## CENTRE OF CENTRAL ASIAN STUDIES UNIVERSITY OF KASHMIR

## SYLLABUS MASTER OF ARTS IN ARCHAEOLOGY

**JULY 2019** 



PG PROGRAME OF ARCHAEOLOGY CENTRE OF CENTRAL ASIAN STUDIES UNIVERSITY OF KASHMIR

#### CENTRE OF CENTRAL ASIAN STUDIES

#### **Establishment of CCAS:**

In order to study the Central Asian region from diversified point of view, the Centre of Central Asian Studies was established in 1978 at the University of Kashmir, Srinagar. Immediately thereafter, the Centre embarked upon a series of un-interrupted and unflinching research exercises largely aimed at re-discovering the cultures and peoples of the region. Therefore, the most of the studies conducted through the Centre were historical and cultural in context, specifically focusing on affinities between Kashmir and Central Asia. For the reason that Kashmir is closely situated to Central Asia and served as bridge between India and Central Asia, its cultural mosaic reflected the syncretism and blend of various socio-cultural practices of a vast region.

#### **Central Asian Museum:**

The bilateral and multilateral relations between the two regions are sufficiently supported by thousands of artifacts showcased in the Central Asian Museum of the Centre.

#### **Area Study Programme:**

Specialized studies pertaining to the region began to be pursued under its Area Studies Programme (ASP) after 1983 when the University Grants Commission provided the Centre with additional staff for an allied research wing – a special status that, inter-alia, served to link the Centre with rest of the Area Studies Centre of India. This enabled the Centre to set afresh its priorities with regard to contemporary problems relating to defence strategy, economic restructuring, resource management, religious revivalism, international relations, foreign investment, legal guarantees, etc. While negotiating new challenges, the Centre expeditiously carried forward its research agenda quite undaunted by the most hostile and un-favorable circumstances that existed in Kashmir.

#### **About PG Programme Archaeology**

The Kashmir Valley, nestled in the Himalayas, possesses exceptional historical, cultural, and geographical significance. Its strategic location facilitated sustained interactions with several prominent civilizations throughout ancient and medieval periods. The Himalayan region is archaeologically rich, serving as a meeting ground for diverse cultures and civilizations, fostering indigenous knowledge, and presenting hidden treasures for exploration. Bordered by China to the east, Central Asia to the north, Afghanistan and Iran to the northwest, and the Indian subcontinent to the south, Kashmir functioned as a crucial nexus for cultural exchange among Chinese, Central Asian, West Asian, and Indian civilizations. Kashmir has been a melting pot of tangible and intangible cultural heritage, reflecting the legacy of prehistoric cultures, Buddhist empires, ancient Hindu kingdoms, and Islamic dynasties. The archaeological remnants from these periods, including sites and heritage structures such as temples, monasteries, forts, and other edifices, are critical to understanding the region's historical development. The valley has yielded numerous artefacts, manuscripts, and inscriptions that offer invaluable insights into its historical narrative. These materials are essential for reconstructing the history of past societies, including aspects of governance, socio-religious practices, trade, and daily life. Given Kashmir's rich heritage of ancient civilizations, diverse cultural influences, and unique archaeological sites, the establishment of a Postgraduate Programme in Archaeology in University of Kashmir is both timely and essential. This initiative addresses a critical need for an academic institution dedicated to the study of archaeology in the Himalayan region of Kashmir.

The department has developed a comprehensive curriculum that includes core subjects in archaeology, fieldwork trainings, conservation, and heritage management. This curriculum aims to provide students with both specialized knowledge and practical skills. Training includes excavation techniques, artefact analysis, conservation methods, and historical research, ensuring that students are well-prepared for professional careers in the field. The establishment of an archaeology discipline promotes research into the region's archaeological heritage, contributing to new discoveries and academic publications. Additionally, the Department of Archaeology offers structured educational programs that not only focus on archaeology but also encourage interdisciplinary research. This interdisciplinary approach integrates archaeology with fields such as history, anthropology, technology, and environmental studies, thereby broadening the scope and impact of archaeological research.

The establishment of a School of Archaeology in 2017 at the University of Kashmir is essential for the preservation, study, and promotion of the Kashmir Valley's rich archaeological heritage in particular and Himalayan region in general. The department will provide valuable educational opportunities, advance research, support conservation efforts, and contribute to the economic and cultural development of the region by promoting cultural entrepreneurship. Through the archaeological research, the University of Kashmir can play a pivotal role in safeguarding the past and enriching the future of the Himalayan region.

## Centre of Central Asian Studies University of Kashmir MA Archaeology

### **Program Specific Outcomes**

Semester	Course Title	Objectives and Outcomes
First Semester	<ul> <li>Introduction to Archaeology</li> <li>World Archaeology: An Overview</li> <li>Prehistory of South Asia</li> <li>Prehistoric Archaeology of Kashmir</li> <li>Term End Practical Explorations/Material culture/Landscape/Site/Settlement</li> </ul>	Course Objectives  The course aims to introduce learners to the discipline of Archaeology, providing an overview of its evolution and fundamental concepts. Specifically, the objectives are:  To acquaint students with the historical development of Archaeology as a discipline.  To introduce students to the nature and extent of prehistory, focusing on the prehistoric evidence found in South Asia and Kashmir valley from the Lower Paleolithic to the Mesolithic periods. Additionally, it presents an overview of Quaternary environmental changes, with a specific focus on the Indian Subcontinent.  To develop a clear understanding of the fundamental concepts and theories in Archaeology. This course includes training in field methods including exploration techniques.  Learning Outcomes  Upon completion of the course, students will gain familiarity with the foundational aspects of South Asian Archaeology and Prehistory and understand the shifts in environmental conditions during the Quaternary period. Students are expected to demonstrate a comprehensive understanding of the emergence and evolution of Archaeology. Additionally, they should possess a solid grasp of fundamental concepts and processes within the discipline, enabling them to understand basics of archaeology as an academic discipline.
Second Semester	<ul> <li>Field Archaeology (Theory)</li> <li>Field Archaeology (Practical)</li> <li>Proto-history of South Asia</li> <li>Archaeological Sources</li> <li>Science in Archaeology</li> <li>Archaeology of Kashmir (Ancient to Medieval)</li> <li>Science and Archaeology</li> </ul>	<ul> <li>Course Objectives</li> <li>To explore the key concerns and methodologies employed in archaeological research.</li> <li>To understand the archaeology of South Asia from the Mesolithic/Neolithic era through the Chalcolithic period, up to the emergence of iron in the late second to early first millennium BCE.</li> <li>To examine the development and spread of agriculture during the Neolithic period, the rise of Harappan urbanism in the third to second</li> </ul>

**Third Semester** 

- millennium BC, and subsequent cultural developments in regions such as Western India, the Gangetic valley, Central India, and the South.
- To provide students with adequate understanding of how natural science can be applied to the solution of problems related to Archaeology and related challenges, aiming to uncover human history and its environments, with a particular focus on the Indian subcontinent.

#### **Learning Outcomes**

Upon successfully completing the Protohistory of South Asia course, students will establish a solid groundwork and acquire a critical comprehension of the subject matter. They will also gain the ability to contextualize South Asian materials within broader archaeological discussions. Students will also acquire knowledge of applying principles natural science to archaeological problems and uncover human history and environments, particularly focusing on the Indian subcontinent. Furthermore, students will understand different archaeological theories and engage in practical's through field trainings especially in excavations.

#### **Course Objectives**

- To understand the emergence and evolution of art and artistic traditions up to the 12<sup>th</sup> century C.E., and to introduce students with the iconography of Hinduism, Buddhism, and Jainism.
- To familiarize students with ancient scripts, emphasize the significance of epigraphical records in reconstructing ancient Indian history, and introduce the currency system of ancient India while exploring the development of coinage.
- To establish a methodological foundation for archaeological interpretation and provide a global perspective on changes within the discipline. Additionally, to introduce students to formal research processes, report writing techniques, and presentation skills.
- To introduce students with the purpose and functioning of museums and their vital role in bridging archaeology with public education together.
- Students will be acquainted with the primary sources of political history, including major political events spanning from the earliest historical records up to 700 C.E. Additionally, students will gain an introduction to political geography and chronology upto 700 CE

- Art, Architecture and Iconography
- Epigraphy and Numismatics
- Art and Architecture of Jammu And Kashmir
- Research Methodology
- Museum Management
- Ancient Indian History-I OR Environmental Archaeology
- Archaeological Sites of Kashmir

#### **Learning Outcomes** Students will gain an in-depth understanding of art traditions, including Hinduism, Buddhism, and Jainism, up to the 12th century C.E., and the significance of iconographic depictions. They will also learn the importance of ancient scripts in reconstructing Indian history, explore ancient Indian currency systems and coinage evolution, and develop strong methodological interpreting archaeological for Furthermore, students will acquire research, writing, and presentation skills, and gain insight into the role of museums in archaeology and public education. They will also be acquainted with primary sources of political history up to 700 CE., enhancing their understanding of early political developments. **Course Objectives** Dissertation Students to conduct original research in a specific area of archaeology, developing new insights and Conservation of Cultural contributions to the field, while enhancing their Property OR Cultural analytical, critical thinking, and writing skills Heritage Management through independent study. This enables students Ancient Indian History-II to apply theoretical knowledge and research OR Ethno-archaeology methodologies to address Terracotta Art archaeological challenges. To provide students with a comprehensive understanding of conserving and managing cultural heritage sites and artifacts, including principles, techniques, ethical considerations, and Fourth Semester legal obligations. **Learning Outcomes** Upon completing the course, students will demonstrate the capability to conduct original research in specific areas of archaeology and cultural heritage, contributing new insights to the field and honing analytical, critical, and writing skills through independent study. This will enable them to effectively apply theoretical knowledge and research methodologies to address real-world archaeological challenges. Additionally, students will acquire a comprehensive understanding of the principles, techniques, ethical considerations, and legal obligations associated with conserving and managing cultural heritage sites and artifacts. Equipped with this knowledge, they will be able to assess, plan, and implement conservation and management strategies, ensuring the

findings.

real-world

preservation of cultural heritage for future generations.

First Semester	Course Code	Course Title	Paper Category	Credits
	ARC17101CR	Introduction to Archaeology	Core	4
	ARC17102CR	World Archaeology: An Overview	Core	4
	ARC17103CR	Prehistory of South Asia	Core	4
	ARC17104DCE	Prehistoric Archaeology of Kashmir	Discipline Centric Elective	4
	ARC17105DCE	Term End Practical Explorations/Material culture/Landscape/Site/ Settlement	Discipline Centric Elective	4
	ARC17106GE	Archaeology – An Introduction	Generic Elective	2
Second Semester	ARC17201CR	Field Archaeology (Theory)	Core	4
	ARC17202CR	Field Archaeology (Practical)	Core	4
	ARC17203CR	Proto-history of South Asia	Core	4
	ARC17204CR	Archaeological Sources	Core	4
	ARC17205DCE	Science in Archaeology	<b>Discipline Centric Elective</b>	4
	ARC17206DCE	Archaeology of Kashmir (Ancient to Medieval)	Discipline Centric Elective	4
	ARC17207GE	Science and Archaeology	Generic Elective	2
Third semester	ARC17301CR	Art, Architecture and Iconography	Core	4
	ARC17302CR	Epigraphy and Numismatics	Core	4
	ARC17303CR	Art and Architecture of Jammu And Kashmir	Core	4
	ARC17304CR	Research Methodology	Core	4
	ARC17305DCE	Museum Management	<b>Discipline Centric Elective</b>	4
	ARC17306DCE	Ancient Indian History-I OR Environmental Anghaeology Discipline Centric Elective		4
	ARC17307DCE	Environmental Archaeology		
	ARC17308GE	Archaeological Sites of Kashmir	Generic Elective	2
Fourth Semester	ARC17401CR	Dissertation	Core	12
	ARC17402DCE	Conservation of Cultural Property OR	Discipline Centric Elective	4
	ARC17403DCE	Cultural Heritage Management		
	ARC17404DCE ARC17405DCE	Ancient Indian History-II OR Ethno-archaeology	Discipline Centric Elective	4
	ARC17406GE	Terracotta Art	Generic Elective	2

#### **Semester-1**

#### Introduction to Archaeology Course code: ARC17101CR

Credits: (4) (L + T) Maximum Marks: 100 Minimum Marks: 40

#### **Course Description:**

This course offers a foundational introduction to archaeology, covering its definitions, aims, and scope, as well as the methods used to study the past. Students will explore key archaeological findings and their significance, while also understanding the distinctions and connections between archaeology, history, and anthropology. The course emphasizes the role of both social and natural sciences in archaeology and provides an overview of various branches of archaeology, from prehistoric to medieval periods. Additionally, students will learn about the development of archaeology in Europe, America, and India. The course also covers the nature of the archaeological record, including the identification of archaeological sites, and the processes of exploration and excavation. Finally, students will gain an understanding of cultural sequences and the methods used to date past events, including both relative and absolute dating techniques.

#### **Expected Outcomes:**

- 1. Understand archaeology and explain its scope, including the appropriate and inappropriate uses of archaeological research.
- 2. Understand and apply key archaeological methods, recognizing the importance of significant archaeological findings.
- 3. Differentiate between archaeology, history, and anthropology, and appreciate the interdisciplinary nature of archaeology, particularly its connections to social and natural sciences.
- 4. Describe the development of archaeology in different regions, focusing on Europe, America, and India.
- 5. Identify and explain the nature of archaeological sites, and distinguish between artifacts and eco-facts.
- 6. Understand cultural sequences from prehistory to history and basic relative and absolute dating methods to study the past.

#### Unit - 1: Definition, Aims and Scope of Archaeology

- a. Definition and scope of archaeology; use and misuse of Archaeology
- b. Archaeological Methods
- c. Key Archaeological Findings and their significance
- d. Overlap and Distinction between Archaeology, History and Anthropology,
- e. Role of Social and Natural Sciences in Archaeology
- f. Branches of Archaeology: Prehistoric to Medieval Archaeology

#### **Unit − 2: Development of Archaeology**

- a. In Europe and America
- b. In India

#### Unit − 3: Nature of the archaeological record

- a. Definition of archaeological sites
- b. Exploration and excavation
- c. Artefacts and eco-facts

#### **Unit** − **4**: Cultural sequence and dating the past

- a. Prehistory, Protohistory and History
- b. Introduction to relative dating methods
- c. Introduction to absolute dating methods

#### **Recommended Readings:**

Bell, J. 1994. *Reconstructing Prehistory: Scientific Method in Archaeology*, Philadelphia: Temple University.

Binford, L.R. 1983. *In Pursuit of the Past: Decoding the Archaeological Record.* London: Thames and Hudson.

Binford, L. R. 1973. An Archaeological Perspective. New York: Seminar Press.

Binford, L.R. 1983. Working at Archaeology. New York: Academic Press.

Binford, L.R. 1989. Debating Archaeology. New York: Academic Press.

Chakrabarti, D.K. 1988. *A History of Indian Archaeology: From the Beginning to 1947*. New Delhi: Munshiram Manoharlal.

Childe, V.G. 1956. *Piecing Together the Past: The Interpretation of Archaeological Data*. London: Routledge and Kegan Paul.

Clark, J.G.D. 1939. Archaeology and Society. London: Methuen.

Clarke, J.G.D. 1982. *The Identity of Man*. London: Methuen.

Clarke, D.L. 1963. "Archaeology: the Loss of Innocence." *Antiquity* 47:6-8.

Daniel, Glyn E. 1975. 150 years of Archaeology. London: Duckworth.

Daniel, Glyn, E. 1981. A Short History of Archaeology. London: Thames and Hudson.

Dunnell, R.C. 1971. Systematics in Prehistory. New York: Free Press.

Embree, Lester 1987. "Archaeology: the Most Basic Science of All" Antiquity 61:75-78.

Fagan, B. 1988. *In the Beginning: An Introduction to Archaeology*. Glenview (Illinois): Scott, Foresman and Company.

Hayden, Brian 1993. *Archaeology: The Science of Once and Future Things*. New York: W.H. Freeman and Company.

Hodder, I. 1986. *Reading the Past: Current Approaches to Interpretation in Archaeology*. 2nd ed. Cambridge: Cambridge University Press.

Hodder, Ian. 1999. *The Archaeological Process: An Introduction*. Oxford: Blackwell Publishers.

Hole, F. and R. F. Heizer 1973. *Introduction to Prehistoric Archaeology*. New York: Holt, Reinhart and Winston.

Knudson, S.J. 1978. *Culture in Retrospect*. Chicago: Rand McNally.

Kuznar, L.A. 1997. *Reclaiming Scientific Anthropology*. Walnut Creek, California: Altamira Press.

Paddayya, K. 1979. "Palaeoethnography *vis-avis* the Stone Age Cultures of India: Some Methodological considerations." *Bulletin of the Deccan College Post-Graduate & Research Institute* 38:63-90.

Renfrew, C. and P. Bahn 1991. *Archaeology: Theories and Methods and Practice*. London: Thames and Hudson.

Spaulding, A.C. 1960. "The Dimensions of Archaeology" in N. Hammond (ed.) *Readings in Archaeology and Physical Anthropology*.

Trigger, Bruce. 1989. A History of Archaeological Thought. Cambridge: Cambridge University Press.

## World Archaeology: An Overview Course code: ARC17102CR

Credits: (4) (L + T) Maximum Marks: 100 Minimum Marks: 40

#### **Course Description:**

This course provides a broad overview of world archaeology, focusing on the major developments in human evolution, prehistoric cultures, and early farming practices. Students will begin by studying the global climate history during the Quaternary period and its impact on human evolution and distribution. The course will cover the antiquity and geographical spread of human fossil records, with a special focus on significant sites like Olduvai Gorge. It will then explore the Paleolithic cultures of Africa, Europe, and Asia, examining the Lower, Middle, and Upper Paleolithic periods. The course also includes a study of prehistoric art and Mesolithic culture, focusing on their geographical distribution, environmental context, and ecological significance. Finally, students will investigate the emergence of farming and the development of Neolithic cultures in West and East Asia, as well as the early domestication processes in other parts of the world, including China, Europe, Africa, and the Americas.

#### **Expected Outcomes:**

- 1. Understand the global climate history during the Quaternary period and its role in human evolution and distribution.
- 2. Analyze human antiquity through fossil records and explain the geographical spread of early human species, with insights into key sites like Olduvai Gorge.
- 3. Identify and compare Lower, Middle, and Upper Paleolithic cultures across Africa, Europe, and Asia.
- 4. Understand the distribution and significance of prehistoric art, as well as the environmental and ecological aspects of Mesolithic cultures.
- 5. Explain the emergence of farming and the development of Neolithic cultures in different regions, and discuss early domestication practices in China, Europe, Africa, and the Americas.

#### **Unit – 1: Climate, Human Evolution and Distribution**

- a. Global Climate history during the quaternary period: an introduction
- b. Human antiquity and fossil records
- c. Geographical distribution of human fossil record
- d. Contributions of Olduvai Gorge.

#### **Unit – 2: World Paleolithic Cultures**

- a. Lower Paleolithic Cultures in Africa, Europe and Asia
- b. Middle Paleolithic Cultures in Africa, Europe and Asia
- c. Upper Paleolithic Cultures in Africa, Europe and Asia

#### **Unit – 3: Prehistoric Art and Mesolithic Culture**

- a. Geographical distribution of Prehistoric Art
- b. Art Manifestations
- c. Mesolithic Culture, Environment, ecology and distribution

#### Unit – 4: Neolithic culture and early farming

- a. Emergence of farming and development of Neolithic culture in West and East Asia
- b. Early domestication in other parts of the world; China, Europe, Africa, North and Meso-American centres.

#### **Recommended Reading:**

Butzer, K. W and G.L. Isaac (Eds.), 1975. After the Australopithecine, The Hague

Clark, J. G. D,1977. World Prehistory: New Perspective, Cambridge

Daniel, G. J. Hundred years of Archaeology

Isaac, G. L, 1971. The Diet of Early Man. World Archaeology, 2:278 -229

Klein, R. G, 1999. *The Human Career, Human Biological and Cultural Origins*, The University of Chicago Press, Chicago

Lee, R. B. and DeVore, I (Eds.), 1968. Man the Hunter Chicago: Aldine.

Leori-Gourhan, A. 1982. *The Dawan Of European Art: An Introduction to Palaeolithic Cave Painting*, Cambridge University Press.

Lewis Barry, Robert Jurmain and Lynn Kilgore, 2010. *Understanding physical Anthropology and Archaeology*, Wadsworth Cengage Learning.

Paddayya, K, 1990. New Archaeology and Aftermath. Ravish publishers, Pune.

Paddayya, K, 1994. C. J. Thomsen and the Three Age System, *Man and Environment* VIII (2): 129-140.

Philipson, D.W, 1988. African Archaeology, Cambridge University Press, Cambridge

Price Douglas T. & Gary M. Feinman, 2008. Images of the Past. McGraw Hill, Boston

Prucel, R. W., 1991. *Processual and Post-Processual Archaeologies Multiple Ways of Knowing the Past*, CAI, Southern Illinois University at Carbondale Occasional Paper No.10

Roe, Derek, The Palaeolithic. In Peter Hammond (Ed.) *Physical Anthropology and Archaeology* 

Scarre Chris (ed.), 2005. The Human Past: World Prehistory and the Development of Human Societies, Thames and Hudson Ltd. London

Smith, Fumiko Ikava . Early Palaeolithic in South East Asia.

Trigger, B.G 1989. A History of Archaeological Thought

Wenke, R. J. 1987. Patterns in Prehistory

Wu Rukang and Olsen, J.W. (eds.),1985. *Palaeoanthropology and Palaeolithic Archaeology in Peoples Republic of China*. Orlando.Fl. Academic Press

#### Prehistory of South Asia Course code: ARC17103CR

Credits: (4) (L + T) Maximum Marks: 100 Minimum Marks: 40

#### **Course Description:**

This course offers a comprehensive overview of the prehistory of South Asia, covering the development of early human cultures and their adaptation to environmental changes. Students will start by exploring the basic concepts of prehistory, including its subject matter, scope, and aims, along with an introduction to prehistoric cultural sequences. The course will examine the Quaternary period, focusing on the climatic changes and their impact on prehistoric life. It will then delve into the major prehistoric cultures of South Asia, including the Lower, Middle, and Upper Paleolithic periods, as well as the Mesolithic culture. Additionally, the course covers the study of rock art, focusing on its geographic distribution, artistic forms, and important sites. Finally, students will explore the origins of farming and the development of Neolithic culture, analyzing the Neolithic Revolution and its consequences, as well as the spread of agriculture and domestication across Northern, Central, and Southern regions of South Asia.

#### **Expected Outcomes:**

- 1. Understand the subject matter, scope, and aims of prehistory, and describe the prehistoric cultural sequences in South Asia.
- 2. Analyze the Quaternary period and explain the nature and timing of climatic changes and their influence on early human cultures in the region.
- 3. Identify and describe the key features of Lower, Middle, and Upper Paleolithic cultures, as well as Mesolithic culture in South Asia.
- 4. Recognize the geographic distribution of rock art in South Asia, understand its various forms, and identify significant sites.
- 5. Explain the origins of farming and Neolithic culture in South Asia, including the debate surrounding the Neolithic Revolution, and the spread of agriculture and domestication in Northern, Central, and Southern regions.

#### **Unit – 1: Prehistory: An Introduction**

- a. Prehistory; Subject matter; Scope and Aims
- b. Introduction to prehistoric cultural sequences
- c. The Quaternary period: nature and timing of climatic changes, major subdivisions

#### **Unit – 2: Prehistoric Cultures**

- a. Lower Paleolithic
- b. Middle Paleolithic
- c. Upper Paleolithic
- d. Mesolithic Culture

#### Unit – 3: Rock Art

a. Geographic distribution; Art manifestations; important sites.

#### Unit – 4: Origins of farming and Neolithic Culture

- a. Neolithic Revolution: debate. Causes and consequences of farming.
- b. Origins of agriculture and domestication of animals
- c. Northern Neolithic cultures of (Afghanistan, Pakistan, India)
- d. Neolithic cultures of Central India
- e. Southern Neolithic Culture

#### **Recommended Readings:**

Allchin, B. and Allchin R. 1993a [1968]. *The Birth of Indian Civilization: India and Pakistan before 500 BC*, New Delhi, Penguin Books.

Allchin, B. and Allchin R. 1993b [1982]. *The Rise of Civilization in India and Pakistan*, Cambridge University Press, London.

Allchin, B. and Allchin R. 1997. *Origins of a Civilization*, Penguin books India, New Delhi. Agrawal, D.P. 1981. Multidisciplinary Quaternary Investigations in Kashmir, *Australian Archaeology*, vol. 12, 103-105.

Agrawal, D.P., Dodia, R., Kotlia, B.S., Razdan, H., and Sahni, A. 1989. The Plio-Pleistocene geologic and climatic record of the Kashmir valley, India: A review and new data, *Palaeogeography, Palaeoclimatology, Palaeoecology*, vol. 4 (3-4), 267-286.

Agrawal, D.P. 1992. Man and Environment in India Through Ages. New Delhi: Books and Books.

Agrawal, D.P. and J.Kharakwal. 2002. South Asian Prehistory. New Delhi: Aryan Books.

Allchin, B. and F.R. Allchin 1982. *Rise of Civilizations in India and Pakistan*. Cambridge: Cambridge University Press.

Allchin, B. and F.R. Allchin. 1977. Origins of Civilization in India. New Delhi: Penguin.

Bordes, F. 1968. The Old Stone Age. London: Weidenld and Nicolson.

Chakravarty, K.K. (ed.) 1984. Rock art of India. New Delhi: Arnold-Heinemann.

Clark, G. 1970. The Study of Prehistory. Berkeley: University of California

Deraniyagala, S. 1992. *Prehistory of Sri Lanka: an Ecological Perspective*. Colombo: Archaeological Survey of Sri Lanka.

Debenath, A. and H. Dibble. 1994. *Handbook of Palaeolithic Typology*. Philadelphia:University of Pennsylvania.

Foley, R. 1987. Another Unique Species. New York: Longman.

Foote, R.B. 1916. *The Foote Collection of Indian Prehistoric and Protohistoric Antiquities: Notes on Their Ages and Distribution.* Madras: Government Museum.

Gaillard, Claire and Sheila Mishra. 2002. The Lower Palaeolithic in South Asia, in F. Semah, C. Falguieries, D. Grimaur-Herve and A.M. Semah (Eds.) *Origins of Settlement and Chronology of the Palaeolithic Cultures in Southeast Asia*, pp.73-92.

Gamble, C. 1993. Timewalkers: The Prehistory of Global Colonization. Stroud: Alan Sutton.

Ghosh, A. 1990. *Encyclopaedia of Indian Archaeology* (2 vols.) New Delhi: Munshiram Manoharlal.

Goudie, A. 1977. Environmental Change. Oxford: Clarendon Press.

Inizan, M.L., H.Roche and J. Tixier. 1992. Technology of Knapped Stone. Meudon: CREP.

Mathpal, Y. 1984. Prehistoric Rock Paintings of Bhimbetka, Central India. New Delhi: Abhinav.

Mishra, S. 1992. "The Age of the Acheulian in India." *Current Anthropology* 33:325-328.

Misra, V.N. and Peter Bellwood (eds.) 1988. *Recent Advances in Indo-Pacific Prehistory*. New Delhi: Oxford and India Book House.

Misra, V.N. 1990. "Stone Age India: An Ecological Perspective." *Man and Environment 15* (1): 17-64.

Misra, V.N. 1987. "Middle Pleistocene Adaptions in India." in Soffer O. (ed.) *The Pleistocene Old World: regional Perspectives.* pp 99-120 Plenum Press: New York

Murty, M. L.K. 1979. "Recent Research on the Upper Palaeolithic Phase in India." *Journal of Field Archaeology* 6:303-20.

Neumayer, Erwin. 1993. Lines on Stone: The Prehistoric Rock Art of India. New Delhi: Manohar

Paddayya, K. 1982. Acheulian Culture of Hunsgi Valley, (Pennisular India): A Settlement System Approach. Deccan College: Pune.

Paddayya, K. 1984. "Stone Age India" in *Neue Forscheungen zur Altsteinseit*. (ed) H. Muller-Karpe. Munich: C. H. Beck Verlag.

Paddayya, K. (ed.). 2002. Recent Studies in Indian Archaeology. New Delhi: ICHR and Munshiram.

Pappu, R.S. and S.G. Deo. 1994. *Man-Land Relationship during the Palaeolithic Times in the Kaladgi Basin, Karnataka*. Pune: Deccan College.

Pappu, R.S. 2000. The Acheulian Culture of Peninsular India. New Delhi: D.K. Printworld.

Petraglia, M.D. and R. Korisettar (ed.). 1998. *Early Human Behavior in Global Context: The Rise and Diversity of the Lower Palaeolithic Record*. London: Routledge.

Sankalia, H.D. 1974. *Prehistory and Protohistory of India and Pakistan*. Pune: Deccan College.

Sankalia, H.D. 1974. Stone Age Tools: Their Names and Probable Functions. Pune: Deccan College.

Settar, S. and R. Korisettar (ed.). 2002. *Indian Archaeology in Retrospect*, Volume 1. Delhi: ICHR and Manohar.

Sharma, G.R. and J. D. Clark 1983. *Palaeoenvironments and Prehistory in the Middle Son Valley*. Allahabad: Abhinav Prakashan

Shali, S.L. 1993. *Kashmir: History and Archaeology Through the Ages*, New Delhi, OM Publications.

Shali, S.L. 2001. Settlement Pattern in Relation to Climatic changes in Kashmir, New Delhi, OM Publications.

Yatoo, M.A., 2013. New Evidence for Upper Palaeolithic Material Culture from North West Kashmir, *Pakistan Heritage*, Volume V, pp. 1-10, Hazara University Mansehra Pakistan. Sankalia, H.D. 1971. New Evidence for Early Man in Kashmir, Current Anthropology 12 (4 / 5), 558-562.

#### Prehistoric Archaeology of Kashmir Course code: ARC17104DCE

Credits: (4) (L+T+P) Maximum Marks: 100 Minimum Marks: 40 Course Description:

This course focuses on the prehistoric archaeology of Kashmir, providing an in-depth study of the region's early human cultures and environmental history. Students will begin by exploring the geochronology, paleo-environment, and landscape of Kashmir, which set the stage for understanding the region's prehistoric developments. The course then covers the Paleolithic cultures of Kashmir, examining the Lower, Middle, and Upper Paleolithic periods. Moving forward, the course delves into the Neolithic culture of Kashmir, discussing its geographical distribution, important sites, phases, features, and chronology, including the transition to the Megalithic culture. Finally, students will study the social, economic, and cultural life during the Neolithic period, as well as the connections between Kashmir's Neolithic culture and other contemporary cultures and civilizations.

#### **Expected Outcomes:**

- 1. Understand the geo-chronology, paleo-environment, and landscape of Kashmir and their significance in prehistoric archaeology.
- 2. Identify and describe the characteristics of Lower, Middle, and Upper Paleolithic cultures in Kashmir.
- 3. Analyze the Neolithic culture of Kashmir, including its geographical distribution, key sites, phases, and features, as well as its chronology and transition to Megalithic culture.
- 4. Examine the social, economic, and cultural conditions of life during the Neolithic period in Kashmir.
- 5. Recognize the affinities between Kashmir's Neolithic culture and other contemporary cultures and civilizations.

#### **Unit – 1: Introduction**

- a. Geo-Chronology
- b. Paleo-environment
- c. Landscape

#### **Unit – 2: Paleolithic Cultures**

- a. Lower Paleolithic
- b. Middle Paleolithic
- c. Upper Paleolithic

#### **Unit – 3: Neolithic Culture**

- a. Geographical Distribution
- b. Important sites
- c. Neolithic Culture: phases and features; continuity and change
- d. Chronology
- e. Megalithic culture

#### Unit – 4: Life ways in Neolithic period

- a. Social, economic and cultural conditions.
- b. Affinities with other cultures and civilizations.

#### **Recommended Readings:**

- Agrawal, D.P. 1982. Archaeology of India. Copenhagen: Scandinavian Institute of Asian Studies.
- Agrawal, D.P. 2000. Ancient Metal Technology and Archaeology of South Asia (A Pan-Asian Perspective), Aryan Books International, New Delhi
- Agrawal, D.P. and D.K. Chakrabarti (eds.). 1979. *Essays in Indian Protohistory*. New Delhi: D.K Publishers.
- Allchin, F.R. and B. Allchin 1993. *The Birth of Civilization in India*. revised ed. New Delhi: Penguin Books.
- Allchin, Bridget and Raymond Allchin 1982. *Rise of Civilization in India and Pakistan*. Cambridge: Cambridge University Press.
- Agrawal, D.P. 1992. Man and environment in India through ages: an interdisciplinary study of the Indian quaternary with focus on north-west, New Delhi, Books & Books.
- Bandey A.A. 1997. Palaeolithic Habitational Site at Manasbal, Kashmir: Recent Archaeological Investigations, *Journal of Central Asian Studies*, University of Kashmir, 8 (1), 12-18.
- Bandey A.A. 2003a. Neolithic settlement found at Bomai, Kashmir, India, *Circle of Inner Asian Art*, Issue 18.
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- Bandey A.A. 2009. Prehistoric *Kashmir Archaeological History of Palaeolithic & Neolithic Cultures*, New Delhi, Dilpreet Publishing House.
- De Terra, H. 1942. The Megaliths of Bursahom, Kashmir, a New Prehistoric Civilization from
- India, American Philosophical society 85 (5), 483-504.
- De Terra, H. and Paterson, T.T. 2003 [1939]. The Ice Age in the Indian Subcontinent and Associated Human Cultures: With Special Reference to Jammu, Kashmir, Ladakh, Sind, Liddar & Central and Peninsular India, New Delhi, Aryan Books.
- Joshi, R.V., Rajguru, S.N., Pappu, R.S., and Bopardiker, B.P. 1974. Quaternary Glaciations and Palaeolithic Sites in the Lidder Valley, J&K, *World Archaeology*, *369-79*.
- Mani, B.R. 2000. Excavations at Kanispur: 1998-99 (District Baramulla Kashmir). *Journal of Interdisciplinary Studies in History and Archaeology* 10, 1-21.
- Mani, B.R. 2008. Kashmir Neolithic and Early Harappan: A Linkage, *Pragdhara* 18, 229-247.
- Misra, V.N. 2001. Prehistoric Human Colonization of India, *Journal of Biosciences* 26 (4), 491-531.

- Pant, R.K., Gaillard, C., Nautiyal, V., Gaur, G.S., and Shali, S.L. 1982. Some new Lithic and Ceramic Industries from Kashmir, *Man and Environment* vol. VI, 37-40.
- Paddayya, K. 2008. Palaeolithic Cultures. In Deborah, M. Pearsall (ed.), *Encyclopaedia of Archaeology*: 768-791, Elsevier.
- Pande, B.M. 1969. Neolithic Hunting Scene on a Stone Slab from Burzahom, Kashmir, *Asian Perspectives*, XIV 1971, 134-138.
- Pande, B.M. 1970[1969]. The Neolithic in Kashmir new discoveries, *The Anthropologist*, Vol. XVII, No. 1-2, 25-41.
- Pant, R.K. 1979. Microwear Studies on Burzahom Neolithic Tools, *Man and Environment* vol. 3, 11-17.
- Spate M, Zhang G, Yatoo MA, Betts A, 2017. New evidence for early 4<sup>th</sup> Millennium BP agriculture in the Western Himalayas: Qasim Bagh, Kashmir, *Journal of Archaeological Science: Reports*, 2017 (11), 568-577.
- Saar, S.S. 1992. Archaeology: Ancestors of Kashmir, New Delhi, Lalit Art Publishers.
- Shah, M.A., 2012. Discovery of Rock Art in Northern Kashmir, A Prelimnary Investigation, in *Proceedings of The National Seminar on River Valley Civilzation of Chatisgarh and New Researches in Indian Archaeology*, 329-336.
- Shali, S.L. 1993. *Kashmir: History and Archaeology Through the Ages*, New Delhi, OM Publications.
- Shali, S.L. 2001. *Settlement Pattern in Relation to Climatic changes in Kashmir*, New Delhi, OM Publications.
- Sankalia, H.D. 1971. New Evidence for Early Man in Kashmir, *Current Anthropology* 12 (4 / 5), 558-562.
- Sankalia, H.D. 1974. *Prehistory and Protohistory of India and Pakistan*, Poona, Deccan College post graduate and research institute.
- Saar, S.S. 1992. Archaeology: Ancestors of Kashmir, New Delhi, Lalit Art Publishers.
- Kaw, R.N. 1979. The Neolithic culture of Kashmir. In D.P. Agrawal and D.K. Chakrabarti (eds.) Essays in Indian
- Yatoo, M.A., 2012. Characterising material culture to determine settlement patterns in north west Kashmir, online resource material at British Library, UK.
- Yatoo, MA, & Bandey, AA, 2014. Relations of Neolithic Kashmir with South and Central Asia: Comparative Analysis of Material Culture from new sites in Kashmir, *Journal of Central Asian Studies*, Vol. 21 (XXI), 37-46.
- Yatoo, M.A., 2013. New Evidence for Upper Palaeolithic Material Culture from North West Kashmir, *Pakistan Heritage*, Volume V, pp. 1-10, Hazara University Mansehra Pakistan. Sankalia, H.D. 1971. New Evidence for Early Man in Kashmir, Current Anthropology 12 (4 / 5), 558-562.

# Explorations/Material culture/Landscape/Site Course Code: ARC17105DCE Term End Practical

Credits: (4) (L+T+P) Maximum Marks: 100 Minimum Marks: 40

#### **Course Description:**

This practical course is designed to provide hands-on experience in archaeological explorations, material culture analysis, and landscape/site studies. Throughout the semester, students will participate in field demonstrations based on lectures from three core and one discipline-centric module. The practical module culminates in a short written assignment where students will apply their learning to a specific topic related to explorations, material culture, landscape, or site/settlement studies. The assignment will require students to clearly define the aims, gather and present relevant data, and draw informed conclusions. The assignment must be submitted before the start of Semester II, with specific submission dates to be provided separately.

#### **Expected Outcomes:**

- 1. Apply theoretical knowledge from core and discipline-centric modules to practical fieldwork in archaeology.
- 2. Define clear aims and objectives for archaeological assignments related to explorations, material culture, and landscape/site studies.
- 3. Collect, analyze, and present archaeological data in a coherent and structured manner.
- 4. Draw informed conclusions based on field data and articulate their findings in a written assignment.
- 5. Develop a deeper understanding of the practical aspects of archaeological research and its application to real-world scenarios. The students will be given practical demonstrations in the field based on taught lectures during three core and one discipline centric modules in the semester-I. In this practical module a student will be expected to write a short assignment assigned to him/her based on explorations, Material culture, Landscape, Site, Settlements and so forth taught during the Semester-I. The assignment should contain but will not be limited to:
  - a) Aims of proposed assignment;
  - b) Nature of data to be collected;
  - c) Presentation of data;
  - d) Conclusions.
  - 2. The assignment shall be submitted to the Centre within the stipulated time before the commencement of Semester II, the dates will be communicated to the students separately.

#### Archaeology – An Introduction Course code: ARC17106GE Generic Elective

Credits: (2) (L+T) Maximum Marks: 50 Minimum Marks: 20

#### **Course Description:**

This introductory course in archaeology provides a comprehensive overview of the field, including its definition, aims, and scope. Students will explore the fundamental concepts of archaeology, including its various methods and the significance of key archaeological findings. The course will also highlight the role of social and natural sciences in archaeology and offer an overview of its branches, from prehistoric to medieval archaeology. Additionally, students will examine the development of archaeology in Europe, America, and India, gaining insight into how the field has evolved across different regions.

#### **Expected Outcomes:**

By the end of this course, students will be able to:

- 1. Define archaeology and explain its scope, including both its proper uses and potential misuses.
- 2. Understand and apply key archaeological methods and recognize the importance of significant archaeological discoveries.
- 3. Appreciate the role of social and natural sciences in enhancing archaeological research.
- 4. Identify and describe the various branches of archaeology, from prehistoric to medieval periods.
- 5. Examine the development of archaeology in Europe, America, and India, and understand its evolution in these regions.

#### Unit-I: Archaeology, its Definition, Aims and Scope

- a. Definition and scope of archaeology; use and misuse of Archaeology
- b. Archaeological Methods
- c. Key Archaeological Findings and their significance
- d. Role of Social and Natural Sciences in Archaeology
- e. Branches of Archaeology: Prehistoric to Medieval Archaeology

#### **Unit – 2 Development of Archaeology**

- a. In Europe and America
- b. In India

#### **Second Semester**

# Field Archaeology – Theory Course code: ARC17201CR

Credits: (4) (L+T+P) Maximum Marks: 100 Minimum Marks: 40

#### **Course Description:**

This course provides a detailed introduction to field archaeology, covering the complete process of archaeological investigation from site discovery to excavation and analysis. Students will learn about various methods for discovering archaeological sites, including both conventional approaches such as literary sources and field surveys, and scientific techniques like environmental surveys, satellite imagery, and underwater archaeology. The course will also cover different methods of data collection, including random and systematic sampling, site catchment analysis, and the reconstruction of settlement patterns. Students will gain practical knowledge of excavation methods for different types of archaeological sites, such as Stone Age sites, settlements, burial sites, and fortifications. Additionally, the course will focus on recording and analysis techniques, including stratigraphy, archaeological photography, drawing methods, and the classification and analysis of artifacts and ecofacts for reconstructing socio-economic organizations.

#### **Expected Outcomes:**

- 1. Identify and apply both conventional and scientific methods for discovering archaeological sites, including the use of literary sources, surveys, satellite imagery, and geophysical techniques.
- 2. Employ various data collection methods, including indiscriminate collection, random and systematic sampling, and site catchment analysis.
- 3. Understand and apply different excavation methods, including vertical, horizontal, and quadrant excavation techniques, and handle various types of sites such as Stone Age, settlement, burial, and fortifications.
- 4. Utilize recording methods in archaeology, such as stratigraphy, three-dimensional recording, and contextual approaches.
- 5. Apply techniques for archaeological photography, photogrammetry, and drawing to document and analyze artifacts and eco-facts.
- 6. Classify and analyze artifacts and eco-facts, and synthesize these analyses to reconstruct socio-economic organizations.

#### **Unit – 1: Methods of discovering Archaeological sites**

- a. Conventional methods- use of literary sources and folk traditions, village to village survey, field walking, survey along the water bodies, etc.
- b. Scientific methods- identification of archaeologically potent area by undertaking environmental and ecological survey, use of maps, satellite imagery and aerial photographs, Underwater archaeology and use of various geophysical methods.

#### **Unit-2: Methods of Data Collection**

- a. Indiscriminate collection of data
- b. Random sampling
- c. Systematic sampling
- d. Site catchment analysis and ethnographic survey
- e. Reconstruction of regional settlement pattern and system

#### **Unit - 3: Excavation Methods in Archaeology**

- a. Vertical, Horizontal and Quadrant excavation methods.
- **b.** Excavation of Stone Age Site, Excavation of Settlement Sites, and Excavation of Burial sites, Excavation of Fortifications and large features.

#### **Unit-4: Recording Methods and Analysis in Archaeology**

- a. Stratigraphy and three dimensional recording,
- b. Contextual approach
- c. Techniques of Archaeological Photography and Photogrammetry,
- d. Methods of Drawings: Plan, Section, Pottery, Tools
- e. Classification and analyses of Artefacts
- f. Classification and analyses of Eco-facts
- g. Synthesis of analyses of artefacts and eco-facts for the reconstruction of Socio- economic organizations

#### **Recommended Readings:**

Aitken, M.J. 1990. Science-based Dating in Archaeology. London: Longmans.

Atkinson, R.J.C. 1953. Field Archaeology. London: Methuen and Co.

Barker, P. 1982. Techniques of Archaeological Excavation. London: Batsford.

Binford, L.R. 1964. A Consideration of Hypothetical Research Design, *American Antiquity* 29:425-441.

Crawford, O.G.S. 1953. Archaeology in the Field. London: Phoenix.

Dancey, W.S. 1985. Archaeological Field Methods: An Introduction. New Delhi: Surject Publications.

Harris, E.C. 1979. Principles of Archaeological Stratigraphy. London: Academic Press.

Hester, T., Heizer, R.E. and J.A. Graham 1975. *Field Methods in Archaeology*. Palo Alto (California): Mayfield Press.

Redman, C. 1974. *Multi-Stage Fieldwork and Analytical Techniques, American Antiquity* 38: 611-79.

Tite, M.S. 1972. *Methods of Physical Examination in Archaeology*. London: Seminar.

Wheeler, R.E.M. 1954. Archaeology from the Earth. Harmondsworth: Penguin Books.

Atkinsen R.J. (1953) Field Archaeology. London: Methuen.

Binford L.R.(1972) An archaeological Perspective. New York: Seminar Press.

Brothwell D. & Higgs E.(Ed.) (1963) Science in Archaeology. London: Thames and Hudson.

Childe V.G.(1956) A Short Introduction to Archaeology. London: Fredrick Muller Ltd.

Childe V.G.(1956) *Piecing together the Past: The Interpretation of Archaeological Data.*London: Routledge & Kegan Paul Ltd.

Clarke D.L. (1968) *Analytical Archaeology*. London: Methuen.

Cleator P.E.(1957) The Past in Pieces. London: George Allen & Unwin Ltd.

Cronyn J.M. (1990) The Elements of Archaeological conservation. London: Routledge.

Daniel G. (1975) Hundred and Fifty Years Of Archaeology. London: Dockworth.

Flower P.J. (1977) *Approaches to Archaeology*. London.

Gosh A. (Ed.) (1953) Ancient India IX. Delhi: ASI.

Heizer F.R. (Ed.) (1959) A Guide to Archaeological Field Methods. California.

Hodder I. (1991) Reading The Past: Current Approaches to Interpretation in Archaeology.

- Cambridge: Cambridge University Press.
- Kempton W. (1981) *The Folk Classification of Ceramics: A Study of Cognitive Prototypes*. London: Academic Press.
- Leute U. (1987) Archaeometry: An Introduction to Physical Methods in Archaeology and the History of Art. New York: VCH
- Miller D. (1985) *Artifacts as Categories: A Study of Ceramic Variability in Central India*. Cambridge: Cambridge University Press.
- Plenderleith H. Conservation of Antiquities and works of art. London: Oxford University Press.
- Roy S. (1961) The story of Indian Archaeology (1784-1947). New Delhi.
- Trigger B.G. (1968) *Beyond History: The Methods of Prehistory*. London: Holt, Rinehart & Winston.
- Trigger B.G. (1989) Towards *A History of Archaeological Thought*. Cambridge: Cambridge University Press.
- Wheeler R.E.M. (1954) Archaeology from Earth. Oxford: Clarendon Press.

## Field Archaeology – Practical Course code: ARC17202CR

Credits: (4) (L+T+P) Maximum Marks: 100 Minimum Marks: 40

#### **Course Description:**

This practical course is designed to provide hands-on experience in field archaeology. It covers the key aspects of archaeological fieldwork, including explorations, data collection, excavations, and data recording. Students will engage in practical activities that help them develop the skills necessary for conducting archaeological research and documentation.

#### **Expected Outcomes:**

Upon completion, students will be able to:

- 1. Conduct archaeological explorations effectively, identifying and surveying potential sites.
- 2. Collect and manage field data systematically.
- 3. Take part in excavations and learn different methods/techniques as well as document findings accurately.
- 4. Record and analyze archaeological data using appropriate methods and tools.
- 5. Submit a project report at the end of the fieldwork.

**Unit-1**: Explorations

**Unit-2:** Data Collections

**Unit-3:** Excavations

Unit-4: Data Recording

#### **Recommended Readings:**

Aitken, M.J. 1990. Science-based Dating in Archaeology. London: Longmans.

Atkinson, R.J.C. 1953. Field Archaeology. London: Methuen and Co.

Barker, P. 1982. Techniques of Archaeological Excavation. London: Batsford.

Binford, L.R. 1964. A Consideration of Hypothetical Research Design, *American Antiquity* 29:425-441.

Crawford, O.G.S. 1953. Archaeology in the Field. London: Phoenix.

Dancey, W.S. 1985. Archaeological Field Methods: An Introduction. New Delhi: Surject Publications.

Harris, E.C. 1979. Principles of Archaeological Stratigraphy. London: Academic Press.

Hester, T., Heizer, R.E. and J.A. Graham 1975. *Field Methods in Archaeology*. Palo Alto (California): Mayfield Press.

Redman, C. 1974. *Multi-Stage Fieldwork and Analytical Techniques, American Antiquity* 38: 611-79.

Tite, M.S. 1972. Methods of Physical Examination in Archaeology. London: Seminar.

Wheeler, R.E.M. 1954. Archaeology from the Earth. Harmondsworth: Penguin Books.

Atkinsen R.J. (1953) Field Archaeology. London: Methuen.

- Binford L.R.(1972) An archaeological Perspective. New York: Seminar Press.
- Brothwell D. & Higgs E.(Ed.) (1963) Science in Archaeology. London: Thames and Hudson.
- Childe V.G.(1956) A Short Introduction to Archaeology. London: Fredrick Muller Ltd.
- Childe V.G.(1956) *Piecing together the Past: The Interpretation of Archaeological Data.*London: Routledge & Kegan Paul Ltd.
- Clarke D.L. (1968) *Analytical Archaeology*. London: Methuen.
- Cleator P.E.(1957) The Past in Pieces. London: George Allen & Unwin Ltd.
- Cronyn J.M. (1990) The Elements of Archaeological conservation. London: Routledge.
- Daniel G. (1975) Hundred and Fifty Years Of Archaeology. London: Dockworth.
- Flower P.J. (1977) Approaches to Archaeology. London.
- Gosh A. (Ed.) (1953) Ancient India IX. Delhi: ASI.
- Heizer F.R. (Ed.) (1959) A Guide to Archaeological Field Methods. California.
- Hodder I. (1991) *Reading The Past: Current Approaches to Interpretation in Archaeology.*Cambridge: Cambridge University Press.
- Kempton W. (1981) *The Folk Classification of Ceramics: A Study of Cognitive Prototypes*. London: Academic Press.
- Leute U. (1987) Archaeometry: An Introduction to Physical Methods in Archaeology and the History of Art. New York: VCH
- Miller D. (1985) Artifacts as Categories: A Study of Ceramic Variability in Central India. Cambridge: Cambridge University Press.
- Plenderleith H. Conservation of Antiquities and works of art. London: Oxford University Press.
- Roy S. (1961) The story of Indian Archaeology (1784-1947). New Delhi.
- Trigger B.G. (1968) *Beyond History: The Methods of Prehistory*. London: Holt, Rinehart & Winston.
- Trigger B.G. (1989) Towards *A History of Archaeological Thought*. Cambridge: Cambridge University Press.
- Wheeler R.E.M. (1954) Archaeology from Earth. Oxford: Clarendon Press.

#### Protohistory of South Asia Course code: ARC17203CR

Credits: (4) (L+T) Maximum Marks: 100 Minimum Marks: 40

#### **Course Description:**

This course covers the protohistoric period of South Asia, focusing on the cultural and technological developments that shaped early civilizations in the region. Students will study the Pre/Early Harappan cultures and their influence on the later Harappan Civilization. The course examines the rise and decline of the Harappan Civilization, including its social, political, and economic aspects, as well as its trade connections with neighboring regions. Additionally, the course explores the Chalcolithic traditions across South Asia and the transition into the Iron Age, highlighting the changes that led to the second urbanization in the subcontinent.

#### **Expected Outcomes:**

- 1. Understand the cultural significance of Pre/Early Harappan sites and their role in understanding South Asian history.
- 2. Analyze the architecture, trade, technology, and social organization in Harappan Civilization.
- 3. Examine Chalcolithic traditions and their impact on regional cultures in South Asia.
- 4. Explore the origins of the Iron Age and its effects on the socio-political landscape, including the second urbanization.

#### **Unit-1: Pre/Early Harappan Cultures**

a. Pre/Early Harappan sites (Mehargarh, Kot Diji, Hakra, Killi Gul Mohammad, Kulli, Nal, Amri, Ravi, Sothi, Padri, Pre-Prabhas, Anarta).

#### **Unit -2: Harappan Culture**

- a. Origin and development of the Harappan Civilization
- b. Geographical distribution, extent and settlement patterns
- c. Important excavated sites
- d. Town planning and architecture
- e. Trade, economy, technology and art. Contacts within Iran, Middle East and Central Asia.
- f. Harappan script
- g. Socio-political and religious organization
- h. Decline - various theories and causes
- i. Late Harappan phase geographical distribution and salient features.

#### **Unit-3: Development of Chalcolithic Traditions (Central India, Rajasthan and Gangetic Doab)**

- a. Ahar distribution, architecture, characteristic features and contributions
- b. Ganeshwar and Jodhpura -- distribution and material culture, important sites
- c. Kayatha - distribution and characteristic
- d. Malwa - distribution, life-style, socio-religious aspects, technology, etc.
- e. OCP and Copper Hoards - distribution and cultural tradition
- f. Regional cultural contacts
- g. Decline of the Chalcolithic- causes and consequences.

#### **Unit-4: Iron Age**

- a. Origins of Iron in South Asia- Problem and perspective
- b. Iron Age in South India and Sri Lanka- Megalithic phase
- c. Iron Age in North India- PGW and NBPW
- d. Second Urbanisation- Causes and consequences.

#### **Recommended Readings**

Childe, V.G. 1951. Man Makes Himself. New York: Mentor.

Cohen, Mark. 1977. The Food Crisis in Prehistory. New Haven: Yale University Press.

Deo, S.B. 1979. Problem of South Indian Megaliths. Dharwad: Karnataka University.

Deo, S.B. 1985. The Megaliths: Their culture, ecology, economy and technology, in *Recent Advances in Indian Archaeology* (S.B. Deo and K. Paddayya eds.), Deccan College, Pune.

Dhavalikar, M.K. 1990. First Farmers of the Deccan, Pune: Ravish Publishers.

Ghosh, A. 1973. *The City in Early Historical India*. Simla: Indian Institute for Advanced Studies.

Ghosh, A. 1990. *Encyclopaedia of Indian Archaeology* (two volumes). New Delhi: Munshiram Manoharlal.

Haimendorf, C. von. F. 1945. "The Problem of Megalithic Cultures in Middle India". *Man in India* XXV: 73-86.

Lal, B.B. 2000. The Saraswati Flows on. New Delhi: Aryan Books.

Lal, Makhan. 1984. Settlement History and the Rise of Civilization in the Ganga-Yamuna Doab. New Delhi: B.R Publishing House.

Mohanty, R.K., and S.R. Walimbe, 1993. A Demographic Approach to the Vidarbha Megalithic Cultures *Man and Environment*, XVIII (2):93-103.

Mohanty,R.K. and V.Selvakumar,2002. The Archaeology of Megaliths in India:1947-1997, in *Indian Archaeology in Retrospect*,(S.Settar and R.Korisettar Eds.), New Delhi:Manohar Publishers.Vol.1:313-52&479-81

Moorti, U.S. 1994. Megalithic Cultures of South India: Socio- Economic Perspectives. Varanasi: Ganga-Kaveri.

Paddayya, K. 2001-2002. The Problem of Ashmound of Southern Deccan in the light of Budihal Excavations. *Bulletin of the Deccan College Research Institute* 60-61: 189-225.

Paddayya, K. (ed.). 2002. Recent Studies in Indian Archaeology. New Delhi: ICHR and Munshiram.

Possehl, G.L. 1979 (ed.). 1979. Ancient Cities of the Indus. New Delhi: Vikas Publishing House.

Possehl, G.L. (ed.). 1993. *Harappan Civilization- A Recent Perspective*. New Delhi: Oxford and IBH Publishing Co.

Possehl, G. 1999. The Indus Age. New Delhi: Oxford.

Roy, T.N. 1983. *The Ganges Civilization: A Critical Study of the PGW and NBPW Periods of Ganga Plains of India*. New Delhi: Ramanand Vidya Bhavan.

Sankalia, H.D. 1977. *Prehistory of India*. New Delhi: Munshiram Manoharlal.

Sankalia, H.D. 1974. Pre and Protohistory of India and Pakistan. Pune: Deccan College.

Sharma, G.R. et al. 1980. Beginnings of Agriculture. Allahabad: Allahabad University Press.

Shinde, Vasant. 1989. New Light on the Origin, Settlement System and Decline of the Jorwe Culture of the Deccan, India South Asian Studies 5:60-72

Shinde, Vasant. 1990. Settlement pattern of the Savalda culture - The first farming community of Maharashtra. *Bulletin of Deccan College Research Institute*, vols. 49-50 (Sankalia Memorial Volume) 49: 417-426

Shinde, Vasant. 1991. Craft specialization and social organization in the Chalcolithic Deccan, India, *Antiquity* 65(249): 796-807.

Shinde, Vasant. 1994. The Deccan Chalcolithic: A Recent Perspective, *Man and Environment*, XIX (1-2): 169-178.

Shinde, Vasant. 1998. Early Farming Community in the Central Tapi Basin (Study of Settlement and Subsistence Patterns), Munshiram Manoharlal Publishers, New Delhi

Shinde, Vasant. 2000. Origin and development of Chalcolithic in Central India, *Bulletin of Indo-Pacific Prehistory Association*, 19: 125-136.

Shinde, Vasant. et al. 2016. Chalcolithic South Asia: Aspects of Crafts and Technology, New Delhi: Pentagon Press in association with Indus Infinity Foundation

Singh, Purushottam. 1991. Neolithic Origins. New Delhi: Agam Kala Prakashan.

Tripathi, Vibha. 1976. *The Painted Grey Ware : An Iron Age Culture of Northern India*. Delhi: Concept.

Tripathy, Vibha. 2001. Age of Iron in South Asia: Legacy and Tradition, Aryan Books International, New Delhi.

Wheeler, R.E.M. 1968. *Indus Civilization*. (Third Edition). Cambridge: Cambridge University Press.

Yatoo, M.A., 2012. Characterising material culture to determine settlement patterns in north west Kashmir, online resource material at British Library, UK.

Spate M, Zhang G, Yatoo MA, Betts A, 2017. New evidence for early 4<sup>th</sup> Millennium BP agriculture in the Western Himalayas: Qasim Bagh, Kashmir, *Journal of Archaeological Science: Reports*, 2017 (11), 568-577.

Yatoo, MA, 2015. Iron Age Material Culture in South Asia – Analysis and Context of Recently Discovered Slag Sites in Northwest Kashmir (Baramulla District) in India, *Ancient Asia*, 6, Art.3, 1-8.

Yatoo, MA, & Bandey, AA, 2014. Relations of Neolithic Kashmir with South and Central Asia: Comparative Analysis of Material Culture from new sites in Kashmir, *Journal of Central Asian Studies*, Vol. 21 (XXI), 37-46.

Saar, S.S. 1992. Archaeology: Ancestors of Kashmir, New Delhi, Lalit Art Publishers.

Kaw, R.N. 1979. The Neolithic culture of Kashmir. In D.P. Agrawal and D.K. Chakrabarti (eds.) Essays in Indian

Mani, B.R. 2000. Excavations at Kanispur: 1998-99 (District Baramulla Kashmir). Journal of Interdisciplinary Studies in History and Archaeology 10, 1-21.

Mani, B.R. 2008. Kashmir Neolithic and Early Harappan: A Linkage, Pragdhara 18, 229-247.

Lawrence, W.R. 1895. The Valley of Kashmir, London, H. Frowde.

# Course code: ARC17204CR Archaeological Sources

Credits: (4) (L+T) Maximum Marks: 100 Minimum Marks: 40

### **Course Description:**

This course explores the various sources of archaeological evidence and their significance in understanding past cultures and civilizations. Students will learn about the importance and limitations of both archaeological and literary sources, with a particular focus on the context of India. The course examines the relationship between archaeology and literature, including early writing systems in different regions. Additionally, students will study material culture through the analysis of stone tools, pottery, terracotta, coins, seals, and inscriptions. The course also covers different types of occupational sites, such as subterranean dwellings, cave and rock art shelters, and archaeological and religious monuments.

# **Expected Outcomes:**

By the end of this course, students will be able to:

- 1. Understand the importance and limitations of archaeological evidence and literary sources in reconstructing history.
- 2. Analyze the interplay between archaeological findings and literary records, including early writing systems.
- 3. Identify and describe various forms of material culture, including stone tools, pottery, and inscriptions.
- 4. Explore different types of occupational sites and understand their significance in archaeological studies.

### **Unit 1: Introduction**

- a. Importance of archaeological evidence
- b. Limitations of Archaeological Evidence
- c. Importance of literary sources in India
- d. Limitations of Literary Sources

### **Unit 2: Archaeology and Literature**

- a. Earliest Literary Sources and Archaeological Records
- b. Early writing in West Asia
- c. Early writing in India and China

### **Unit 3: Material Culture**

- a. Stone artefacts and tools
- b. Pottery and Terracotta
- c. Coins, Seals and Inscriptions

# **Unit 4: Occupational sites/Settlements**

- a. Subterranean sites/ Dwelling sites
- b. Cave and Rock Art shelters
- c. Archaeological and Religious Monuments.

# **Recommended Readings:**

Allchin, F. R. 1995. The Archaeology of Early Historic South Asia and Emergence of Cities and States. Cambridge University Press, Cambridge.

Andren, Anders 1998. Between Artifacts and Texts. New York: Plenum press.

Bhattacharyi, Sukumari 1975. Literature in the Vedic Age (2 Vols). K.P. Bagehi and Co., Calcutta

Dymond, D. P. 1974. Archaeology and History: A Plea for Reconciliation. London: Thomas and Hudson

Erodsy, George 1988. Urbanisation in Early Historical India. Oxford: BAR.

Dhavalikar, M.K.1999. Historical Archaeology of India. New Delhi: Books & Books.

Kosambi, D.D. 1985. An Introduction to the Study of Indian History. (reprint). Mumbai: Popular Prakashan.

Kunhau Raja 196.2 Survey of Sanskrit Literature. Mumbai: Bharatiya Vidya Bhavan.

Lad, Gauri P. 1981. Mahabharata and Archaeological Evidence. Pune: Deccan College.

Sharma, R. S. 1996. The State and Vasna formation in the Mid- Ganga Plains. New Delhi: Manohar Publishers.

Roy, T. N. 1983. The Ganges Civilization : A Critical Study of PGW & NBPW Periods of the Ganga Plains of India. New Delhi: Ramanada Vidya Bhavan.

Thapar, Romila 1990. From Lineage to State. Delhi: Oxford University Press.

Tripathi, Vibha 1976. The Painted Gray ware: An Iron Age Culture of North India. Delhi: Concept Publishing House.

Tripathi, Vibha 2001. Age of Iron in South Asia Legacy & Tradition. New Delhi: Aryan Books International.

# Science in Archaeology Course code: ARC17205DCE

Credits: (4) (L+T+P) Maximum Marks: 100 Minimum Marks: 40

### **Course Description:**

This course introduces students to the scientific methods used in archaeology, focusing on how various disciplines contribute to the understanding of past human activities. The course covers key areas such as archaeobotany, zooarchaeology, archaeometallurgy, geoarchaeology, and dating methods. Students will explore the analysis of plant and animal remains, the study of rocks, minerals, and soils, and the application of geographic and remote sensing techniques in archaeology. Additionally, the course provides an overview of both relative and absolute dating methods, enabling students to accurately date archaeological findings.

# **Expected Outcomes:**

By the end of this course, students will be able to:

- 1. Understand and identify different types of plant and animal remains in archaeological contexts and their significance in reconstructing past environments and human diets.
- 2. Analyze human and animal bones to gain insights into ancient health, demographics, and domestic practices.
- 3. Identify common rocks and minerals, analyze soil properties, and apply geographic techniques, including GIS and remote sensing, to archaeological research.
- 4. Apply both relative and absolute dating methods to determine the age of archaeological materials, enhancing the accuracy of historical timelines.

# **Unit – 1: Archaeobotany**

- a. Archaeobotany: Introduction to different types of plant fossils found in archaeological contexts such as woods, food grains, impressions, compressions, casts, petrifications, coprolites, phytoliths, pollen and spores.
- b. Carbonisation of Seeds

# **Unit – 2: Zooarchaeology**

- a. Study of bones: The mammalian skeleton, Osteology of selected domestic animals. Fossil preparation, identification and systematic palaeontology of fossil vertebrates.
- b. Study of human bones: Identification, methods of cleaning and reconstruction, sex determination, age estimation, demography and pathology

# Unit – 3: Archaeometalurgy and Geoarchaeology

- a. Identification of common rocks and minerals.
- b. Preliminary study of soils/sediments: Determination of texture, colour, pH, calcium carbonate, organic carbon, phosphate etc.
- c. Earth Science: Geographic techniques toposheet reading and interpretations, introduction to GIS and basics of remote sensing.

# **Unit – 4: Archaeological Dating Methods**

- a. Relative Dating Methods StratigraphySeriationDendrochronology
- b. Absolute Dating Methods
   Radiocarbon
   Thermoluminescence
   Electron Spin Resonance
   Potassium Argon
   Fission Track
   Obsidian hydration
   Amino acid racemisation

# **Recommended Readings**

Badam, G.L. 1979. Pleistocene Fauna of India, Pune: Deccan College.

Baker, J. and D. Brothwell. 1980. Animal Diseases and Archaeology, Academic Press: London

Bass, W.M. 1981. *Human Osteology: A laboratory and field manual of the Human skeleton*, 2nd edition, Columbia: Missouri Archaeological Society.

Bone, J.F. 1979. *Animal Anatomy and Physiology*, Reston: Reston Publishing Co.

Black, C.A., Evans, D.D., White, J.L., Ensminger, L.E. and F.E. Clark (Eds.). 1965. *Methods of Soil Analysis*, part I Physical and Mineralogical properties and part II Chemical and Microbiological properties, American Society of Agronomy, Inc. Madison, Wisconsin, USA

Brothwell, D. and E. Higgs (Eds.). 1969. *Science in Archaeology*, London: Thames and Hudson.

Brothwell, D. and A.M. Pollard. 2001. *Handbook of Archaeological Sciences*, New York: John Wiley and Sons.

Cornwall, I.W. 1974. *Bones for Archaeologists*, (revised edition), London: L.M. Dent and Sons.

Deo, S.G. and P.P.Joglekar. 1998. Geographic Information System (GIS) for Archaeology. *Puratattava*, 27:85-90.

Deo, S.G. 2000-01. Computer Applications in Archaeology: A review of work done at Deccan College, *Bulletin of Deccan College Postgraduate and Research Institute*, Vol. 60-61: 137-142.

Deotare, B.C. 1995. Pollen recovery from minerogenic sediments: A methodological approach. *Man and Environment*, XX(2):101-105.

Erdtman, G. 1969. *Hand book of Palynology*, New York: Hafner.

Gary Lock and Zoran Stancic (eds). 1995. Archaeology and Geographical Information Systems, London: Taylor and Francis.

Gary Lock and J. Moffett (Eds.). 1992. Computer Application and Quantitative Methods in Archaeology 1991. London: BAR International Series.

Greig, James. 1989. *Handbook for Archaeologists No.4: Archaeobotany*, European Science Foundation, Strasbourg.

Joshi, R.V. and B.C. Deotare. 1983. *Chemical Analysis of Archaeological Deposits from India*. Pune: Deccan College.

Kajale, M.D. 1991. Current status of Indian Palaeoethnobotany: Introduced and indigenous food plants with a discussion of the historical development of Indian Agriculture and agricultural system in general, in *New Light on Early Farming*, Jane Renfrew (Ed.), Edinburgh: Edinburge University press, pp.155-190.

Leiggi, Patrick and Peter May (Eds.). 1994. *Vertebrate Palaeontological Techniques*, Vol. 1, Cambridge University Press.

Moore, P.D., Webb, J. A. and M.E. Collinson. 1992. Pollen Analysis, Oxford: Blackwell.

Pearsall, D. 1989. Palaeoethnobotany- Handbook of Procedures. London: Academic press.

Plenderlith, H.J. 1965. *The Conservations of Antiquities and Works of Art*, London: Oxford University press.

Renfrew, J. 1973. Palaeoethnobotany, London: Mathuen and Co.

Reilly, P. and S. Rathz (Eds.). 1992. Archaeology and the Information Age. London: Routledge

Romer, A.S. 1967. Vertebrate Paleontology, Chicago: University of Chicago press.

Schmid, E. 1972. Atlas of Animal Bones. London: Elsevier publishing Co.

Singh, R. and L.R. Kajia. 1979. *Map Work and Practical Geography*, Allahabad: Central Book Depot.

Traverse, A. 1988. Palaeopalynology Boston: Unwin Hyman.

Zittel, Von K.A. 1925. Text Book of Palaeontology, Macmillan and Co. 3 vols.

Yatoo, M.A., 2012. Characterising material culture to determine settlement patterns in north west Kashmir, online resource material at British Library, UK.

Spate M, Zhang G, Yatoo MA, Betts A, 2017. New evidence for early 4<sup>th</sup> Millennium BP agriculture in the Western Himalayas: Qasim Bagh, Kashmir, *Journal of Archaeological Science: Reports*, 2017 (11), 568-577.

# Course code: ARC17206DCE Archaeology of Kashmir (Ancient to Medieval)

Credits: (4) (L+T+P) Maximum Marks: 100 Minimum Marks: 40

# **Course Description:**

This course provides an in-depth exploration of the archaeology of Kashmir, tracing its history from ancient to medieval times. Students will study key archaeological sites, significant finds, and the development of art, architecture, and coinage in the region. The course begins with an overview of Kashmir's history up to the sixth century AD, followed by an examination of important sites from the Kushan period. It then explores the artistic and architectural achievements of Kashmir from the period of the Huns to the Loharas, including the study of sculptures and ancient temples. The course concludes with a look at the medieval period, focusing on the architectural contributions of the Sultanate and Mughal periods, as well as the development of ancient and medieval cities in Kashmir.

# **Expected Outcomes:**

By the end of this course, students will be able to:

- 1. Understand the historical context of Kashmir from ancient to medieval times.
- 2. Analyze the significance of key archaeological sites and their contributions to the understanding of Kashmir's history.
- 3. Explore the development of art, including terracotta, stone, metal, and ivory sculptures, as well as the architecture of stupas and stone temples.
- 4. Examine the evolution of coinage in Kashmir and its historical implications.
- 5. Investigate the architectural styles under the Sultanate and Mughal periods and their impact on the region's cultural heritage.

# Unit-1:

- a. A brief history of Kashmir up to sixth century AD.
- b. Semthan site and its significance

### Unit-2:

- a. Kushan sites; Hoinar, Hutmur, Ahan, Kanispora and other important sites and their importance.
- b. Harwan; Debate on its origin, Finds and their significance.

# Unit-3:

- a. A brief history of Kashmir from Huns to Loharas.
- b. Sculptures: Terracotta, Stone, Metal and Ivory sculptures.
- c. Ancient Architecture of Kashmir: Stupa, Stone Temples
- d. Coinage

### Unit-4:

- a. A brief history of Medieval Kashmir
- b. Architecture under the Sultans
- c. Architecture under the Mughals
- d. Ancient and medieval cities.

### **Recommended Readings:**

- Agrawal, D.P. 1982. Archaeology of India. Copenhagen: Scandinavian Institute of Asian Studies.
- Agrawal, D.P. 2000. Ancient Metal Technology and Archaeology of South Asia (A Pan-Asian Perspective), Aryan Books International, New Delhi
- Agrawal, D.P. and D.K. Chakrabarti (eds.). 1979. *Essays in Indian Protohistory*. New Delhi: D.K Publishers.
- Allchin, F.R. and B. Allchin 1993. *The Birth of Civilization in India*. revised ed. New Delhi: Penguin Books.
- Allchin, Bridget and Raymond Allchin 1982. *Rise of Civilization in India and Pakistan*. Cambridge: Cambridge University Press.
- Agrawal, D.P. 1992. Man and environment in India through ages: an interdisciplinary study of the Indian quaternary with focus on north-west, New Delhi, Books & Books.
- Bandey A.A. 1997. Palaeolithic Habitational Site at Manasbal, Kashmir: Recent Archaeological Investigations, *Journal of Central Asian Studies*, University of Kashmir, 8 (1), 12-18.
- Bandey A.A. 2003a. Neolithic settlement found at Bomai, Kashmir, India, *Circle of Inner Asian Art*, Issue 18.
- Bandey A.A. 2003b. Preliminary Report: Archaeological explorations in Bomai village, Sopore, *Central Asian Digest*, Vol. XXIII, 10-12.
- Bandey A.A. 2009. Prehistoric *Kashmir Archaeological History of Palaeolithic & Neolithic Cultures*, New Delhi, Dilpreet Publishing House.
- De Terra, H. 1942. The Megaliths of Bursahom, Kashmir, a New Prehistoric Civilization from
- India, American Philosophical society 85 (5), 483-504.
- De Terra, H. and Paterson, T.T. 2003 [1939]. The Ice Age in the Indian Subcontinent and Associated Human Cultures: With Special Reference to Jammu, Kashmir, Ladakh, Sind, Liddar & Central and Peninsular India, New Delhi, Aryan Books.
- Joshi, R.V., Rajguru, S.N., Pappu, R.S., and Bopardiker, B.P. 1974. Quaternary Glaciations and Palaeolithic Sites in the Lidder Valley, J&K, *World Archaeology*, *369-79*.
- Mani, B.R. 2000. Excavations at Kanispur: 1998-99 (District Baramulla Kashmir). *Journal of Interdisciplinary Studies in History and Archaeology* 10, 1-21.
- Mani, B.R. 2008. Kashmir Neolithic and Early Harappan: A Linkage, *Pragdhara* 18, 229-247.
- Misra, V.N. 2001. Prehistoric Human Colonization of India, *Journal of Biosciences* 26 (4), 491-531.

- Pant, R.K., Gaillard, C., Nautiyal, V., Gaur, G.S., and Shali, S.L. 1982. Some new Lithic and Ceramic Industries from Kashmir, *Man and Environment* vol. VI, 37-40.
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- Pant, R.K., Gaillard, C., Nautiyal, V., Gaur, G.S., and Shali, S.L. 1982. Some new Lithic and Ceramic Industries from Kashmir, *Man and Environment* vol. VI, 37-40.
- Paddayya, K. 2008. Palaeolithic Cultures. In Deborah, M. Pearsall (ed.), *Encyclopaedia of Archaeology*: 768-791, Elsevier.
- Pande, B.M. 1969. Neolithic Hunting Scene on a Stone Slab from Burzahom, Kashmir, *Asian Perspectives*, XIV 1971, 134-138.
- Pande, B.M. 1970[1969]. The Neolithic in Kashmir new discoveries, *The Anthropologist*, Vol. XVII, No. 1-2, 25-41.
- Pant, R.K. 1979. Microwear Studies on Burzahom Neolithic Tools, *Man and Environment* vol. 3, 11-17.
- Spate M, Zhang G, Yatoo MA, Betts A, 2017. New evidence for early 4<sup>th</sup> Millennium BP agriculture in the Western Himalayas: Qasim Bagh, Kashmir, *Journal of Archaeological Science: Reports*, 2017 (11), 568-577.
- Saar, S.S. 1992. Archaeology: Ancestors of Kashmir, New Delhi, Lalit Art Publishers.
- Shah, M.A., 2012. Discovery of Rock Art in Northern Kashmir, A Prelimnary Investigation, in *Proceedings of The National Seminar on River Valley Civilzation of Chatisgarh and New Researches in Indian Archaeology*, 329-336.
- Shali, S.L. 1993. *Kashmir: History and Archaeology Through the Ages*, New Delhi, OM Publications.
- Shali, S.L. 2001. Settlement Pattern in Relation to Climatic changes in Kashmir, New Delhi, OM Publications.
- Sankalia, H.D. 1971. New Evidence for Early Man in Kashmir, *Current Anthropology* 12 (4 / 5), 558-562.
- Sankalia, H.D. 1974. *Prehistory and Protohistory of India and Pakistan*, Poona, Deccan College post graduate and research institute.
- Saar, S.S. 1992. Archaeology: Ancestors of Kashmir, New Delhi, Lalit Art Publishers.
- Kaw, R.N. 1979. The Neolithic culture of Kashmir. In D.P. Agrawal and D.K. Chakrabarti (eds.) Essays in Indian
- Yatoo, M.A., 2012. Characterising material culture to determine settlement patterns in north west Kashmir, online resource material at British Library, UK.
- Yatoo, MA, & Bandey, AA, 2014. Relations of Neolithic Kashmir with South and Central Asia: Comparative Analysis of Material Culture from new sites in Kashmir, *Journal of Central Asian Studies*, Vol. 21 (XXI), 37-46.

# **Generic Elective** Science and Archaeology

Course code: ARC17207GE

**Credits:** (2) (L+T) **Maximum Marks: 50 Minimum Marks: 20** 

# **Course Description:**

This course introduces students to the scientific techniques used in archaeology, focusing on methods for dating and analyzing archaeological materials. The course covers fundamental concepts in archaeological science, such as stratigraphy, seriation, and dendrochronology. It methods, also explores various absolute dating including radiocarbon thermoluminescence, and other advanced techniques that provide precise chronological frameworks for understanding archaeological findings.

# **Expected Outcomes:**

By the end of this course, students will be able to:

- 1. Understand the basic principles of archaeological science, including stratigraphy, seriation, and dendrochronology.
- 2. Apply different absolute dating methods to archaeological materials, improving the accuracy of dating and analysis in archaeological research.
- 3. Evaluate the strengths and limitations of various dating techniques in reconstructing past human activities.

# **Unit – 1 Archaeological Science - An introduction**

- a. Stratigraphy
- b. Seriation
- c. Dendrochronology

### **Unit – 2 Absolute Dating Methods**

- a. Radiocarbon
- b. Thermoluminescence
- c. Electron Spin Resonance
- d. Potassium Argon
- e. Fission Track
- f. Obsidian hydration
- g. Amino acid racemisation

# **Third Semester**

# Art, Architecture and Iconography Course code: ARC17301CR

Credits: (4) (L+T+P) Maximum Marks: 100 Minimum Marks: 40

## **Course Description:**

This course explores the evolution, growth, and development of art, architecture, and iconography in India, highlighting both indigenous developments and external influences. Students will gain an understanding of the structural features of ancient fortified settlements, the origin and evolution of Stupa and rock-cut architecture, and the stylistic progression of temple construction across different historical periods. The course also covers the development of sculpture in various artistic traditions, from the Mauryan to the Chola periods. Additionally, it provides a comprehensive study of Hindu and Buddhist iconography, examining the representation and significance of various deities and figures in religious art.

# **Expected Outcomes:**

By the end of this course, students will be able to:

- 1. Understand the historical development of art and architecture in India, including the influences that shaped these traditions.
- 2. Analyze the structural features of ancient settlements and the architectural evolution of stupas, rock-cut structures, and temples.
- 3. Identify and describe the main styles of Indian sculpture and their regional variations.
- 4. Explore the iconography of Hindu and Buddhist deities, understanding their symbolic meanings and representations in art.

### **Unit** − 1: **Introduction to Art & Architecture**

i. Evolution, growth and development of Art and Architecture: A Survey

(The students would be given a general idea about the evolutionary history of Art and Architecture in India in the context of endogenous developments and exogenous influences during the different phases of its history)

ii. Structural features of ancient fortified settlements.

### Unit − 2: Buddhist Art & Architecture

- i. Origin and evolution of Stupa Architecture: Sanchi, Bharhut, Amaravati and Nagarjunakonda.
- ii. Development of Rock-cut Architecture: Chaityas and Viharas.
- iii. Rock-cut cave paintings of Ajanta and Bagh.

### Unit – 3: Hindu Art & Architecture

- i. Temple Styles: Origin and evolution of temples; Gupta temples, Chalukyan temples, Khajuraho temples, temples of Orissa and Chola temples.
- ii. Sculpture: Main styles Mauryan; Sunga; Kushana (Mathra and Gandhara schools); Gupta, Sarnath school; Chalukyas, Pallavas, Palas, Cholas and Chandellas.

# **Unit – 4: Indian Iconography**

- i. Hindu Iconography: Siva; Vishnu; Brahma; Surya; Ganesa; Kartikeya; Durga; Mahishasuramardhini; Lakshmi; Saraswati; Saptamatrikas; Ashtadikpalas; Navagrahas.
- ii. Buddhist Iconography: Buddha and Bodhisattvas: Concept and Representation; The Shakyamuni Buddha; The Dhyani Buddha; The Manushi Buddha; The Bodhisatvas; Avalokitesvara, Vajrapani, Maitreya; Manjushi, Tara.

# **Recommended Readings**

Agrawal, V.S. 1948. Gupta Art. Lucknow: U.P. Historical Society.

Agrawal, V.S. 1965. Masterpieces of Mathura Sculptures. Varanasi: Prithvi Prakashan.

Asher, Catherine B. and Thomas R. Metcalf (Eds.). 1994. *Perceptions of South Asia's Visual Past*. New Delhi/ Madras: American Institute of India Studies/ Swadharma Surajya.

Banerji, Arundhati 1994. Early Indian Terracotta Art. New Delhi: Harman Publishing House.

Berkson, Carmel 1982. An Approach Towards Examining Style in the Cave Temple, in *Rupa Pratirupa* (*Alice Boner Commemoration Volume*) [Bettina Baumer ed.], pp. 57-86, New Delhi, Biblia Implex.

Brown, Percy 1960. *Indian Architecture (Buddhist and Hindu)*. Bombay: D. B. Taraporewala and Sons.

Chakrabarti, Jayant 1980. *Techniques in Indian Mural Painting*. Calcatta: K. P. Bagchi and Company.

Coomarswami, Ananda 1972. *History of Indian and Indonesian Art.* New Delhi: Mushiram Manoharlal. (Indian edition.)

Dehejia, Vidya 1972. Early Buddhist Rock Temples: A Chronological Study. London: Thames and Hudson.

Dehejia, Vidya 1979. Early Stone Temples of Orissa. Delhi: Vikas Publishing House.

Dehejia, Vidya 1990. Art of Imperial Cholas. New: York: Columbia University Press.

Dehejia, Vidya 1997. *Discourse in Early Buddhist Art: Visual Narrative of India* New Delhi: Munshiram Manoharlal.

Dehejia, Vidya 1997. Indian Art. London: Phaidan Press.

Dhavalikar, M. K. 1978. *Masterpieces of Indian Terracottas*. Bombay: Taraporewala and Sons.

Dwivedi, V. K. 1976. Indian Ivories. Delhi: Agam Kala Prakashan.

*Encyclopaedia of Indian Temple Architecture*. (Volume 2, part 1)Varanasi/ Gurgaon: American Institute of Indian Studies.

Gupta, S.P. (Ed.) 1985. Kushan Sculptures from Sanghol: A Recent Discovery. New Delhi: National Museum

Hallade, M. 1968. *Gandhara Style and the Evolution of Buddhist Art*. London: Thames and Hudson.

Joshi, N.P. 1966. Mathura Sculptures. Mathura: Archaeological Museum.

Kala: Journal of Indian Art History Congress. Publisher: Indian Art History Congress, Guwahati (Assam). Annual.

Khandalwala, Karl (Ed.) 1991. *Golden Age: Gupta Art Empire*, Province and Influence. Bombay: Marg Publications.

Knox, Robert 1992. *Amaravati: Buddhist Sculptures from the Great Stupa*. London: British Museum Press.

Kramrisch, Stella 1933. Indian Sculpture. Calcutta: Y.M.C.A. Publication House.

Kramrisch, Stella 1965. The Art of India. London: Phaidon Press.

Kramrisch, Stella 1986. The Hindu Temple. (2 volumes). Reprint. Delhi: Motilal Banarasidas.

Mate, M. S. 1998. Prachin Kala Bharati. Pune: Continental Prakashan.

Motichandra 1957-58. Ancient Indian Ivories, *Bulletin of the Prince of Wales Museum* (1957-58) Volume 6, pp. 4-63.

Nagaraju, S. 1981. Buddhist Architecture of Western India. Delhi: Agam Kala Prakashan.

Nehru, Lolita 1989. *Origins of Gandhara Style: A Study of Contirbutary Influences*. Delhi: Oxford University Press.

Parimoo, Ratan et al. (ed.) 1991. The Art of Ajanta: New Perspective. New Delhi: Books and Books. (two volumes)

Rama, K. 1995. Buddhist Art of Nagarjunkonda. Delhi: Sandeep Prakashan.

Ray, Nihararanjan. 1965. Maurya and Shanga Art. Calcutta: Indian Studies.

Saraswati, S. K. 1975. A Survey of Indian Sculpture. New Delhi: Munshiram Manoharlal.

Sarkar, H. 1966. Studies in Early Buddhist Architecture of India. New Delhi: Munshiram Manoharlal

Schlingloff, Dieter 1988. *Studies in the Ajanta Paintings: Identifications and Interpretations*. Delhi: Ajanta Publications.

Sharma, R.C. 1986. *Mathura as School of Sculpture*, in Dimension of Art (Papul Jayakar Seventy), (Lokesh Chandra and Jotindra Jain Eds. ) pp. 407-416. Delhi: Agam kala Prakashan

Sivaramamurti, C. 1962. *Indian Bronzes*. Bombay: Marg Publications.

Spink, Walter 1967. Ajanta to Ellora, Marg 20:8-67.

Stone, Elizabeth Rosen 1994. *The Buddhist Art of Nagarjunkonda*. (Buddhist Tradition Series). Varanasi: Motilal Banarasidas.

William, Joanna Gottfried 1982. Art of Gupta India: Empire and Province. Princeton: Princeton University Press.

Zimmer, H. 1964. *The Art of Indian Asia*. (2 vols.). New York: Bollingen Foundations Inc.

Bakker, Hans. 1997. *The Vakatakas: An Essay in Hindu Iconology*. (Gonda Indological Series). Groninga: Egbert Forsten.

1989. Buddhist Iconography. New Delhi Tibet House (edited volume).

Banerjea, J.N. 1974 *Development of Hindu Iconography*. (III ed.) New Delhi: Munshiram Manoharlal.

Bhattacharya, B. 1958 Indian Buddhist Iconography. Calcutta: K.L. Mukhopadhyaya.

Champakalakshami, R. 1981. Vaishanava Iconography in the Tamil Country. Delhi: Orient Longman.

Chawla, J. 1990 *The Rigvedic Deities and their Iconic Forms*. New Delhi: Munshiram Manoharlal.

Desai, Devangana. 1996. *The Religious Imagery of Khajuraho*. Mumbai: Project for Indian Cultural Studies Publication IV.

Gopinath Rao, T.A. 1985. (2and ed) *Elements of Hindu Iconography*. Varanasi: Motilal Banarasidas.

Gupte, R.S. 1971. *Iconography of Hindus, Buddhists and Jains*. Bombay: Taraporewala Sons and Co.

Huntington, Susan. 1984. The "Pala-Sena" School of Sculpture. Leiden: E.J. Brill.

Joshi, N.P. 1979. Bharatiya Murtishastra. Nagpur: Maharashtra Grantha Nirmiti Mandal.

U.P. Shah 1987. Jaina Rupamandana. New Delhi: Abhinav Publication.

Kamalakar, G (ed.). 1993. Vishnu in Art, Thought and Literature, Hyderabad: Birla Archaeological and Cultural Research.

Kim, Inchang. 1997. *The Fututre Buddha Maitraya: An Iconological Study*. New Delhi: D.K. Print World.

Krishan, Y. 1996. *The Buddha Image: Its origin and Development*. New Delhi: Munshiram Manoharlal.

Lokesh, Chandra. 1987. Buddhist Iconography 2 vols. New Delhi: Aditya Prakasan.

Mani, V.R. 1995. Saptamatrikas in India Religio and Art. New Delhi: Mittal Publications.

Mishra, Rajani. 1989. Brahma-Worship, Tradition and Iconography. Delhi: Kanishka

Publishing House.

Mukhopadhyay, Santi Priya. 1985. Amitabha and his Family. Delhi: Agam Kala Prakashana.

Nagar, Shanti Lal. 1988. Mahishasuramardini in Indian Art. New Delhi: Aditya Prakasana.

Panikkar, Shivaji, K. 1997. Saptamatruka Worship and Scultures, An Iconological Interpretations of Conflicts. New Delhi: D.K. Printworld.

Parimoo, Ratan. 1982. *Life of Buddha in Indian Sculpture (Ashata-Maha-Pratiharyan): An Iconological Analysis*. New Delhi: Kanak Publications.

Pushpendra Kumar. 1993. Tara: The Supreme Goddess. Delhi Bharatiya Vidya Prakashna.

Ramachandra Rao. 1988-1991 *Pratima Kosa - Encyclopedia of Indian Iconography*. vols. 1-5, Bangalore: Kalpatharu Research Academy.

Sarma, I.K. 1982. *The Development of Early Shaiva Art and Architecture* (With Special Reference to Andhradesh). Delhi: Sandeep Prakashan.

Shah, U.P. 1987. *Jaina-Rupa-Mandana* (Jana Iconography). New Delhi: Abhinava Publications.

Soundara Rajan, K.V. 1982. *India's Religious Art*. New Delhi: Cosmo Publications.

Tiwari, Maruti Nandan Prasada. 1995. Jaina Iconography: Evolution and Appraisal, in *Studies in Jaina Art and Iconography and Allied Subjects in Honour of Dr. U.P. Shah* (R.T. Vyas ed.), pp.15-22, Varanasi, Oriental Institute - Abhinava Publications.

Upadhyaya, Vasudev 1970. *Pracin Bharatiya Murti Vijnana*. (Hindi). Varanasi: Chowkhamba Sanskrit Series.

Yadava, Nirmala. 1997. Ganesh in Indian Art and Literature. Jaipur Publication Scheme.

Lawrence, W.R. 1895. The Valley of Kashmir, London, H. Frowde.

# **Epigraphy and Numismatics Course code: ARC17302CR**

Credits: (4) (L+T+P) Maximum Marks: 100 Minimum Marks: 40

# **Course Description:**

This course offers an in-depth exploration of epigraphy and numismatics as crucial sources for understanding the history and culture of ancient India. Students will learn about the development and significance of early scripts, with a focus on Brahmi and Kharoshti, and will study key inscriptions that provide insights into historical events and cultural practices. The course also covers the origins, types, and features of ancient Indian coinage, examining their role in historical research, their minting techniques, and the processes involved in their preservation.

# **Expected Outcomes:**

By the end of this course, students will be able to:

- 1. Understand the scope and significance of epigraphy and its role in reconstructing India's history.
- 2. Analyze the origin and development of ancient Indian scripts, particularly Brahmi and Kharoshti, and their usage in inscriptions.
- 3. Evaluate the historical and cultural importance of major Indian inscriptions, interpreting their content and significance.
- 4. Understand the role of numismatics in historical research, including the study of coin types, symbolism, minting techniques, and the scientific methods used in coin analysis.
- 5. Apply knowledge of coin preservation techniques and the significance of coin provenance in archaeological research.

# **Unit** − 1: **Introduction to Epigraphy**

- i. Scope and importance of Epigraphy.
- ii. Antiquity of writing in India.
- iii. Origin and early history of Brahmi and Kharoshti Scripts; their orthographic nature and decipherment.
- iv. Ashokan Edicts: Nature, categories, linguistic and orthographic features, geographic distribution.
- v. Major Rock Edicts: Nos I, II, IV, VI, IX, X, XII, XIII, Lumbani inscriptions

# **Unit – 2: Major Inscriptions**:

Historical and cultural importance of the following inscriptions, giving the latest views and interpretations: Besnagar Garuda Pillar Inscriptions of Heliodorus: Hathigumpha Inscription of Kharavela; Nasik Cave Inscription of Vasishthiputra Pulumavi, 19<sup>th</sup> year; Junagadh Inscription of Rudradaman. Swat Relic casket inscription: Sarnath Budha image inscription of the time of Kanishka; Lucknow Museum Jain image inscription of the time of Huvishka (126 AD); Allahabad pillar inscription of Samudragupta; Aihole pillar inscription of Pulakesin II; Gwalior inscription of Mihira Bhoja; Tanjavaur inscription of Rajendra Chola and Sangli Copper plate of Govinda IV (Swarn Varsha).

# **Unit** − **3**: **Numismatic Study**

a)

- i. Numismatics as a source of history
- ii. Antiquity of coinage in India;
- iii. Numismatography
- iv. Typology and Symbolism
- b) Coin provenance: stratigraphic occurrence, stray occurrence, hoards, private and public collection; Coin metals, minting techniques, scientific analyses of coins using destructive and non-destructive methods.
- c) Coin cleaning, treatment and preservation.

#### **Unit – 4: India Numismatics**

- i. Important coins and their features
- ii. General features of Punch-Marked Coins, Indo-Greek, Indo-Scythian, Indo-Parthian, Satavahana, Kushana, Imperial Gupta, Delhi Sultanate, Mughal, Afghan, Sikh, British and Local Coins.

### **Recommended Readings**

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Whitehead, R.B. 1910. Catalogue of Coins in the Punjab Museum, Lahore, Vol.I: Indo-Greek Coins. Oxford: Clarendon Press.

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# Art and Architecture of Jammu & Kashmir Course code: ARC17303CR

Credits: (4) (L+T+P) Maximum Marks: 100 Minimum Marks: 40

### **Course Description:**

This course explores the art and architecture of Jammu and Kashmir, providing a comprehensive overview from early historic to early medieval periods. It covers the origins and development of art and architectural styles in the region, including significant rock art from Ladakh. Students will study notable sites from various periods, including early historic art and architecture at Semthan, Kushan sites, and Ladov, as well as early medieval monuments like Pandrethan, Parihaspor, and Avantipora. The course also examines later developments, including the Pattan temples, Boniyar temple, and the art and monasteries of Ladakh.

# **Expected Outcomes:**

By the end of this course, students will be able to:

- 1. Understand the historical development of art and architecture in Jammu and Kashmir, including the key influences and styles.
- 2. Identify and describe significant archaeological sites and monuments from different periods, such as Semthan, Harwan, Pandrethan, and Ladakh monasteries.
- 3. Analyze the artistic and architectural features of important sites, including rock art, temples, and monasteries, and their contributions to the cultural heritage of the region.

#### **Unit 1: Introduction**

- a. Origin and Development of Art in Jammu & Kashmir
- b. Evolution and Growth of Architecture in Jammu & Kashmir
- c. Rock art of Ladakh

# **Unit-2 - Early Historic art and Architecture**

- a. Semthan
- b. Kushan sites, Harwan, Ahan, Kanispor
- c. Ushkur and Ambaran
- d. Ladov and Naranag

# Unit-3 - Art and Architecture of Early Medieval Period

- a. Pandrethan
- b. Parihaspor and Martand
- c. Avantipora

# **Unit-4 – Temples and Monastries**

- a. Pattan temples
- b. Boniyar temple
- c. Kargil Maitriyas
- d. Ladakh Monastries
- e. Gool art, Ramban

### **References:**

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- Bandey A.A. 1992. *Early Terracotta Art of Kashmir*, Centre of Central Asian Studies, University of Kashmir.
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Thapar, B.K. 1985. Recent Archaeological Discoveries in India, Tokyo, Centre for East Asian Cultural Studies.

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# **Research Methodology**

Course code: ARC17304CR

Credits: (4) (L+T) Maximum Marks: 100 Minimum Marks: 40

### **Course Description:**

This course introduces students to the methodologies and theoretical frameworks used in archaeological research. It covers the application of scientific methods, key concepts in the philosophy of science, and the evolution of archaeological theory from processual to post-processual approaches. Students will learn about various research designs, field data collection techniques, and the process of writing research proposals and theses, with a focus on both global and Indian examples.

# **Expected Outcomes:**

By the end of this course, students will be able to:

- 1. Understand the application of scientific methods and philosophical concepts in archaeological research.
- 2. Analyze the development of archaeological theory, from processual to post-processual approaches, and their impact on research practices.
- 3. Apply different research designs and methodologies in archaeological studies, using examples from both India and other parts of the world.
- 4. Develop skills in field data collection, analysis, and research proposal writing, preparing for advanced research in archaeology.

### Unit – 1: Research Methodology in Archaeology

- a. Application of the scientific method in archaeology and post-positivist responses.
- b. Basic concepts in philosophy of science used in research methodology: induction, deduction; hypothesis; proposition, analogy and explanation, and nomothetic versus idiographic controversy.

# **Unit – 2: Processual Archaeology**

- a. New archaeology and related trends: behavioral archaeology, Marxist trends, cultural materialism, *Annales* school and middle range research.
- b. Shortcomings of the new archaeology and the rise of post-processual archaeology.

# Unit – 3: Post-Processual Archaeology

- a. Main trends within post-processual archaeology: cognitive archaeology, structuralist and hermeneutical trends, impact of postmodernism, feminist archaeology.
- b. Application of the new archaeology and later trends in Indian archaeology.

# Unit – 4: Research design & Analytical Archaeology

- a. Principal aspects of research design formulation; examples of planned archaeological research: outside India and Indian examples.
- b. Techniques of field data collection and analysis.
- c. Thesis/proposal writing.

# **Recommended Readings**

Bernard Knapp, B. (Ed.). 1992. *Archaeology, Annales and Ethnohistory*. Cambridge University Press.

Binford, L.R. 1989. Debating Archaeology. New York: Academic Press.

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Hodder, Ian. (ed). 1982. *Symbolic and Structural Archaeology*. Cambridge: Cambridge University Press.

Hodder, Ian. 1992. Theory and Practice in Archaeology. London: Routledge.

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Johnson, M. 1999. Archaeological Theory: An Introduction. Malden (Ma): Blackwell Publishers.

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# Museum Management Course code: ARC17305DCE

Credits: (4) (L+T) Maximum Marks: 100 Minimum Marks: 40

# **Course Description:**

This course provides a comprehensive understanding of museum management, focusing on the principles of museology, the history and types of museums, and the practical aspects of managing museum collections. Students will explore the processes involved in artifact collection, documentation, and classification, as well as the administrative and legal frameworks governing museums. The course also emphasizes the role of museums in education and public engagement through exhibitions.

# **Expected Outcomes:**

By the end of this course, students will be able to:

- 1. Understand the basic principles and practices of museology, including the history and classification of museums in a global and Indian context.
- 2. Develop skills in the ethical collection, documentation, and classification of museum artifacts, including the use of modern technologies for data management.
- 3. Gain knowledge of museum administration, including staff roles, public relations, and the legal frameworks that govern museums in India.
- 4. Appreciate the educational role of museums, learning how to design exhibitions that serve as effective educational tools.

# **Unit – 1: Museology: Basic Principles and Practice**

- a. Definition of Museum, Museology and New Museology; Aims and Functions of Museum, Museum in an age of Globalisation.
- b. History of World and Indian Museum Movement. Types of Museums and their Classification.
- c. Report Writing on one of the following Indian Museum, Kolkata, National Museum, New Delhi, Central Asian Museum, Kashmir University Srinagar, SPS Museum Srinagar, Dogra Museum Jammu.

### **Unit – 2:** Collection and Documentation of Artifacts

- a. Aims, methods and ethics of collection
- b. Documentation; Identification, classification, accessioning, cataloguing, indexing, data processing, information retrieval, computerization, insurance of museum objects, photographic record of museum collection
- c. Principles of classification and methods of identification of museum materials; terminology for describing museum objects.
- d. Research in museums, examples of museum contribution to research, research facilities.

# **Unit – 3: Museum Administration and Legislation**

- a. Museum and their administrative control; Staff and their duties
- b. Museum and Public Relations: Visitors and their comforts
- c. Supervision and security.
- d. The Indian Treasure-Trove Act, 1878
- e. The Ancient Monuments and Archaeological Sites and Remains Act 1958
- f. Antiquity and Art Treasure Act, 1972

# **Unit – 4: Museum Exhibition and Education**

- a. Development of the key concept of an exhibition
- b. Museum educational goals
- c. Exhibition as a source of education

# **Recommended Reading**

Baxi, S.J. and V. Dwivedi. 1973. *Modern Museum: Organisation and Practice in India*. New Delhi: Abhinay Publication.

Bedekar, V.H. (Ed.) 1988. New Museology and Indian museum: Report based on proceedings of All India Seminar held at Gawahati. Assam.

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Light, R.B. et al. 1986. Museum Documentation Systems: Developments and Application. London: Butterworths.

Moore, Kevin (Ed.). 1994. Museum Management. London: Routledge.

Pearce, S.M. 1990. Archaeological Curatorship. London: Leicester University Press.

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Zaheer, M. 1963. Museum Management, accession, indexing, custody, labelling and verification & object. Lucknow: Ram Advani Book Seller.

1968. Brief Guide to the Salar Jung Museum. Hyderabad: Salar Jung Museum Board.

Kak, R.C. 1923. Handbook of the Archaeological and Numismatic Sections of the Sri Pratap Singh Museum, Srinagar, Calcutta, Thacker Spink & CO.

# Ancient Indian History - 1 Course code: ARC17306DCE

Credits: (4) (L+T) Maximum Marks: 100 Minimum Marks: 40

# **Course Description:**

This course explores the significant periods in ancient Indian history, focusing on the Vedic Age, the rise of the Magadhan Empire, and the Mauryan Empire. Students will gain insights into the social, economic, and cultural developments during these periods. The course also covers the religious traditions of ancient India, highlighting the evolution of Vedic religion, the rise of Brahmanical practices, and the emergence of various heterodox sects such as Buddhism and Jainism.

# **Expected Outcomes:**

By the end of this course, students will be able to:

- 1. Understand the socio-economic and cultural aspects of the Vedic Age, including the transition from the early to the later Vedic period.
- 2. Analyze the emergence of Magadha as a dominant empire during the second urbanization and the impact of Persian and Greek invasions on Indian society.
- 3. Examine the sources, administration, economy, and cultural developments of the Mauryan Empire.
- 4. Explore the evolution of religious traditions in ancient India, including the transformation of Vedic religion, the development of Brahmanical practices, and the rise of heterodox sects.

### **Unit-1: Vedic Age:**

Economy, Society and Culture - Early and later Vedic period

# **Unit-2: Magadhan Empire:**

- a. Janapadas, Mahajanapadas and the Emergence of Magadha as an empire: Second urbanization: Important city sites.
- b. Persian and Greek invasions and their influences.

### **Unit-3: Mauryan Empire:**

Sources: Empire building: Administrations: Economy and Culture.

### **Unit-4: Religious Traditions in Ancient India:**

Vedic Religions; Transformation of Vedic Religion into Brahmanical Religion; Shaivism, Vaisnavism, Shaktism; Heterodox sects – Buddhism, Jainism, Ajivikism, Tantricism.

(The students would be introduced to changing history of different religions and cults; sects within religious beliefs; religious texts, rituals and mythology)

# **Recommended Readings**

Altekar, A.S. 1973. Position of Women in Hindu Civilization. Delhi: Motilal Banarasidass.

Altekar, A.S. 1975. Education in Ancient India. Varanasi: Manohar Prakashan.

Moon, Vasant. (ed.) 1987. Writings and Speeches of Dr. B.R. Ambedkar. Bombay:Department of Education, Government of Maharashtra.

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Maity, S.K. 1958. *Economic Life in Northern India in the Gupta Period*. Calcutta: World Press Ltd.

Majumdar, R.C. 1922. Corporate Life in Ancient India. Calcutta: Calcutta University.

Motichandra 1977. Trade and Trade Routes in Ancient India. New Delhi. Abhinav Publications.

Pandey, Raja Bali 1966. Hindu Sanskaras. Varanasi: Chowkhamba Vidyabhavan.

Rawlinson, H.G. 1916. *Intercourse between India and the Western World*. Cambridge: Cambridge University Press.

Sharma, R.S. and V. Jha (eds.) 1974. *Indian Society: Historical Probings*. New Delhi: People's Publishing House.

Sharma, R.S. 1987. *Urban Decay in India*. New Delhi: Munshiram Manoharlal.

Sharma, R.S. 1985. *Material Culture and Social Formation in Ancient India*. New Delhi: Macmillian India.

Sharma, R.S. 1966. Light on Early Society and Economy. Bombay: Manaktalas.

Sharma, R.S. 1965. *Indian Feudalism*. Calcutta: Calcutta University.

Sharma, R.S. 1958. Shudras in Ancient India. Delhi: Motilal Banarasidass.

Sontheimer, G.D. 1977. *The Joint Hindu Family and its Evolution as a Legal Institution*. New Delhi: Munshiram Manoharlal.

Thapar, Romila 1984. *Ancient Indian Social History: Some Interpretations*. Hyderabad: Orient Longmans Ltd.

Warmington, E.H. 1928. *Commerce between the Roman Empire and India*. Cambridge: Cambridge University Press.

Wheeler, R. E. M. 1954. Rome beyond the Imperial Frontiers. London: G.Bell and Sons. Ltd.

# Environmental Archaeology Course code: ARC17307DCE

Credits: (4) (L+T+P) Maximum Marks: 100 Minimum Marks: 40

### **Course Description:**

This course provides an in-depth exploration of Environmental Archaeology, focusing on the relationship between human societies and their environments during the Quaternary period. Students will examine the geological time scale, the distinctive features of the Quaternary period, and the methods used in palaeo-environmental reconstruction. The course also covers the stratigraphy of significant regions in India, including aeolian deposits, river systems, and sea level fluctuations.

# **Expected Outcomes:**

By the end of this course, students will be able to:

- 1. Understand the nature, scope, and significance of Environmental Archaeology, particularly within the context of the Quaternary period.
- 2. Identify and analyze the distinctive environmental features of the Quaternary period, including glacial, fluvial, lacustrine, and aeolian processes.
- 3. Reconstruct past environments through the study of ancient vegetation, fauna, and climatic variations.
- 4. Apply knowledge of Quaternary stratigraphy to specific regions in India, focusing on aeolian stratigraphy, river systems, and sea level changes.

### **Unit – 1: Introduction**

- a. Nature and Scope.
- b. Geological Time Scale.
- c. Quaternary Period

### **Unit – 2: Distinctive Features of Quaternary Period**

- a. Glacial.
- b. Fluvial
- c. Lacustrinal
- d. Aeolian

### **Unit – 3: Paleo-environmental Reconstruction**

- a. Ancient Vegetation.
- b. Ancient Fauna.
- c. Climatic Variations

### **Unit – 4: Quaternary Stratigraphy**

- a. Aeolian Stratigraphy (Western India).
- b. Indian Rivers (Northern India).
- c. Sea Level Fluctuations.

#### **Recommended Reading:**

Goldberg, P., and R. I. Macphail. 2006. Practical and Theoretical Geoarchaeology. Oxford: Blackwell.

Holliday, Vance T.. 2004. Soils in Archaeological Research. Oxford: Oxford University Press.

Abeyratne, M., N. A. Spooner, R. Grun, and J. M. Head. 1997. Multidating studies of Batadomba Cave, Sri Lanka. Quaternary Science Reviews 16:243-255.

Bacon, A.-M., F. Demeter, P. Duringer, C. Helm, M. Bano, L. Vu The, N. T. Kim Thuy, P. O. Antoine, B. Thi Mai, N. T. M. Huong, Y. Dodo, F. Chabaux, and S. Rihs. 2008. The Late Pleistocene Duoi U'Oi cave in northern Vietnam: palaeontology, sedimentology, taphonomy and palaeoenvironments. Quaternary Science Reviews 27:1627-1654.

Barker, G. 2005. The archaeology of foraging and farming at Niah Cave, Sarawak. Asian Perspectives 44:90-106.

Barker, G., H. Barton, M. Bird, P. Daly, I. Datan, A. Dykes, L. Farr, D. Gilbertson, B. Harrisson, C. Hunj, T. Higham, L. Kealhofer, J. Krigbaum, H. Lewis, S. McLaren, V. Paz, A. Pike, P. Piper, B. Pyatt, R. Rabett, T. Reynolds, J. Rose, G. Rushworth, M. Stephens, C. Stringer, J. Thompson, and C. S. M. Turney. 2007 The 'human revolution' in lowland tropical Southeast Asia: the antiquity and behavior of anatomically modern humans at Niah Cave (Sarawak, Borneo). Journal of Human Evolution 52 243-261.

Bettis, E. A. I., D. W. Benn, and E. R. Hajic. 2008. Landscape evolution, alluvial, environmental history, and the archaeological record of the Upper Mississippi River Valley. Geomorphology 101:362-377.

Boyd, W. E. 2008. Social change in late Holocene mainland SE Asia: A response to gradual climate change or a critical climatic event? Quaternary International.

Bridgland, D. R., and R. Westaway. 2008. Climatically controlled river terrace staircases: A worldwide Quaternary phenomenon. Geomorphology 98:285-315.

Brooks, N. 2004 Beyond collapse: the role of climatic desiccation in the emergence of complex societies in the middle Holocene, in Environmental Catastrophes in Mauritania, the Desert and the Coast. Abstract Volume and Field Guide. Mauritania, 4-18 January.

2004. First Joint Meeting of ICSU Dark Nature and IGCP 490. Edited by S. Leroy and P. Costa, pp. 26-30.

Cullen, H. M., P. B. deMenocal, S. Hemming, G. Hemming, F. H. Brown, T. Guilderson, and F. Sirocko. 2000 Climate change and the collapse of the Akkadian empire. Geology 28:379-382.

Hoffecker, J. F., V. T. Holliday, M. V. Anikovich, A. A. Sinitsyn, V. V. Popov, S. N. Lisitsyn, G. M. Levkovskaya, G. A. Pospelova, S. L. Forman, and B. Giaccio. 2008. From the Bay of Naples to the River Don: the Campanian Ignimbrite eruption and the Middle to Upper Paleolithic transition in Eastern Europe. Journal of Human Evolution 55:858-870.

Huffman, F. O., J. D. Vos, W. B. Aart, and F. Aziz. 2010. Provenience Reassessment of the 1931–1933 Ngandong Homo erectus (Java), Confirmation of the Bone-Bed Origin Reported by the Discoverers. PaleoAnthropology 2010:1-60.

Kealhofer, L., P. Grave, H. Genz, and B. Marsh. 2009. Post-Collapse: the re-emergenc of polity in Iron age Bogazkoy, Central Anatolia. Oxford Journal of Archaeology 28:275-300.

Kourampas, N., I. A. Simpson, N. Perera, S. U. Deraniyagala, and W. H. Wijeyapala. 2009. Rockshelter sedimentation in a dynamic tropical landscape: Late Pleistocene-Early Holocene archaeological deposits in Kitulgala Beli-lena, southwestern Sri Lanka. Geoarchaeology 24:677-714.

Marriner, N., and C. Morhange. 2007 Geoscience of ancient Mediterranean harbours. Earth-Science Reviews 80:137-194.

O'Sullivan, P. B. 2008. The 'collapse' of civilizations: what palaeoenvironmental reconstruction cannot tell us, but anthropology can. The Holocene 18.

Pappu, R. S. 1995. The Contribution of Earth Science to the Development of Indian Archaeology, in Quaternary Environments and Geoarchaeology of India, Edited by S. Wadia, R. Korisettar, and V. S. Kale, pp. 414-434. Bangalore: Memoirs of the geological Society of India 32.

Pollard, A. M. 1999 Geoarchaeology: an introduction. Geological Society, London, Special Publications 165:7-14.

Tainter, J. A. 1988. The Collapse of Complex Societies. Cambridge: Cambridge University Press

2005. Dark Ages in archaeology/systems collapse, in Archaeology: the key concepts. Edited by C. Renfrew and P. G. Bahn, pp. 40-. London: Routledge.

Weiss, H., and R. S. Bradley. 2001 What Drives Societal Collapse? Science 291:609-61.

Weiss, H., M. A. Courty, W. Wetterstrom, G. Guichard, F. Senior, R. H. Meadow, and A. Curnow. 1993. Genesis and Collapse of Third Millennium North Mesopotamian Civilization. Science 261:995-1004.

Westaway, K. E., M. J. Morwood, R. G. Roberts, A. D. Rokus, J. X. Zhao, P. Storm, F. Aziz, G. van den Bergh, P. Hadi, Jatmiko, and J. De Vos. 2007. Age and biostratigraphic significance of the Punung Rainforest Fauna, East Java, Indonesia, and implications for Pongo and Homo. Journal of Human Evolution 53:709-17.

# Archaeological Sites of Kashmir Course code: ARC17308GE General Elective

Credits: (2) (L+T+P) Maximum Marks: 50 Minimum Marks: 20

#### **Course Description:**

This course offers an introduction to the key archaeological sites of Kashmir, spanning from prehistoric times to the early historic period. Students will explore significant sites such as Burzahom, Gufkral, and Harwan, among others, gaining insights into the region's rich cultural and historical heritage. The course focuses on the archaeological evidence uncovered at these sites and their contribution to our understanding of Kashmir's past.

## **Expected Outcomes:**

By the end of this course, students will be able to:

- 1. Identify and describe the major prehistoric and early historic archaeological sites in Kashmir.
- 2. Understand the cultural and historical significance of these sites within the broader context of South Asian archaeology.
- 3. Analyze the archaeological findings from these sites and interpret their impact on the understanding of Kashmir's ancient history.

#### **Unit – 1: Prehistoric Sites**

- a. Burzahom,
- b. Gufkral,
- c. Kanispora,
- d. Bomai.

#### **Unit – 2: Early Historic Sites**

- a. Semthan
- b. Harwan
- c. Ushkur
- d. Kanispora
- e. Kutbal,
- f. Ahan

## **Fourth Semester**

# Dissertation Course code: ARC17401CR

**Credits:** (12) (**P**)

Maximum Marks: 300 Minimum Marks: 120

#### **Description:**

The dissertation course provides an opportunity for students to engage in independent research, culminating in the submission of a dissertation. Students may opt for this in lieu of two core papers during Semester IV. This course allows students to explore a specific area of interest in depth, under the supervision of a faculty member, and contribute original research to the field of archaeology.

#### **Expected Outcomes:**

By the end of this course, students will be able to:

- 1. Develop and present a comprehensive research proposal, including aims, methodology, and expected contributions to the field.
- 2. Conduct independent research, applying appropriate archaeological methods and analysis.
- 3. Write and submit a scholarly dissertation that reflects an understanding of the chosen topic and contributes to existing knowledge in the discipline.
- 4. Demonstrate the ability to manage a research project from conception to completion, including data collection, analysis, and synthesis.

#### **DISSERTATION**

- 1. A student may opt for writing a Dissertation in lieu of two of the core papers for semester IV.
- 2. The dissertation application form shall be submitted by the student within 30 days of the commencement of teaching for semester III.
- 3. The application shall be submitted along with necessary dissertation fee (non-refundable), along with a detailed synopsis of his research and concurrence of the research guide. He/She will be permitted to proceed with the dissertation only after it is approved by the Departmental Committee.
- 4. The synopsis shall be signed by the student and the research guide and shall consist of:
  - a) Current status of knowledge of the topic of research;
  - b) Aims of proposed research and methodology to be adopted;
  - c) Nature of data to be collected;
  - d) Proposed method of analysis of data;
  - e) Expected contribution to the knowledge of the subject; and
  - f) A detailed bibliography of the literature on the topic selected.
- 5. Every student, who offers dissertation, shall work under the supervision of a teaching faculty member of the Institute. The topic of the dissertation and the supervisor shall be chosen by the student in consultation with the Departmental Committee. If a candidate's proposed work is of an interdisciplinary nature, one more internal supervisor from the related discipline may be appointed.
- 6. A student shall complete his dissertation on the topic and under the supervision of a guide approved by the Departmental Committee. He shall not be permitted to change the topic and/or guide once approved by the Departmental Committee.
- 7. The cover of the dissertation shall mention the topic of the dissertation and shall contain the following matter:

# "Dissertation submitted to Department of Culture and Archaeology, CCAS in partial fulfillment of the Degree of Master of Arts".

- 8. The student shall prepare two copies of the dissertation. He shall submit one copy of the dissertation to the Academic Section and shall retain the second copy with himself to be submitted, only if required later on by the Academic Section.
- 9. The dissertation shall have the following certificate from the research guide:

#### **CERTIFICATE**

**CERTIFIED** that the work incorporated in this thesis (entitled)

Submitted by (Name of the student) was carried out by the student under my supervision. Such material as has been obtained from other sources has been duly acknowledged in the dissertation.

(Sign. of the student)

(Sign. of research guide)

- 11. Revaluation of the dissertation shall be done only when a student gets 40 and above marks.
- 12. A student who fails to get the minimum required marks (i.e. 40) shall revise and resubmit it for evaluation as per the comments of the examiner. Revised dissertation shall be submitted for evaluation at any semester-end examination.
- 13. The dissertation shall be submitted to the Academic Section. It shall be submitted not later than first week of the last month of the semester IV.

# Conservation of Cultural Property Course code: ARC17402DCE

Credits: (4) (L+T+P) Maximum Marks: 100 Minimum Marks: 40

#### **Course Description:**

This course focuses on the principles and practices of conserving cultural properties, including ancient structures and archaeological materials. Students will explore various methods of preservation and restoration, with attention to both inorganic and organic materials. The course covers the causes of deterioration and the techniques used to address them, offering a comprehensive understanding of how to maintain and protect cultural heritage.

#### **Expected Outcomes:**

Upon completion, students will be able to:

- 1. Identify different types of ancient structures and materials and understand their deterioration causes.
- 2. Apply preservation and conservation techniques to both inorganic and organic materials.
- 3. Develop strategies for the restoration of cultural properties.
- 4. Understand the significance of conserving material culture and the challenges involved.

#### **Unit-1: Ancient Structures.**

- a. Types of Structures
- b. Material of Structures
- c. Causes of deterioration

#### **Unit-2: Conservation of Structures**

- a. Preservation Methods
- b. Conservation Techniques
- c. Restoration of Structures

## **Unit-3: Inorganic Archaeological Materials**

- a. Types of Materials
- b. Causes of deterioration
- c. Preservation and Conservation Techniques

## **Unit-4: Organic Materials**

- a. Material Culture
- b. Causes of Deterioration
- c. Preservation and Conservation Techniques

#### **Recommended Reading:**

Batra, M. L. 1996. Conservation: Preservation and Restoration of Monuments. New Delhi: Aryan Books International.

Basham, A.L. 2007. The Illustrated Cultural History of India. Oxford University Press.

Bhandari, N.K. 2007. Cultural Heritage of India. Delhi: Eastern Book Corporation.

Bhowmik, S. K. 2004 Heritage Management: Care, Understanding and Appreciation of Cultural Heritage. Jaipur: Publication Scheme.

Biswas, Sachindra Sekhara. 1999. Protecting the Cultural Heritage (National Legislation and International Conservation). New Delhi: Aryan Books International.

Deshpande, M. N. 1994. Care of Cultural Heritage. New Delhi: National Museum Institute.

Dhawan, Shashi. 1996. Recent Trends in Conservation of Art Heritage. Delhi: Agam Kala Prakashan.

Ghoshmaulik, S. K. and K.K. Bass 2001. Understanding Heritage: Role of Museum. Bhubaneswar: Academic Staff College.

Howard, Peter. 2003. Heritage: Management, Interpretation, Identity. London: Continuum.

Paddayya, K. 2004. Heritage management with special reference to modern impacts on Archaeology sites of lower Deccan. Deccan Studies 1 (2): 7-24.

Rao, P.R. 1988. Cultural Heritage of India. Delhi: Sterling.

Renfrew, C. 2000. Loot, Legitimacy and Ownership. London: Duckworth.

Singh, L.K. 2008. Indian Cultural Heritage from Tourism Perspective. Delhi: ISHA Books.

Thapar, B.K. 1989 Conservation of the Indian Heritage. New Delhi: Cosmo Publication.

# Cultural Heritage Management Course code: ARC17403DCE

Credits: (4) (L+T+P) Maximum Marks: 100 Minimum Marks: 40

### **Course Description:**

This course introduces students to the principles and practices of managing cultural heritage. It covers the definition and significance of heritage preservation, the role of international organizations such as UNESCO, and the specific heritage management landscape in India and Jammu & Kashmir. The course also addresses challenges to cultural heritage, including natural and man-made threats, and explores the impact of heritage tourism and public participation.

#### **Expected Outcomes:**

Upon completion, students will be able to:

- 1. Define and articulate the importance of cultural heritage and its preservation.
- 2. Understand the role of international and national organizations in heritage management.
- 3. Analyze challenges facing cultural heritage and propose solutions for effective management.
- 4. Conduct field studies and write detailed reports on heritage management practices, with a focus on Jammu and Kashmir.

#### **Unit-1: Introduction to Cultural Heritage Management**

- a. Definition, Scope and Importance of Heritage and Heritage Preservation and Management
- b. World Heritage Sites, Role of UNESCO
- c. World Heritage Sites
- d. world Heritage Sites in India

#### Unit-2: Cultural Heritage Management in India

- a. Role of Government bodies
- b. Legislation
- c. Role of Non-Government organizations

#### **Unit-3: Challenges to Cultural Heritage**

- a. Natural and man-made challenges
- b. Public participation in preservation of cultural heritage
- c. Heritage Tourism

#### Unit-4: Heritage Management in Jammu and Kashmir.

- a. Heritage Management in Jammu and Kashmir.
- b. Field study and report writing (The students would submit a detailed report on heritage management in J & K on the basis of field study, oral histories and written sources).

#### **Recommended Reading:**

Batra, M. L. 1996. Conservation: Preservation and Restoration of Monuments. New Delhi: Aryan Books International.

Basham, A.L. 2007. The Illustrated Cultural History of India. Oxford University Press.

Bhandari, N.K. 2007. Cultural Heritage of India. Delhi: Eastern Book Corporation.

Bhowmik, S. K. 2004 Heritage Management: Care, Understanding and Appreciation of Cultural Heritage. Jaipur: Publication Scheme.

Biswas, Sachindra Sekhara. 1999. Protecting the Cultural Heritage (National Legislation and International Conservation). New Delhi: Aryan Books International.

Deshpande, M. N. 1994. Care of Cultural Heritage. New Delhi: National Museum Institute.

Dhawan, Shashi. 1996. Recent Trends in Conservation of Art Heritage. Delhi: Agam Kala Prakashan.

Ghoshmaulik, S. K. and K.K. Bass 2001. Understanding Heritage: Role of Museum. Bhubaneswar: Academic Staff College.

Howard, Peter. 2003. Heritage: Management, Interpretation, Identity. London: Continuum.

Paddayya, K. 2004. Heritage management with special reference to modern impacts on Archaeology sites of lower Deccan. Deccan Studies 1 (2): 7-24.

Rao, P.R. 1988. Cultural Heritage of India. Delhi: Sterling.

Renfrew, C. 2000. Loot, Legitimacy and Ownership. London: Duckworth.

Singh, L.K. 2008. Indian Cultural Heritage from Tourism Perspective. Delhi: ISHA Books.

Thapar, B.K. 1989 Conservation of the Indian Heritage. New Delhi: Cosmo Publication.

# Ancient Indian History – 2 Course code: ARC17404DCE

Credits: (4) (L+T) Maximum Marks: 100 Minimum Marks: 40

#### **Course Description:**

This course examines the history of India from the decline of the Mauryan Empire to the post-Gupta period. It focuses on the rise of smaller states such as the Sungas, Kanavas, and Pallavas, and the impact of Central Asian conquests, including the Indo-Greeks, Sakas, Parthians, Kushans, and Huns. The course also covers the political, economic, and cultural aspects of the Satvahanas and the Gupta Empire, and explores the changes in political, economic, and cultural conditions during the post-Gupta period.

#### **Expected Outcomes:**

Upon completion, students will be able to:

- 1. Analyze the transition from the Mauryan Empire to smaller regional states.
- 2. Assess the effects of Central Asian invasions on Indian history.
- 3. Discuss the achievements and developments under the Satvahanas and the Gupta Empire.
- 4. Understand the historical developments of the post-Gupta period.

#### Unit-1: Decline of Mauryan Empire and the rise of smaller states:

- 1. Sungas, Kanavas and Pallavas: Cultural History;
- 2. Central Asian conquest of India and its consequences; Indo-Greeks, Sakas, Parthians, Kushans and Huns: Political history; economic, social and cultural impact.

#### **Unit-2: Satvahanas:**

Political History, Economy, Society and Culture.

#### **Unit-3: Gupta Empire:**

- i. Excavated remains of Gupta period;
- ii. Empire building under Gupta rulers, Polity, Economy, Society and Culture.

## **Unit-4: Post Gupta Period:**

Political, Economic and Cultural history.

#### **Recommended Readings**

Allchin, F.R. 1995. *The Archaeology of Early Historic South Asia: the Emergence of Cities and States*. Cambridge: Cambridge University Press.

Devahuti, D. 1970. Harsha - A Politcal History. Oxford: Clarendon Press.

Goyal, S.R. 1986. Harsha and Buddhism. Meerut: Kusumajali Prakasan.

Jha, Amiteshwar and Dilip Rajgor. 1994. *Studies in the Coinage of the Western Kshatrapas*. Anjaneri (Nasik): Indian Institute of Research in Numismatic Studies.

Kosambi, D.D. 1985. An Introduction to the Study of Indian History. (reprint) Bombay: Popular Prakasan.

Majumdar, R.C. and A.D. Pusalkar (ed.). 1950. *The Vedic Age*. Bombay: Bharatiya Vidya Bhavan.

Majumdar, R.C. (ed.). 1966. The Age of Imperial Unity. Bombay: Bharatiya Vidya Bhavan.

Majumdar, R.C. (ed.). 1970. The Classical Age. Bombay: Bharatiya Vidya Bhavan.

Majumdar, R.C. (ed.). 1971. The Age of Imperial Kannauj. Bombay: Bharatiya Vidya Bhavan.

Majumdar, R.C. (ed.). 1972. The Struggle for the Empire. Bombay: Bharatiya Vidya Bhavan.

Majumdar, R.C., H.C. Raychoudhuri, and K. Datta. 1961. *Advanced History of India*. London: Macmillian.

Mirashi, V.V. 1981. *The History and Inscriptions of the Satavahanas and the Western Kshatrapas*. Bombay: State Board of Literature.

Narain, A.K. 1957. The Indo-Greeks. Oxford: Oxford University Press.

Raychoudhuri, H.C. 1950. *Political History of Ancient India*. (5th ed.) Calcutta: University of Calcutta.

Sharma, R.S. 1965. *Indian Feudalism*. Calcutta: University of Calcutta.

Shastri, K.A.N and G. Srinivasachari. 1970. *Advanced History of India*. London: Macmillan and Co.

Shastri, K.A.N. 1966. History of South India. (IIIrd ed.) Oxford: Oxford University Press.

Shastri, K.A.N. 1952. The Age of the Nandas and Mauryas. Banaras: Motilal Banarsidas.

Shastri, K.A.N. 1957. A Comprehensive History of India vol. II. (The Mauryas and Satavahanas). Bombay: Orient Longmans.

Shastri, A.M. (ed.). 1999. Age of Satavahanas, 2 vols., Aryan Prakashan, New Delhi.

Thapar, Romila. 1973. Ashoka and the Decline of the Mauryas (2nd ed) Oxford: Oxford University Press.

Stein, M.A. (translation) 1989a [1900]. Kalhana's Rajatarangini, vol. I, New Delhi, Motilal Banarsidass Publishers.

Stein, M.A. (translation) 1989b [1900]. Kalhana's Rajatarangini, vol. II, New Delhi, Motilal Banarsidass Publishers.

Stein, M.A. 2005 [1899]. Memoir on Maps Illustrating the Ancient Geography of Kashmir, Srinagar, Ali Mohammad & Sons.

Sufi, G.M.D. 1996. Kashir Being a History of Kashmir from the Earliest Times to our own, vol. II, New Delhi, Capital Publishing House.

Shali, S.L. 1993. Kashmir: History and Archaeology Through the Ages, New Delhi, OM Publications.

#### ETHNO-ARCHAEOLOGY Course code: ARC17405DCE

Credits: (4) (L+T+P) Maximum Marks: 100 Minimum Marks: 40

#### **Course Description:**

This course explores ethno-archaeology, which uses ethnographic data to inform the interpretation of archaeological findings. It covers the foundational concepts, scope, and methods of ethno-archaeology, and how this approach aids in reconstructing past material cultures such as settlement patterns, technology, and ceramics. The course includes studies of ethno-archaeological research in both Indian and international contexts, examining the relevance of current practices and traditions for understanding ancient societies.

#### **Expected Outcomes:**

Upon completion, students will be able to:

- 1. Understand the principles and methods of ethno-archaeology and their application in archaeological research.
- 2. Analyze the relevance of contemporary ethnographic data to the interpretation of past cultures.
- 3. Evaluate ethno-archaeological studies conducted in India and abroad, including the study of living hunter-gatherers and shifting cultivation practices.
- 4. Apply ethno-archaeological insights to scientific fields such as biological anthropology, ethno- botany, and archaeo-zoology.

## **Unit** − 1: Concepts in Ethnoarchaeology

- a. Nature and interrelationship of archaeological and ethnographic records: Role of Analogy.
- b. Definition, scope and methods of ethnoarchaeology;
- c. Brief review of the Ethnoarchaeological researches in India.
- d. Ethnoarchaeology and reconstruction of past material culture; e.g. Settlement pattern, technology, ceramics, food processing, etc.

#### **Unit – 2: Ethnoarchaeological studies in Indian settings**

- a. Forager/collector model to Palaeolithic and Mesolithic societies.
- b. Ethnoarchaeological researches on the living hunter-gatherers in central, western and southern regions of India. Pardhis, Van Vagris, Korkus, Gonds, Bastar, Birhors, Yanadis, Chenchus, and Musahars. Veddas of Sri Lanka.
- c. Present day shifting cultivation practices and their relevance to the study of Mesolithic, Neolithic and Chalcolithic cultures of India.
- d. Ethnoarchaeological research for reconstructing the early agro-pastoral Chalcolithic communities of central and western India; Mahadeo Kolis, Bhils and Dhangars.
- e. Living Megalithic tradition in India.
- f. Ethnoarchaeology of marginal resource utilization

#### **Unit** − **3**: Ethnoarchaeological studies outside India:

a. Important Ethnoarchaeological studies of living hunter-gatherer societies outside India: Eskimos of Alaska, Bushmen of the Kalahari Desert and Australian Aborigines

#### Unit – 4: Ethnoarchaeological applications for Sciences in Archaeology:

a. Role of analogy in problems pertaining to the application of Sciences in Archaeology; biological anthropology, ethno-botany, and Archaeo-zoology.

#### **Recommended Readings:**

Ajay Pratap 1987. Shifting Cultivation in the Rajmahal Hills of India, in Archaeology as Long-term History, (Ed) Ian Hodder, pp. 68-83. Cambridge: Cambridge University Press.

Ajay Pratap 2000. The Hoe and the Axe: Ethnohistory of Shifting Cultivation in Eastern India. New Delhi: Oxford University Press.

Allchin, B. 1985. Ethnoarchaeology in South Asia, in South Asian Archaeology 1983, (J. Schotsmans and M. Taddei Eds.), pp 21-33 Napels: Instituto Universitario Orientale.

Allchin, B. 1994. Living Traditions: South Asian Ethnoarchaeology. New Delhi: Oxford & IBH Co Pvt Ltd.

Allchin, F. R. 1959. Poor Men's Thalis: A Deccan Potter's Technique, Bulletin of the School of Oriental and African Studies, 22(2): 250-7.

Ansari, S. 2000. Small game hunting Musahars: An Ethnoarchaeological Approach, Puratattva, 30: 141-150.

Ansari, S. 2001. Fishing Practices Among the Mallahs of Allahabad District, Uttar Pradesh, Man and Environment, 26 (1): 39-55.

Ansari, S. 2005. Ethnoarchaeology of Prehistoric Settlement Pattern of South-Central Ganga Valley, Indian Society for Prehistoric and Quaternary Studies Monograph Series No. 4, Pune: Indian Society for Prehistoric and Quaternary Studies.

Ansari, S. 2005. Prehistoric Settlement Pattern of South-Central Ganga Valley: An Ethnoarchaeological Perspective in Gurudakshina: Facets of Indian Archaeology, (Ed.) Alok Kumar Kanungo, pp. 287-328, Oxford: BAR International Series 1433.

Ansari, S. 2011. Ethnorar chaeological Perspectives of Prehistonic settlement Patterns of South-Central Ganga Valley Oxford: BAR International Series.

Arati Deshpande-Mukherjee 2000. An Ethnographic Account of Contemporary Shellfish Gathering on the Konkan Coast, Maharashtra, Man and Environment 25 (2): 79-92.

Arati Deshpande-Mukherjee 2006. Reconstructing the Past: Ethnographic Observation on Shell working at Bishnupur, in Past and Present Ethnoarchaeology in India, (Gautam Sengupta,

Griffin, P.B. and W.G. Solheim II. 1990. Ethnoarchaeological Research in Asia, Asian Perspectives 28 (2): 145-161.

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# Terracotta Art Course code: ARC17406GE General Elective

Credits: (2) (L+T) Maximum Marks: 50 Minimum Marks: 20 Course Description:

This course provides an overview of terracotta art, focusing on its geographical spread, significant sites, and historical development. It explores terracotta art from pre-Kushan and Kushan eras, examining sculptures and their connections with other cultures and civilizations.

#### **Expected Outcomes:**

Upon completion, students will:

- 1. Understand the geographical and historical context of terracotta art.
- 2. Identify and analyze important sites and chronological phases of terracotta art.
- 3. Recognize and interpret terracotta sculptures from the pre-Kushan and Kushan periods and their cultural affiliations.

#### **Unit – 1: Introduction**

- a. Geographical Extent
- b. Important sites
- c. Chronology

#### Unit – 2 Terracotta Art Pre Kushan and Kushan Era

- a. Terracotta Sculptures
- b. Affinities with other cultures and civilization.

#### **Recommended Readings:**

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