## Model Curriculum for Three/Four Year Degree Course (With Multiple Entry /Exit Option) Based on NEP-2020

# Archaeology



## **Odisha State Higher Education Council, Bhubaneswar Government of Odisha**

Semester	Subjects
Ι	Core I - Archaeology and Its Field Methods
	Core II- Science in Archaeology
II	Core III- Conservation and Preservation of Monuments
	Core IV - Heritage of Odisha an Art and Architecture
III	Core V- Museum Studies
	Core VI- Indian Art and Architecture
	Core VII- Odisha Temple Architecture

### **Programme Outcomes**

- To prepare the students for a career in Archeology.
- To prepare the students for Higher Education and Research in archeology.
- To develop a conceptual understanding of the subject and to develop an inquisitiveness in the subject.
- To enable the student to acquire basic skills necessary to understand the subject and to master the skills to handle equipment's utilized to learn the subject.
- To generally promote wider reading on the subject and allied inter disciplinary subject.

# Semester-ICore IArchaeology and Its Field Methods

#### **Course Outcome:**

After completing this course students are expected to have a fair knowledge about the scientific aspects of field archaeology and its methods. The expected outcome is that the student will develop a strong foundation on the basic understanding of the nature, development and value of archaeology as a discipline.

#### **Course Objectives:**

This course is an introductory paper intending to introduce field archaeology in terms of exploration and excavation, development of archaeology in Indian and Global perspective, different methods of data retrieval i.e. stratigraphy, its analysis and interpretation.

#### **Unit-I: Introduction**

- a. Definition and Scope
- b. Relevance of Archaeology
- c. Relationship with Pure Sciences and Social Sciences

#### **Unit-II: Development of Archaeology**

- a. Development in Global Perspective
- b. Development in Indian Perspective

#### **Unit-III: Methods of Field Archaeology**

- a. Exploration Methods
- b. Excavation Methods

#### **Unit-IV: Practical Methods**

Students would be assigned a Project work. They may participate in Excavation and Exploration conducted by ASI, OSA, OIMSEAS or University Departments and submits the report.

- ✓ D.K. Chakrabati ; A Source Book of Indian Archaeology from the Beginning to 1947, New Delhi, 1988.
- ✓ K. Rajan ; Archaeology ; Principles and Methods, Thanjavur, 2002.
- ✓ B. M. Fagan; Archaeology- A brief Introduction, New York, 1991.
- ✓ C. Renfrew; Archaeology: Theories, Methods and Practice, U.S.A, 1991.
- ✓ K.V Raman; Principles and Methods of Archaeology, Madras, 1986.
- ✓ J. J. Hester; Introduction to Archaeology, Williamsburg court Fairfax, 1976.
  Ghosh; An Encyclopaedia of Indian Archaeology, New Delhi, 1989.
- ✓ W. S. Dancey ; Archaeology Field Methods; An Introduction, New Delhi, 1985.

#### Core II Science in Archaeology

#### **Corse Outcomes:**

Students are familiarized to understand the past.

#### **Course Objective**:

In this paper students are introduced to the various scientific disciplines applied in archaeological research. In this paper students would be given a scope to understand the past through scientific aids and also through the classification of potteries and antiquities.

#### **Unit-I: Dating in Archaeology**

- (i). Relative Dating
- (ii). Absolute Dating

#### **Unit-II: Classification of Archaeological Remains**

- (i). Classification of Potteries
- (ii). Classification of Antiquities

#### **Unit-III: Documentation and Report Writing**

- (i). Documentation in Archaeology
- (ii). Report Writing and Publication

#### **Unit-IV: Practical**

Students would be assigned to write a report. Students may take up internship in OSM, ASI site museum, State site museums, University museums, etc. and submit a report.

- ✓ Savindra Singh; Geomorphology, Allahabad, 1998.
- ✓ Colin Renfrew; Archaeology: Theories, Methods and Practice, U.S.A, 2012.
- ✓ B.M. Fagan ; In the Beginning –An Introduction to Archaeology, London, 1988.
- ✓ James j. Hester ; Introduction to Archaeology, Williamsburg court Fairfox, 1976.
- ✓ K.V Raman ; Principles and Methods of Archaeology, Madras, 1986.
- ✓ Ghosh ; An Encyclopaedia of Indian Archaeology, New Delhi, 1989.
- ✓ K.Rajan ; Archaeology ; Principles and Methods, Thanjavur, 2002.
- ✓ J.K.Patnaik, Excavations at Lalitgiri, MASI 112, New Delhi, 2016.
- ✓ S.K.Patnaik, Excavations at Radhanagar, OIMSEAS, Bhubaneswar, 2015.

#### Semester II Core III Conservation and Preservation of Monuments

#### **Course Outcome:**

Students are made to understand the problems, prospects and issues related to structural conservation and chemical preservation of monuments and antiquities.

#### **Course Objectives:**

The objective of this course is to introduce basic concepts of conservation and preservation of monuments and antiquities including principles and ethics and methods of conservation and restoration of monuments, artefacts, palm leafs etc.

#### **Unit-I: Principles and Ethics of Conservation**

- a. Introduction to Conservation
- b. Theories of Conservation
- c. Values and Degrees of Conservation

#### **Unit-II: Deterioration factors and their Remedies**

- a. Natural factors and their Remedies
- b. Biological factors and their Remedies
- c. Human factors and their Remedies

#### **Unit-III: Mortars used in Ancient Buildings**

- a. Lime Mortar
- b. Mud Mortar
- c. Cement Mortar

#### Unit-IV: Built Heritage Sites and their Conservation and preservation

- a. Excavated sites-Lalitagiri, Ratnagiri, Udayagiri
- b. Temples.-Temples of Khiching, Sun Temple at Konark

- ✓ L.N. Batra ; Heritage Conservation (Preservation and Restoration of Monuments ), New Delhi, 1996.
- ✓ O.P. Agrawal and M. Barkeshli ; Conservation of Books, Manuscripts and Paper Documents, INTACH, 1997.
- ✓ O.P.Agrawal; Preservation of Art Objects and Library Materials, NBT, 1993.
- ✓ B.Feilden ; Guideline for Conservation (A Technical Manual), INTACH, 1989.
- ✓ S.S.Biswas ; Protecting The Cultural Heritage, New Delhi.

#### Core IV Heritage of Odisha an Art and Architecture

#### **Course Outcome:**

After completion of this paper the student will know the manner in which art and architecture in Odisha evolved and the contribution of this eastern state to the Indian fabric. He will have a good understand of the rock art, Buddhist and and Jaina art and architecture of Odisha.

#### **Course Objectives:**

The paper is intends to familiarize the heritage of Odishan art and architecture i.e. rock art (pictographs and petroglyphs), rock cut cave architecture and sculpture of Dhauli, Khandagiri and Udayagiri, Buddhist architectures of Odisha (Hinayana, Mahayana and Vajrayana period) and also the important Jaina centres and their art and iconography.

#### **Unit-I: Early Art Heritage**

- (i). Rock Art of Odisha
- (ii). Dhauli, Khandagiri and Udayagiri

#### Unit-II: Buddhist Art of Odisha

- (i). Concept of Stupa, Viharas and Chaityas
- (ii). Lalitagiri, Ratnagiri, Udayagiri

#### Unit-III: Jaina Art of Odisha

- (i). Jaina sites: Subai, Achyutarajpur
- (ii). Jaina Tirthankaras and their Sasanadevis

#### **Unit-IV : Practical**

Visit to sites and submit a report.

- ✓ S. Pradhan ; Rock Art in Orissa, New Delhi, 2001.
- ✓ D. Mitra ; Bhubaneswar, New Delhi, 1978.
- ✓ A.N. Parida ; Early Temples of Orissa, New Delhi, 1999.
- ✓ K.S. Behera &T.E.Donaldson ; Sculpture Masterpieces from Orissa, New Delhi, 1998.
- ✓ T.E.Donaldson ; Icongraphy of the Buddhist Sculptures of Orissa, Delhi, 2001.
- ✓ B.Bandyopadhyay ; Buddhist centres of Orissa, Lalitagiri, Ratnagiri and Udayagiri, New Delhi, 2004.
- ✓ D. Mitra ; Khandagiri and Udayagiri, New Delhi, 1975.
- ✓ R.P. Mohapatra ; Archaeology in Orissa, Vol-II, Delhi, 1986.
- ✓ S.K.Patnaik, Early Buddhist Art of Odisha, New Delhi, 2020.

#### Semester-III Museum Studies

#### Core V

#### **Course Outcome:**

The expected outcome of the paper is to familiarize and make the student aware of our rich cultural/architectural heritage through museum studies.

#### **Course Objectives:**

The course introduces the student to know and be aware of museums its content and displays. It also teaches the student about the ancient Indian heritage of different dynasties, their socio-political and religious – economic conditions etc.

#### **Unit-I: Introduction**

- a. Definition and types of Museum
- b. History of Museums in India and Odisha

#### **Unit-II: Important Museums**

- a. Indian Museum-Kolkata, National Museum-New Delhi, Salarjung Museum-Hyderabad
- b. Odisha State Museum, Khiching Museum and Tarapur Museum

#### **Unit-III: Archaeological Site Museums**

- a. Kalibangan, Nagarjunakonda, Purana Quila
- b. Ratnagiri, Lalitagiri and Konark

#### **Unit-IV: Practical**

Visit to museums and to write a report.

- ✓ B. R. Thorat; Principles of Museology, Archaeology Archival and Library Science, Mumbai, 2000.
- ✓ A. Tripathy; Museum Studies, Delhi, 2010.
- H. Sarkar; Museum in Archaeological Remains, Monuments and Museum, Delhi, 1964
- ✓ N. R. Banarjee; Museum and Cultural Heritage in India, Delhi, 1990.
- ✓ M. L. Nigam; Fundamentals of Museology, Hyderabad, 1985.
- ✓ U. Agarwal; Directory of Museums in India, New Delhi, 2000.

#### Indian Art and Architecture

#### **Course Outcome:**

Core VI

The expected outcome of the paper is to familiarize and make the student aware of our rich cultural/architectural heritage and their contribution. To better comprehend the architectural heritage of the Buddhist and the Rock Cut Cave tradition of India.

#### **Course Objectives:**

The course would introduce the student to know and be aware of our ancient heritage and its architecture from the Mauryan to the early medieval period. It teaches the student about the ancient Indian heritage of the Mauryan, Sungas, Buddhist Architectures of north and south India.

#### **Unit-I: Harappan Art and Architecture**

- a. Town Planning
- b. Great Bath, Dockyard and Water Reservoir

#### Unit-II: Mauryan and Sunga School of Art

- a. Mauryan Column and its features
- b. Salient features of Stupa, Viharas and Chaityas
- c. Sanchi and Bharut Art

#### **Unit-III: Kushana School of Art**

- a. Gandhara School of Art
- b. Mathura School of Art

#### **Unit-IV: Andhra School of Art**

- a. Amaravati School of Art
- b. Nagarjuna School of Art

- ✓ P.Brown ; Indian Architecture (Buddhist and Hindu Period), Mumbai, 1997.
- ✓ Edith Tomory ; A History of fine art, In India and the west, Chennai, 2009.
- ✓ V. Dehejia ; Indian Art, London, 1997.
- ✓ *R. Craven* ; *Indian Art, London, 1997.*
- ✓ S.P.Gupta ; Elements of Indian Art, New Delhi, 2002.
- ✓ A.N. Parida ; Early Temples of Orissa, New Delhi, 1999.
- ✓ K.S. Behera ; Temples of Orissa, Bhubaneswar, 1993.
- ✓ N.S. Ramaswami ; Indian Monuments, New Delhi, 1979.
- ✓ S.L. Huntington, The Art of Ancient India, New Delhi, 2014.

#### **Odisha Temple Architecture**

#### **Course Outcome:**

This paper will bring about a clear understanding of the regional style of temple architecture that evolved in Odisha. He will know how the style evolved and how Odisha had a distinct identity of its own due to its temples. He will be able to differentiate the various types of the style and classify them.

#### **Course Objectives:**

The paper would introduce the students and give them an understanding of Odishan temple art and architecture. He is taught the very fundamentals of the regional style that evolved in Odisha from the 6<sup>th</sup> century to the 13<sup>th</sup> century A.D.

#### **Unit-I: Introduction**

- a. Classification of Temples
- b. Salient features of Temples

#### **Unit-II: Early Phase**

- a. Satrughanesvara Temple
- b. Parasuramesvara Temple
- c. Vaitala Temple

#### **Unit-III: Transition and Mature Phase**

- a. Muktesvara Temple
- b. Brahmesvara Temple
- c. Lingaraj Temple
- d. Sun Temple at Konark

#### **Unit-IV: Practical**

Project report writing.

#### **Books Recommended:**

- ✓ A.N. Parida ; Early Temples of Orissa, New Delhi, 1999.
- ✓ K.S. Behera &T.E.Donaldson ; Sculpture Masterpieces from Orissa, New Delhi, 1998.
- ✓ T.E.Donaldson ; Icongraphy of the Buddhist Sculptures of Orissa, Delhi, 2001.
- ✓ T.E. Donaldson ; Hindu Temple Art of Orissa, Vol.I & II, 1985-86.
- ✓ R.P. Mohapatra ; Archaeology in Orissa, Vol-II, Delhi, 1986.
- ✓ K.S. Behera; Temples of Odisha, Odisha Sahitya Academy, 1981.
- ✓ D. Mitra ; Bhubaneswar, Calcutta, 1958.
- ✓ K.S. Behera ; Konark: The Heritage of Mankind, Religion, History and Architecture, Vol.II, New Delhi, 1996.
- ✓ N. K. Bose ; Cannons of Orissan Architecture, New Delhi, 1982.

#### Core VII