writing, seals, religion and economy

# 3. Egyptian Civilisation

- Egypt geophysical history and its impact on local cultures
- Art and architecture
- Religion
- Writing system
- Contribution in literature, science, philosophy, medicine

#### 4. Chinese Civilisation

- Shang Dynasty
- Chou Dynasty
- Chen Dynasty
- Han Dynasty
- Art and architecture
- Contributions in philosophy

#### 1. Iranian Civilisation

- Origin of Iranian Civilisation
- Achaemenians: history and formation of their empire
- Provincial administration system
- Zoroastrian Religion
- Art and architecture
- Cyrus
- Darius I and Darius II
- Sasanians

#### 2. Greek Civilisation

- Origin and development of the Greek Civilisation
- Origin of city states
- Hellenic and Hellenistic phases
- Art and architecture
- Literature

- Philosophy
- Science
- 3. Roman Civilisation
  - Origin and development of Roman Empire
  - General characteristics of Roman Culture
  - Art and architecture
  - Philosophy and science
  - Roman Law

# Paper-V Ancient History of Pakistan and India

#### ANCIENT HISTORY OF PAKISTAN AND INDIA

#### 1. Introduction

- Geographical factors in history of Pakistan
- Sources of ancient history

# 2. Vedic Age

- Rigvedic Period
- Vedic Period
- Epic Age

# 3. Religious Movements

- Jainism
- Buddhism
- Hinduism

# 4. Early Historic Perios

- Achaemenian
- Invasion of Alexander the great
- The Mauryas: Chandergupta Maurya, Bindusara and Ashoka

# 5. Foreign Invasions

- Indo Greeks
- Scythians
- Parthians
- Kushanas
- Sasanians
- Kidara Kushanas
- White Huns

# 6. Native Dynasties

- Guptas
- Harsha Vardhana
- Turk Shahis
- Hindu Shahis

# ANCIENT RELIGIONS OF PAKISTAN AND INDIA

- 1. Jainism
  - Jain tradition regarding twenty-four *tirthankaras* (prophets)
  - Parsva and Mahavira
  - Mahavira's life sketch
  - Importance of the Ardha Magadhi canon
  - Mahavira's meeting with Gosala Mankhaliputta (head of the Ajivika sect)
  - Vardhamana Mahavira and his doctrine
  - Jainism after Mahavira
  - Jain canon, philosophy and icons.

# 2. Buddhism

• Buddhist literature

- Origin and development of Buddhism
- Teachings of Gautama Buddha
- Hinayana and Mahayana sects
- Vina Sutta and Abhidhamma Pitakas
- Sthaviravadin School
- Evolution of the Great Vehicle (Mahayana)
- Mahasanghika and Sarvastivadins
- Adi Buddhas
- Boddhisattvas
- Lalitavistara
- Buddhist ethics and morality

#### 3. Hinduism

- Upanishads and freedom of religious speculation
- Vaishnavism
- Origin and evolution of Vaishnavism
- Vasudeva-Krishna and the Bhagavata sect
- The Bhagavatgita
- Vishnu's *avataras* (incarnations)
- The doctrine of four vyuhas (phases of conditioned spirit)
- Images and their emblems of identification
- Saivism
- The Pasupata sect and its teachings
- Saivism as a popular cult
- Mahesvara and Mahadeva
- Saiva images
- Important gods and goddesses and their characteristic iconographic features

# Paper VI Art and Architecture of Pakistan and India (Pre Muslim Period)

#### ANCIENT ART AND ARCHITECTURE OF PAKISTAN AND INDIA

This course will review art and architectural traditions of Pakistan and India of Pre-Islamic period. It requires visits to archaeological sites and museums. The course-contents are as follow:

#### 1. Architecture

- Vedic Period architectural traditions
- Mauryan architecture
- Buddhist architecture: stupa, monastery, rock-cut sanctuaries, etc.
- Hindu architecture: Temple
- Gupta Architecture

#### 2. Art

- Mauryan art
- Shunga art
- Early Andhra art
- Later Andhra art
- Mathura art (Kushana Period)
- Gandhara art (Kushana Period)
- Origin of the Buddha image
- Gupta art
- Ajanta cave paintings
- Iconography of Hindu Triad
- Rock Art of Pakistan

# Paper VII Numismatics of Pakistan

#### Numismatics

This course is divided into two parts: a) Numismatics of Pre-Muslim period of Pakistan and India and b) Numismatics of Muslim period of Pakistan and India. The Course contents are as follow:

#### 1. Introduction

- Numismatics: Definition, scope and significance
- Metallurgical studies
- Mints
- Cataloguing
- History of coins
- Techniques of manufacturing coins

# 2. Numismatics: Pre-Muslim Period

- Antiquity of coinage in Pakistan and India
- Punch marked coins
- Indo-Greek coins
- Scytho-Parthian coins
- Kushan coins
- Huna coins
- Hindu-Shahi coins

# 3. Numismatics: Muslim Period

- Arab period Coins in Pakistan
- Coins of the Ghaznavid and Ghorid rulers
- Coins of the early Sultanate period (the Khaljis, Tughlaqs, Syeds, Lodhis, Suris)
- Coins of the Mughal rulers
- Coins of the Durranis and the Sikhs

# Paper VIII Palaeography and Epigraphy of Pakistan

#### PALAEOGRAPHY AND EPIGRAPHY OF PAKISTAN AND INDIA

This course is divided into two parts: Paleography and Epigraphy. In Paleography the origin and development of Brahmi, Kharoshthi, arada and Devanagri scripts will be studied and learnt how to transcribe them into Roman alphabets. In Epigraphy the importance of epigraphical research will be reviewed and will include ancient inscriptions/*faramin* or those of the Muslim rulers of Pakistan and India. The course contents are as follows

# 1. Palaeography: Brahmi

- Origin of writing in Pakistan and India (South Asia)
- Brahmi script: characters, conjuncts
- Origin of Brahmi script
- Decipherment
- Asokan Brahmi
- Provincial styles
- Kushan characters
- Regional styles
- Gupta characters
- Proto-Sarada
- Sarada
- Devanagari

#### 2. Palaeography: Kharoshthi

- Kharoshthi script: alphabets, conjuncts
- Origin of Kharoshthi script
- Decipherment
- Asokan Kharoshthi
- Development
- Transitional phases of writing

# 3. Epigraphy

- Importance of Epigraphic research in Archaeology
- History of Epigraphic Studies in Pakistan and India
- Survey of the Epigraphic records
- Epigraphy as a source of History of Pakistan and India.

# Paper IX Muslim Architecture of Pakistan and India

# Muslim Architecture of Pakistan and India

#### 1. Arab Period

- Settlement pattern and architecture of Banbhore
- Settlement pattern and architecture of Mansurah

#### 2. Ghaznavid/Ghaurid Period

- Tomb of Abdullah bin Harun in Lasbela
- Udigram Mosque
- Tomb of Khalid bin Walid
- Tomb of Sadan Shaheed
- Tombs at Lal Mahra

#### 3. Sultanate Period

 Monuments of Delhi and Ajmir: Quwwat ul Islam Masjid, Qutb Minar, Alai Darwaza, Tughlaqabad, Buildings of Feroz Shah Tughlaq, Tombs of Syeds and Lodhis, the Suri period buildings.

# 4. Mughal Period

- Monuments of Agra: Taj Mahal, Akbar's tomb
- Monuments of Delhi: Red Fort, Jami Masjid
- Monuments of Fatehpur Sikri
- Monuments of Lahore: Badshahi masjid, Wazir Khan masjid, Shalimar Garden, Jahangir's tomb and Shahi Fort
- Monuments of Peshawar: Mahabat Khan masjid, Palosi Piran complex
- Monuments of Thatta: Shahi masjid and Dabgaran masjid

#### 5. Provincial/Regional Styles

- Provincial style monuments of Kalhora and Talpur Rulers of Sindh
- Choukandi type tombs of Sindh and Baluchistan
- Provincial style monuments of the Punjab
- Provincial style monuments of the NWFP
- Sindhi Islamic architecture Makli Hill (Thatta)
- Wooden architecture of the Northern Areas of Pakistan

# Paper X Muslim Calligraphy, Painting, Minor Arts and Crafts

# MUSLIM CALLIGRAPHY, PAINTING, MINOR ARTS AND CRAFTS

# 1. Calligraphy

- Origin and development of Arabic script
- Status or position of a calligrapher
- Significance of calligraphy in Islamic arts
- Origin and development of calligraphy
- Principal forms of calligraphy
- Sub-forms of calligraphy
- Modern calligraphers in Pakistan

# 2. Schools of Painting

- Early Arab
  - Mesopotamian
  - Mongol
  - Persian
  - Mughal

#### 3. Minor Arts

- Metalwork
- Glasswork
- Woodwork
- Book illumination
- Bookbinding
- Ceramics