

**SYLLABUS  
FOR MASTER OF ARTS IN ARCHAEOLOGY (2 Year)  
2025**



**PG Programme Archaeology  
Centre of Central Asian Studies  
School of Social Science  
University of Kashmir  
Srinagar**

in accordance with National Education Policy (NEP) 2020

**About PG Programme Archaeology**

India, with its vast geographical expanse and deep cultural continuity, is home to one of the richest archaeological heritages in the world. From Paleolithic sites and Neolithic settlements to the urban centres of the Indus Valley Civilization, megalithic cultures, monumental architecture of the early historic period, and a long sequence of Buddhist, Hindu, Jain, and Islamic traditions, the subcontinent offers an unparalleled spectrum of material culture and historical depth. Its diverse archaeological record reflects complex interactions between ecological settings, technological innovations, and socio-religious transformations over millennia.

In recognition of this profound heritage, University of Kashmir has introduced a Postgraduate Programme in Archaeology. The programme aims to provide students with a comprehensive understanding of archaeological theory and practice. It offers rigorous academic training in areas such as field archaeology (excavation and exploration), artefact analysis, museology, experimental archaeology, conservation, and heritage management. Practical field-based learning is a core component, equipping students with the methodological and analytical skills necessary for professional careers in archaeology and heritage studies.

A distinctive feature of the programme is the integration of the Indian Knowledge System (IKS), which imparts critical insights into indigenous sciences, philosophies, and cultural practices. This interdisciplinary approach enhances students' ability to interpret archaeological data within broader civilizational frameworks. Additionally, the inclusion of Experimental Archaeology

allows students to engage directly with ancient technologies and practices through hands-on reconstruction and replication exercises, fostering experiential learning.

The programme encourages research not only on the archaeological heritage of India but also extends its academic scope to the other parts of Globe. It promotes interdisciplinary collaboration by intersecting archaeology with disciplines such as history, environmental studies, sciences, and digital technologies. The introduction of PG Programme in Archaeology at University of Kashmir marks a significant step toward safeguarding the region's cultural legacy, while also fostering educational, research, and tourism opportunities. Through this initiative, the University aspires to become a leading centre for Himalayan archaeology and cultural preservation.

### **Introduction**

Master of Arts in Archaeology is a two-year postgraduate programme designed to cultivate critically informed, analytically skilled, and research-oriented students with a comprehensive understanding of archaeology from regional, national, and global perspectives. Archaeology, as a discipline, reconstructs past human societies by examining material remains, landscapes, and cultural artifacts. This process provides valuable insights into the evolution of human history, technological advancements, and socio-cultural transformations over time. A nuanced understanding of the past is essential for interpreting human-environment interactions and the development of civilizations.

The programme offers students the opportunity to engage with tangible cultural heritage and explore interdisciplinary domains such as geoarchaeology, archaeozoology, archaeobotany, and computational archaeology and so forth. It emphasizes the application of scientific techniques in archaeological research and nurtures methodological and theoretical proficiency. Department of Archaeology adopts a hands-on, experiential approach to learning that incorporates field surveys, excavations, laboratory analysis, Indology, Indian Knowledge System (IKS), experimental archaeology, and heritage management.

The curriculum includes core courses, discipline-centric electives (DCE), and skill-based courses, enabling students to acquire both broad-based knowledge and domain-specific expertise. The programme structure is aligned with the National Education Policy (NEP) 2020 and follows the Curriculum and Credit Framework for Postgraduate Programmes issued by the University Grants Commission (UGC). It is based on the Learning Outcomes-Based Curriculum Framework (LoCF), promoting active engagement in archaeological research, fieldwork, and critical discourse.

In accordance with NEP 2020, the programme adopts an Outcome-Based Education (OBE) approach. This model emphasizes what students are expected to learn and achieve by the end of the programme. It focuses on defining and attaining clearly stated Programme Learning Outcomes (PLOs) and Course Learning Outcomes (CLOs).

- Programme Learning Outcomes (PLOs) are broad, overarching statements that reflect the knowledge, skills, values, and competencies students are expected to acquire during the entire course of study.
- Course Learning Outcomes (CLOs) are specific, measurable statements outlining what students will be expected to perform or demonstrate at the end of each course.

To ensure quality and effectiveness, the attainment of these outcomes is systematically monitored and assessed. This ensures that the educational objectives of the programme are met and that students are adequately prepared for academic research, professional careers, and societal engagement.

### **Credit Requirements and Eligibility for the PG Programme**

Subject to the Admission Policy of the University, a candidate must have passed 3- or 4-Year Bachelor's examination from the University of Kashmir or from any other recognized University /Institution, whose examination has been recognized as equivalent thereto and fulfils other conditions of eligibility as prescribed by the University from time to time, for admission to the 1<sup>st</sup> or 3<sup>rd</sup> Semester of the programme.

- For a 2-year (4-semester) Master's degree programme, a 3-Year (6-Semester) Bachelor's Degree with a minimum total of 120 Credits including a minimum of 12 credits in the relevant subject shall be the eligibility criteria for admission.
- For a 1-Year (2-Semester) Master's programme, a 4-Year (8-Semester) Bachelor's Degree with Honours / Honours with Research, with a minimum total of 160 Credits including 20 credits in the subject, shall be the eligibility criteria.

However, for the disciplines where the admissions, prior to the implementation of NEP-2020, were offered without any specific subject at the UG level, the existing procedure shall continue till the University, on the basis of recommendations of the Boards of Studies of the concerned discipline, notifies otherwise.

### **National Higher Education Qualifications Framework (NHEQF) Levels in the PG Archaeology Programme**

The National Higher Education Qualifications Framework (NHEQF) categorizes academic qualifications into different levels, representing a progressive continuum of learning outcomes. These levels define what a student should know, understand, and be able to do at each stage of higher education.

Since this MA in Archaeology is a two-year postgraduate programme after a three-year undergraduate degree, it falls under NHEQF Level 6.5. This means that students are expected to:

- Develop specialized knowledge in archaeology and related disciplines
- Apply critical thinking and research skills in analysing archaeological data
- Engage in interdisciplinary approaches such as geoarchaeology, archaeobotany, and computational archaeology
- Prepare for careers in academia, heritage management, and research institutions

**Table 1: NHEQF Levels in the Postgraduate Archaeology Programme**

S. No.	Qualification	NHEQF Level	Credits	Credit Points
1	Postgraduate diploma	6	40	240
2	One-year postgraduate (after four-year undergraduate)	6.5	40	260
3	Two-year postgraduate (after three-year undergraduate)	6.5	40 + 40	260
4	Two-year postgraduate (after four-year undergraduate)	7	40 + 40	280

- This MA in Archaeology is at Level 6.5, meaning it focuses on advanced knowledge, research skills, and interdisciplinary approaches
- Students completing this programme will have the knowledge and skills necessary for doctoral studies (Level 8) or professional careers in archaeology
- The NHEQF ensures that all postgraduate qualifications have clearly defined learning outcomes and credit structures, making degrees nationally and internationally comparable.

### **Graduate Attributes of Postgraduate Programmes in Archaeology**

Students who complete the MA in Archaeology are expected to develop advanced knowledge, critical thinking, and research skills that extend beyond undergraduate-level education. The programme equips students with specialized archaeological expertise, enabling them to conduct independent research, analyse cultural heritage, and apply scientific methods in the study of past societies. The curriculum includes a diverse range of subjects, covering archaeological theories, field practices, cultural heritage studies, scientific approaches to material culture and traditional knowledge.

### **Core Graduate Attributes in Archaeology**

- a. Demonstrate a deep understanding of archaeological theories, methods, and field practices, extending beyond foundational knowledge. This includes the ability to reconstruct past human societies using material culture, landscapes, and environmental data. The curriculum also encourages practical engagement through hands-on approaches to understanding ancient technologies.

- b. Apply archaeological knowledge to new or unfamiliar research environments, including excavation sites, museum collections, and digital heritage projects. Use multidisciplinary approaches integrating history, anthropology, geology, and scientific methods such as geoarchaeology and archaeobotany.
- c. Integrate knowledge from various subfields of archaeology, handle complex datasets, and formulate interpretations even with incomplete or fragmentary evidence. Develop an awareness of ethical and heritage conservation responsibilities in archaeology.
- d. Effectively communicate archaeological findings, research conclusions, and heritage interpretations to both academic specialists and the general public. Present research in scholarly publications, exhibitions, museums, and digital platforms.
- e. Develop independent learning and research skills, allowing for self-directed academic inquiry. Gain expertise in archaeological fieldwork, scientific analysis, and computational archaeology, along with an understanding of traditional knowledge systems and experimental methodologies where relevant.

### **Descriptors of Learning Achievements under NHEQF for Archaeology**

The National Higher Education Qualifications Framework (NHEQF) defines postgraduate learning achievements in archaeology based on the following key elements:

- **Knowledge and understanding** – Mastery of archaeological theories, excavation techniques, dating methods, and conservation practices, including insights from traditional knowledge systems.
- **General, technical, and professional skills** – Proficiency in artifact analysis, GIS applications, remote sensing, and scientific documentation, complemented by experimental approaches in reconstructing past technologies.
- **Application of knowledge and skills** – Ability to conduct archaeological surveys, interpret material culture, and analyse environmental data from excavation sites.
- **Generic learning outcomes** – Critical thinking, interdisciplinary research, and ethical decision-making in heritage conservation and cultural resource management.
- **Constitutional, humanistic, ethical, and moral values** – Awareness of heritage laws, indigenous rights, and ethical excavation practices, ensuring responsible research and conservation efforts.
- **Employability and job-ready skills** – Training in museum management, heritage tourism, digital archaeology, and field research, enhancing career prospects in academia, government institutions, and heritage organizations.

These attributes ensure that postgraduate students in archaeology are well-prepared to contribute to archaeological scholarship, heritage conservation, and cultural management, both in India and internationally.

## Programme Structure

The **M.A. in Archaeology** is a **four-semester** programme with a **total of 96 credits**, including:

- **Core Courses (CR):** Fundamental subjects providing essential archaeological knowledge.
- **Discipline-Centric Electives Courses (DCEC):** Specialized courses for deeper exploration of archaeology.
- **Skill Enhancement Course (SEC):** Means a course which aim at imparting practical skills, hands on training, soft skills, etc. to enhance the employability of students.
- **Dissertation/Research:** A comprehensive report of the research work done on the basis of systemic, scientific, and rigorous investigations on the chosen and approved topic utilizing relevant research methods/techniques/innovations.

## Curricular Components and credit distribution for Two-Year PG Programme

**For 2-year PG:** Students entering 2-year PG after a 3-year UG programme can choose to do

- only course work in the third and fourth semester or
- course work in the third semester and research in the fourth semester or
- only research in the third and fourth semester.

### **Two-Year PG Programme**

*Table 2: Curricular Components for 2-year PG*

Curricular Components		Two-Year PG Programme (Generic and Professional) Minimum Credits			
		Course Level	Coursework	Research thesis/project/Dissertation	Total Credits
PG Diploma		400	40	-	40
1st Year (1st & 2nd Semester)		400	20	-	40
		500	20		
<b>Students exiting after 1st year will be awarded a Postgraduate Diploma</b>					
2nd Year (3rd Semester)	Coursework Only	500	20	--	20
4th Semester	Coursework only (Or)	500	20	--	20
	Research Only		4	16	20

**Table 3: Detailed Credit Distribution**

Semester	Course Type	Number of Courses	Credits Per Course	Total Credits
Semester 1	Core Course	4	4	16
	Discipline Centric Elective Course (DCEC)	1	4	4
<b>Total</b>		5		<b>20</b>
<b>Semester 2</b>				
Semester 2	Core Course	3	4	12
	Discipline Centric Elective Course (DCEC)	1	4	4
	Skill Based	1	4	4
<b>Total</b>		5		<b>20</b>
<b>Semester 3</b>				
Semester 3	Core Course	4	4	16
	Discipline Centric Elective Course (DCEC)	1	4	4
<b>Total</b>		5		<b>20</b>
<b>Semester 4 (Research only)</b>				
Semester 4	(Dissertation/Research)	1	16	16
	Core Course	1	4	4
		2		20
<b>Or (Coursework only)</b>				
	Core Course	3	4	12
	Discipline Centric Elective Course (DCEC)	1	4	4
	Skill Based	1	4	4
<b>Total</b>		5		<b>20</b>
<b>Grand Total</b>		20		<b>80</b>
<b>Note: Students may choose any one course from the Discipline-Centric Electives in each semester</b>				

**Degree Requirements**

- The M.A. degree is awarded to students who successfully complete a minimum of 96 credits (all) over two years, following the prescribed course structure.

**Credit Requirement and Eligibility**

For 2-year MA

- **Total Credits:** 80
- **Duration:** 2 Years (4 Semesters)

### **Evaluation Process**

- Each course is assessed through semester-end examinations (72%) and internal assessments (28%).
- A minimum of 40% (Grade E or above) is required to pass each course.
- If a student shall be required to secure a minimum Qualifying Letter Grade “D” or Grade Point “5” as indicated in table 4 in each component of each course including internal as well as external components of Theory/Practical independently.
- Students who miss an internal assessment may be given a second attempt within the semester, subject to instructor approval.
- Students failing a course may reappear for the semester-end exam, but their internal assessment marks will remain unchanged.

### **Grading System Calculation**

*Table 4: Percentage to Grade/Grade Letter and Grade Point Conversion*

Marks Obtained	Grade	Grade Point
80-100	O: Outstanding	10
70-79	A+: Excellent	09
60-69	A: Very Good	08
55-59	B+: Good	07
50-54	B: Above Average	06
45-49	C: Average	05
40-44	P: Pass	04
0-39	F: Fail	0

*Note: 0.5 shall be treated as 1 mark and less than 0.5 mark omitted*

### **Cumulative Grade Point Average (CGPA) Calculation:**

The University Grants Commission (UGC) recommends the following method for calculating the **Semester Grade Point Average (SGPA)** and **Cumulative Grade Point Average (CGPA)**:

#### **a. Semester Grade Point Average (SGPA)**

SGPA is calculated using the total grade points earned in all courses during a semester, weighted by the number of credits for each course.

**Formula:**

$$SGPA (Si) = \frac{\sum(Ci \times Gi)}{\sum Ci}$$

Where:

- **C<sub>i</sub>** = Credits for a course

- $G_i$  = Grade points earned in that course

**Example Calculation (Semester 1):**

*Table 5: Illustration for computation of SGPA*

Course	Credits (C <sub>i</sub> )	Grade	Grade Points (G <sub>i</sub> )	Credit × Grade Point (C <sub>i</sub> × G <sub>i</sub> )
Course 1	4	A	8	4 × 8 = 32
Course 2	4	B+	7	4 × 7 = 28
Course 3	4	B	6	4 × 6 = 24
Course 4	4	O	10	4 × 10 = 40
Course 5	4	C	5	4 × 5 = 20
	20			144

**Total Credits= 20**

**Total Grade Points: 144**

$$SGPA=144/20=7.2$$

**b. Cumulative Grade Point Average (CGPA)**

CGPA is calculated by taking the weighted average of SGPA scores across all semesters.

**Formula:**

$$CGPA=\sum(C_i \times S_i) / \sum C_i$$

Where:

- $S_i$  = SGPA of a semester
- $C_i$  = Total credits in that semester

**Example Calculation:**

*Table 6: Example*

Semester	Credits (C <sub>i</sub> )	SGPA (S <sub>i</sub> )	Credit × SGPA (C <sub>i</sub> × S <sub>i</sub> )
Semester 1	20	7.2	20 × 7.2 = 144.0
Semester 2	20	7.8	20 × 7.8 = 156.0
Semester 3	20	5.6	20 × 5.6 = 112.0
Semester 4	20	6.0	20 × 6.0 = 120.0

**Total Credits: 80**

**Total Grade Points: 532**

$$CGPA=532/80=6.65$$

**Note:** SGPA and CGPA are rounded off to two decimal places and recorded in transcripts.

**Academic Integrity and Plagiarism**

Ethical Scholarship & Responsibilities

- The Department of Archaeology upholds ethical scholarship and enforces institutional academic conduct standards.
- Cheating and plagiarism are strictly prohibited.

- Students must properly cite all sources and avoid misrepresenting others' work as their own.

### Definition of Plagiarism

Plagiarism involves misrepresenting another's work—ideas, interpretations, words, or creative outputs—as one's own. It includes:

- Copying text, research findings, tables, designs, images, sounds, or maps without citation.
- Paraphrasing without proper credit.
- Cutting and pasting from multiple sources without referencing.
- Submitting collaborative work as independent.

### Career Prospects

Graduates can explore careers in:

- **Academia & Research** – Teaching, doctoral studies, and archaeological research, including interdisciplinary studies incorporating traditional knowledge systems.
- **Heritage Management** – Roles in UNESCO, ASI, museums, NGOs, and heritage conservation, with expertise in both historical preservation and experimental reconstruction techniques.
- **Government & Private Sector** – Cultural resource management, tourism, and policy-making related to archaeology and heritage studies.
- **Field & Digital Archaeology** – GIS specialists, excavation supervisors, computational archaeology experts, and practitioners of experimental archaeology.

### Suggested Teaching-Learning Strategies

To ensure an engaging and comprehensive learning experience, the following strategies will be implemented across all courses:

- **Lecture-cum-discussion** – Interactive lectures complemented by discussions to encourage critical thinking and student engagement.
- **Library readings and critical discussions** – Students will be encouraged to explore scholarly literature and participate in critical discussions to deepen their understanding of key concepts.
- **Reflective writing and comparative analysis** – Writing assignments and comparative studies will help students analyse and synthesize archaeological theories, methodologies, and case studies.
- **Historical debates and group discussions** – Organizing debates on key archaeological and historical issues will enhance analytical and argumentative skills.

- **Case studies and project work** – Hands-on projects and case studies will provide practical exposure to archaeological methods, interpretations, and site-based studies, including experimental approaches to ancient technologies.
- **Guided readings of classical texts** – Discussions on influential works in archaeology, history, and indigenous knowledge traditions will help students engage with foundational texts and theoretical advancements.
- **Student presentations** – Individual and group presentations on selected topics will encourage research, teamwork, and effective communication skills.
- **Field visits and practical demonstrations (where applicable)** – For courses involving field archaeology, students will participate in site visits and hands-on training in archaeological methods, including experimental reconstructions of past material cultures.
- **Use of digital and visual aids** – Incorporation of GIS, satellite imagery, 3D modeling, and other digital tools in teaching to familiarize students with modern archaeological techniques.

### Assessment Framework

*Table 7: Assessment Framework*

Assessment Type	Written Modes	Oral Modes	Integrated Modes	Marks
Internal Assessments	Class Test, Article Writing, Class Assignment, Book Review, Article Review, Journal Writing	Viva-Voce, Group Discussion	Field Assignment, Presentation	28
Semester-End Examination	Analytical essay questions, case-study-based questions, short-answer and objective questions, source-based analysis of inscriptions, artifacts, or excavation reports	-	-	72

### Programme Learners Outcomes

Domain	PLO
<b>1. Knowledge and understanding</b>	Graduates will learn advanced knowledge of archaeological theories, field methodologies, cultural sequences, and regional traditions
<b>2. Skills / Technical Skills</b>	Graduates will be able to conduct systematic archaeological fieldwork, including exploration, excavation, stratigraphic analysis, artefact documentation, scientific dating, and experimental archaeology.
<b>3. Application of Knowledge and Skills</b>	Graduates will apply interdisciplinary approaches, integrating scientific, historical, environmental, and digital tools to interpret archaeological data, conserve heritage, and design site management strategies.
<b>4. Communication Skills</b>	Graduates will effectively communicate archaeological findings and heritage narratives in academic, professional, and public settings through writing, visual documentation, and digital platforms.
<b>5. Critical Thinking</b>	Graduates will have an understanding to critically evaluate archaeological evidence, theories, and interpretations, and use problem-solving approaches in research, heritage disputes, or policy analysis.
<b>6. Ethics</b>	Graduates will learn ethical awareness in fieldwork, heritage handling, indigenous knowledge engagement, and collaborative research, upholding professional standards.
<b>7. Life-long Learning</b>	Graduates will engage in self-directed learning, keeping pace with new archaeological methods, technologies, and emerging research in South Asia and global archaeology.
<b>8. Creativity</b>	Graduates will use creative thinking to reconstruct ancient lifeways through experimental archaeology, ethnoarchaeology, and innovative research dissemination techniques.
<b>9. Research Aptitude</b>	Graduates will be able to design and execute independent research, applying rigorous methodology, data analysis, and synthesis in dissertation work or field-based studies.
<b>10. Problem Solving</b>	Graduates will identify, assess, and resolve challenges in archaeology—including those related to excavation logistics, heritage management, conservation, and policy implementation.

<b>Course Structure</b>			
<b>Course Code</b>	<b>Course Title</b>	<b>Paper Category</b>	<b>Credits</b>
<b>1<sup>st</sup> Semester</b>			
MARCCIA125	Introduction to Archaeology	Core	4
MARCCWP125	World Prehistory: An Overview	Core	4
MARCCFA125	Field Archaeology (Exploration)	Core	4
MARCCPR125	Practical I	Core	4
MARCDPS125	Prehistory of South Asia	Discipline Centric Elective Course	4
MARCDAK125	Archaeology of Ancient Jammu & Kashmir	Discipline Centric Elective Course	4
Students may choose any one course from the Discipline-Centric Electives.			
<b>2<sup>nd</sup> Semester</b>			
MARCCFA225	Field Archaeology (Excavation)	Core	4
MARCCPR225	Practical II	Core	4
MARCCSA225	Science in Archaeology	Core	4
MARCSA225	Digital Applications in Archaeology	Skill Based	4
MARCDPS225	Protohistory of South Asia	Discipline Centric Elective	4
MARCDHA225	Historical Archaeology	Discipline Centric Elective	4
Students may choose any one course from the Discipline-Centric Electives			
<b>3<sup>rd</sup> Semester</b>			
MARCCRM325	Research Methodology	Core	4
MARCCPR325	Practical III	Core	4
MARCCIA325	Ancient Indian Architecture	Core	4
MARCCAI325	Indian Art & Iconography	Core	4
MARCDEN325	Epigraphy and Numismatics	Discipline Centric Elective	4
MARCDEA325	Environmental Archaeology	Discipline Centric Elective	4
Students may choose any one course from the Discipline-Centric Electives			
<b>4<sup>th</sup> Semester</b>			
<b>Research only</b>			
MARCCDI425	Dissertation	Core	16
MARCCDA425	Data Analysis	Core	4
<b>Or Course Work</b>			
MARCCIK425	Indian Knowledge System	Core	4
MARCCFA425	Ethnoarchaeology	Core	4
MARCCPR425	Practical IV	Core	4
MARCSEA425	Experimental Archaeology	Skill Based	4
MARCDCH425	Cultural Heritage Management & Conservation	Discipline Centric Elective	4
MARCDMM425	Museum Management	Discipline Centric Elective	4
Students may choose any one course from the Discipline-Centric Electives			

### Introduction to Archaeology (MARCCIA125)

<b>Course Code: (MARCCIA125)</b>		<b>Credits: 4</b>		<b>Semester: 1<sup>st</sup></b>	
<b>Course Title: Introduction to Archaeology</b>					
<b>Internal Assessments</b>				28 Marks	
<b>Semester-End Examination</b>				72 Marks	
<b>Course Learning Outcomes (CLOs)</b>					
<ul style="list-style-type: none"> <li>• <i>CLO 1:</i> Understand the basic definitions, scope, and significance of archaeology, including its relation to history and anthropology.</li> <li>• <i>CLO 2:</i> Trace the history and development of archaeology across various regions including Europe, North America, and South Asia.</li> <li>• <i>CLO 3:</i> Identify and analyze different types of archaeological records, sites, and artefacts.</li> <li>• <i>CLO 4:</i> Comprehend cultural sequences and familiarize with relative and absolute dating methods used in archaeology.</li> </ul>					
Unit	Content	Hours (L+T+P)	Credits		
1	<b><u>Definition and Scope of Archaeology</u></b> a. Definition and scope of archaeology; use and misuse of Archaeology b. Archaeological Methods c. Relation and Distinction between Archaeology, History and Anthropology d. Role of Social and Natural Sciences in Archaeology	15	1		
2	<b><u>History and Development of Archaeology</u></b> a. Introduction to the Three Age system b. Europe c. North America d. South Asia	15	1		
3	<b><u>Nature of the archaeological record</u></b> a. Archaeological sources. b. Types of Archaeological sites c. Exploration and Excavation d. Artefacts and Eco facts	15	1		
4	<b><u>Cultural Sequences and Dating the Past</u></b> a. Pre, Proto and Historical Archaeology b. Introduction to Relative Dating Methods c. Introduction to Absolute Dating Methods	15	1		

#### CLO-PLO mapping matrix for course

<u>Unite-wise CLOS</u>	PLO1	PLO2	PLO3	PLO4	PLO5	PLO6	PLO7	PLO8	PLO9	PLO10	<u>Average CLO</u>
MARCCIA125.1	<u>3</u>	<u>1</u>	<u>1</u>	<u>2</u>	<u>1</u>	<u>1</u>	<u>2</u>	<u>1</u>	<u>1</u>	<u>1</u>	<u>1.4</u>
MARCCIA125.2	<u>3</u>	<u>1</u>	<u>2</u>	<u>2</u>	<u>2</u>	<u>1</u>	<u>2</u>	<u>1</u>	<u>2</u>	<u>1</u>	<u>1.7</u>
MARCCIA125.3	<u>2</u>	<u>3</u>	<u>3</u>	<u>1</u>	<u>3</u>	<u>1</u>	<u>2</u>	<u>2</u>	<u>3</u>	<u>2</u>	<u>2.2</u>
MARCCIA125.4	<u>3</u>	<u>3</u>	<u>3</u>	<u>1</u>	<u>2</u>	<u>1</u>	<u>2</u>	<u>1</u>	<u>3</u>	<u>2</u>	<u>2.1</u>
Average PLO	<u>2.75</u>	<u>2.00</u>	<u>2.25</u>	<u>1.5</u>	<u>2.00</u>	<u>1.00</u>	<u>2.00</u>	<u>1.25</u>	<u>2.25</u>	<u>1.5</u>	<u>2.5</u>

### **Suggested Readings:**

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21. Raman, K. V. (1986). *Principles and methods of archaeology*. Parthajan Publications.
22. Renfrew, C., & Bahn, P. (2012). *Archaeology: Theories, methods and practice* (6th ed.). Thames & Hudson.
23. Srivastava, K. M. (1990). *New era of Indian archaeology*. Cosmo Publications.
24. Trigger, B. 2006. *A history of archaeological thought* (2nd ed.). Cambridge University Press.
25. Wheeler, M. 1954. *Archaeology from the earth*. Oxford University Press.
26. Wheeler, M. 1958. *Still digging: Adventures in archaeology*. London: Pan Books.

### World Prehistory: An Overview (MARCCWP125)

<b>Course Code: (MARCCWP125)</b>		<b>Credits: 4</b>		<b>Semester: 1<sup>st</sup></b>	
<b>Course Title: World Prehistory: An Overview</b>					
<b>Internal Assessments</b>				28 Marks	
<b>Semester-End Examination</b>				72 Marks	
<b>Course Learners Outcomes (CLOs):</b>					
<ul style="list-style-type: none"> <li>• <i>CLO 1:</i> Explain the impact of climatic changes during the Miocene, Pliocene, and Quaternary periods on human evolution, and identify key fossil records and their geographical distribution.</li> <li>• <i>CLO 2:</i> Compare tool technologies and cultural developments across Lower, Middle, and Upper Palaeolithic periods, and analyze the significance of early art and symbolic behaviour.</li> <li>• <i>CLO 3:</i> Evaluate Mesolithic adaptations, including technological innovations and the transition to pastoralism, and correlate these with ecological and societal changes.</li> <li>• <i>CLO 4:</i> Debate the causes and global consequences of the Neolithic Revolution, synthesizing evidence from West Asia, East Asia, and other regions to construct informed arguments.</li> </ul>					
Unit	Content	Hours (L+T+P)	Credits		
1	<u><b>Climate, Human Evolution and Distribution</b></u> <ol style="list-style-type: none"> <li>a. Miocene and Pliocene roots</li> <li>b. Quaternary period: an introduction</li> <li>c. Human antiquity and fossil records</li> <li>d. Geographical distribution of fossil records</li> </ol>	15	1		
2	<u><b>Palaeolithic Technologies and Cultures</b></u> <ol style="list-style-type: none"> <li>a. Lower Palaeolithic Cultures</li> <li>b. Middle Palaeolithic Cultures</li> <li>c. Upper Palaeolithic Cultures</li> <li>d. Beginning of Art and Symbolic Behaviour</li> </ol>	15	1		
3	<u><b>Mesolithic Cultures</b></u> <ol style="list-style-type: none"> <li>a. Definition and scope</li> <li>b. Geographical distribution of Sites</li> <li>c. Technologies and Symbolic behaviour</li> <li>d. Beginning of Pastoralism and Material Culture</li> </ol>	15	1		
4	<u><b>Neolithic cultures and early farming</b></u> <ol style="list-style-type: none"> <li>a. Emergence of farming and development of Neolithic cultures in West and East Asia</li> <li>b. Early domestication in other parts of the world.</li> <li>c. Neolithic Revolution: debate. Causes and consequences of farming.</li> </ol>	15	1		

#### CLO-PLO mapping matrix for course

Unit-wise CLOS	PLO1	PLO2	PLO3	PLO4	PLO5	PLO6	PLO7	PLO8	PLO9	PLO10	Average CLO
MARCCWP125.1	3	2	2	2	2	1	2	1	2	2	1.9
MARCCWP125.2	3	2	2	2	3	2	2	2	2	2	2.2
MARCCWP125.3	3	3	3	2	3	2	2	2	2	2	2.4
MARCCWP125.4	3	2	3	3	3	2	2	2	3	3	2.6
<b>Average (PLO)</b>	<b>3.0</b>	<b>2.25</b>	<b>2.5</b>	<b>2.25</b>	<b>2.75</b>	<b>1.75</b>	<b>2.0</b>	<b>1.75</b>	<b>2.25</b>	<b>2.25</b>	<b>2.61</b>

### **Suggested Reading:**

1. Ambrose, S. H. Paleolithic technology and human evolution. *Science*. 2001 Mar 2;291(5509):1748-53. <https://doi:10.1126/science.1059487>
2. Barnard, A. 2016. *Language in prehistory*. Cambridge University Press.
3. Bahn, P. G. 1998. *Prehistoric Art*. Cambridge: University Press.
4. Bahn, P. G. 2014. *The Cambridge world prehistory* (C. Renfrew, Ed.). Cambridge University Press.
5. Bednarik, R. G. 2020. *The domestication of humans*. Routledge.
6. Bellwood, P. 2005. *First farmers: The origins of agricultural societies*. Blackwell.
7. Boivin, N., Crassard, R., & Petraglia, M. D. 2017. *Human dispersal and species movement: from prehistory to the present*. Cambridge University Press. <https://doi.org/10.1017/9781316686942>
8. Bordes, F. 1968. *The Old Stone Age*. London: Weidenld and Nicolson.
9. Chazan, M. 2013. *World Prehistory and Archaeology* (Third edition). Routledge. <https://www.taylorfrancis.com/books/e/9781315663906>
10. Childe, V. G. 1937. *Man makes himself, by V. Gordon Childe. Illustrated edition, with an introduction by Sally Green*. Moonraker Press & Pitman Publishing Ltd.
11. Clark, J. G. D, 1977. *World Prehistory: In new Perspective*, Cambridge University Press.
12. Fagan, B.M., & Durrani, N. 2016. *World Prehistory: A Brief Introduction* (9th ed.). Routledge. <https://doi.org/10.4324/9781315641133>
13. Fagan, B.M., & Durrani, N. 2021. *World Prehistory: The Basics* (1st ed.). Routledge. <https://doi.org/10.4324/9781003177326>
14. Futuyma, D. J., & Kirkpatrick, M. 2017. *Evolution* (Fourth edition). Sinauer Associates, Inc., Publishers.
15. Gamble, C. 2007. *Origins and revolutions: human identity in earliest prehistory*. Cambridge University Press.
16. Hodder, I. 2010. Religion in the emergence of civilization: Çatalhöyük as a case study. In *EBL*. Cambridge University Press. <https://doi.org/10.1017/CBO9780511761416>
17. Hodder, I. 2018. Things and the Slow Neolithic: The Middle Eastern Transformation. *Journal of Archaeological Method and Theory*, 25(1), 155–177. <https://doi.org/10.1007/s10816-017-9336-0>
18. Hodder, I. 2020. *Consciousness, creativity, and self at the dawn of settled life*. Cambridge University Press. <https://doi.org/10.1017/9781108753616>
19. Hodder, I. 2022. *Çatalhöyük excavations: the 2009-2017 seasons*. British Institute at Ankara.
20. Isaac, G. L, 1971. The Diet of Early Man. *World Archaeology*, 2:278 -229
21. Kuhn, S. L. 2021. *The evolution of Paleolithic technologies*. Routledge.
22. Palmer, D. 2007. *The origins of man*. New Holland Publishers (UK).
23. Palmer, D. 2010. *Origins: human evolution revealed*. Mitchell Beazley; Distributed in the USA and Canada by Octopus Books.
24. Philipson, D.W, 1988. *African Archaeology*, Cambridge University Press, Cambridge
25. 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
26. Richards, G. 2019. *Human evolution: an introduction for the behavioural sciences*. Routledge. <https://doi.org/10.4324/9780429291104>
  27. Richerson, P. J., & Boyd, R. 2021. *The origins and evolution of cultures*. Oxford University Press
  28. Soffer, O. 1994. Ancestral Lifeways in Eurasia — The Middle and Upper Paleolithic Records. In *Origins of Anatomically Modern Humans* (pp. 101–119). [https://doi.org/10.1007/978-1-4899-1507-8\\_5](https://doi.org/10.1007/978-1-4899-1507-8_5)
  29. Souvatzi, S. G., Baysal, A., & Baysal, E. L. 2019. *Time and history in prehistory*. Routledge. <https://doi.org/10.4324/9781315531854>
  30. Sutton, M. Q. 2022. *Discovering world prehistory: interpreting the past through archaeology*. Routledge, Taylor & Francis Group.
  31. Stringer, C. B., & Andrews, P. 1988. Genetic and Fossil Evidence for the Origin of Modern Humans. *Science*, 239(4845), 1263–1268.
  32. Tattersall, I., & Cambridge University Press. 2022. *Understanding human evolution*. Cambridge University Press. <https://doi.org/10.1017/9781009106177>

### Field Archaeology-Exploration (MARCCFA125)

<b>Course Code: (MARCCFA125)</b>		<b>Credits: 4</b>		<b>Semester: 1<sup>st</sup></b>	
<b>Course Title: Field Archaeology-Exploration</b>					
<b>Internal Assessments</b>				28 Marks	
<b>Semester-End Examination</b>				72 Marks	
<p>Course Learners Outcomes (CLOs):</p> <ul style="list-style-type: none"> <li>• CLO 1: Describe the history, principles, and applications of archaeological survey methods, and explain the nature of archaeological records and site formation processes.</li> <li>• CLO 2: Compare traditional (literary sources, folk traditions) and scientific survey methods (transect/grid surveys, geophysical techniques, satellite imagery), and apply appropriate sampling strategies for site discovery.</li> <li>• CLO 3: Analyze archaeological site contexts, features, and landscapes using catchment analysis and settlement pattern studies, and assess the significance of chance discoveries in archaeological research.</li> <li>• CLO 4: Manage post-field data through typological, petrographic, and radiometric dating methods, and prepare technical reports and heritage management plans for site conservation and documentation.</li> </ul>					
Unit	Content	Hours (L+T+P)	Credits		
1	<b><u>Introduction to Field Survey Methods.</u></b> a. Survey methods: History and application. b. What to expect during field surveys? c. Understanding Nature of archaeological record.	15	1		
2	<b><u>Discovering Archaeological sites</u></b> a. Traditional: Literary Sources, Folk traditions, Village to village survey b. Scientific: Transect and Grid survey methods, Geophysical survey methods, Satellite imagery and aerial photography. c. Sampling methods d. Chance Discoveries	15	1		
3	<b><u>Identification of Archaeological record &amp; Data Collection.</u></b> a. Understanding site contexts and formation processes. b. Assessing the layout and features of an archaeological site. c. Landscape Archaeology: Site catchment analysis and settlement pattern	15	1		
4	<b><u>Post-Field Data Management, Analysis, and Reporting</u></b> a. Data management b. Analysis and dating: typology, petrography, residue, radiocarbon/OSL/dendrochronology c. Reporting and heritage management: technical reports, conservation plans, site Management plans.	15	1		

#### CLO-PLO mapping matrix for course

<u>Unite-wise CLOS</u>	<u>PLO1</u>	<u>PLO2</u>	<u>PLO3</u>	<u>PLO4</u>	<u>PLO5</u>	<u>PLO6</u>	<u>PLO7</u>	<u>PLO8</u>	<u>PLO9</u>	<u>PLO10</u>	<u>Average CLO</u>
MARCCFA125.1	3	2	2	2	2	2	2	1	2	2	2.0
MARCCFA125.2	3	3	3	2	3	2	2	2	2	3	2.5
MARCCFA125.3	3	3	3	2	3	2	2	2	2	3	2.5
MARCCFA125.4	3	3	3	3	3	3	2	2	3	3	2.8
<b>Average (PLO)</b>	<b>3.0</b>	<b>2.75</b>	<b>2.75</b>	<b>2.25</b>	<b>2.75</b>	<b>2.25</b>	<b>2.0</b>	<b>1.75</b>	<b>2.25</b>	<b>2.75</b>	<b>2.5</b>

### **Suggested Readings:**

1. Bahn, Paul. (1996). *Archaeology: A very short introduction*. Oxford University Press.
2. Bahn, Paul. (2015). *The history of archaeology: A brief introduction*. Routledge.
3. Binford, L.R. 1983. *Working at Archaeology*. New York: Academic Press.
4. Carver, M., & Hummler, M. (2024). *Archaeological investigation* (2nd ed.). Routledge.
5. Childe, V. G. (1950). The Urban Revolution. *The Town Planning Review*, 21(1), 3–17. <http://www.jstor.org/stable/40102108>
6. Childe, V.G. 1956. *Piecing Together the Past: The Interpretation of Archaeological Data*. London: Routledge and Kegan Paul.
7. Dillon, B. D. (Ed.). (1989). *Practical archaeology: Field and laboratory techniques and archaeological logistics*. Institute of Archaeology, University of California.
8. Dunnell, R.C. 1971. *Systematics in Prehistory*. New York: Free Press.
9. Fagan, B. 1985. *The adventure of archaeology*. National Geographic Society.
10. Fleming, S. (1978). *Dating in archaeology: A guide to scientific techniques*. J. M. Dent.
11. Harris, E. C. 1993. *Principles of archaeological stratigraphy*. Academic Press.
12. Hawkes, J. 1982. *Adventure in archaeology: The biography of Sir Mortimer Wheeler*. St. Martin's Press.
13. Heizer, R. F. (Ed.). (1969). *The archaeologist at work: A source book in archaeological method and interpretation*. Harper & Row.
14. Hodder, I., & Orton, C. 1979. *Spatial analysis in archaeology* (1st pbk. ed). Cambridge University Press.
15. Hayden, Brian 1993. *Archaeology: The Science of Once and Future Things*. New York: W.H. Freeman and Company.
16. Hodder, I. 1995. *Theory and practice in archaeology*. Routledge.
17. Knudson, S.J. 1978. *Culture in Retrospect*. Chicago: Rand McNally.
18. Kuznar, L.A. 1997. *Reclaiming Scientific Anthropology*. Walnut Creek, California: Altamira Press.
19. Mirsky, J. 1977. *Sir Aurel Stein: Archaeological explorer*. University of Chicago Press.
20. Renfrew, C., & Bahn, P. (2012). *Archaeology: Theories, methods and practice* (6th ed.). Thames & Hudson.
21. Rajan, K. (2002). *Archaeology: Principles and methods*. Manoo Pathippakam.
22. Rajan, K. (2016). *Understanding archaeology: Field methods, theories and practices*. Manoo Pathippakam.
23. Raman, K. V. (1986). *Principles and methods of archaeology*. Parthajan Publications.
24. Srivastava, K. M. (1990). *New era of Indian archaeology*. Cosmo Publications.
25. Wheeler, M. 1954. *Archaeology from the earth*. Oxford University Press.
26. Wheeler, M. 1958. *Still digging: Adventures in archaeology*. London: Pan Books

### Practical I (MARCCPR125)

<b>Course Code: (MARCCPR125)</b>		<b>Credits: 4</b>		<b>Semester: 1<sup>st</sup></b>		
<b>Course Title: Practical I</b>						
<b>Internal Assessments</b>				28 Marks		
<b>Viva-Voce/ Demonstration</b>				72 Marks		
<b>Course Learners Outcomes (CLOs):</b> <ul style="list-style-type: none"> <li>• <i>CLO 1:</i> Formulate clear aims and objectives for a fieldwork-based assignment, and identify appropriate types of data (material culture, landscape features, settlements) to address archaeological research questions.</li> <li>• <i>CLO 2:</i> Demonstrate proficiency in field participation by employing systematic methods for data collection, ensuring accurate documentation of archaeological evidence (artifacts, site features, or spatial patterns).</li> <li>• <i>CLO 3:</i> Organize and present collected data effectively using visual (maps, charts), written, or digital formats, and interpret findings to draw logical conclusions about the archaeological context.</li> <li>• <i>CLO 4:</i> Collaborate in group work to evaluate archaeological evidence, and deliver structured presentations that communicate research processes, challenges, and outcomes to peers and instructors.</li> </ul>						
<b>Unit</b>	<b>Content</b>				<b>Hours</b> (L+T+P)	<b>Credits</b>
1	<p><b><u>Practical</u></b>            In this practical module student will be expected to write a short assignment based on explorations, Material culture, Landscape, Site, Settlements and so forth taught during the Semester-I.            The assignment should include:</p> <ol style="list-style-type: none"> <li>a) Aims of proposed assignment</li> <li>b) Nature of data to be collected</li> <li>c) Presentation of data</li> <li>d) Conclusions.</li> </ol> <p>Assessment</p> <ol style="list-style-type: none"> <li>a. Assignment quality</li> <li>b. Field participation</li> <li>c. Accuracy of data documentation</li> <li>d. Group work and presentations</li> </ol>				60	4

#### CLO-PLO mapping matrix for course

<u>Unite-wise CLOS</u>	<u>PLO1</u>	<u>PLO2</u>	<u>PLO3</u>	<u>PLO4</u>	<u>PLO5</u>	<u>PLO6</u>	<u>PLO7</u>	<u>PLO8</u>	<u>PLO9</u>	<u>PLO10</u>	<u>Average CLO</u>
MARCCPR125.1	2	3	3	2	2	2	2	2	3	3	2.4
MARCCPR125.2	2	3	3	2	2	2	2	2	2	3	2.3
MARCCPR125.3	2	2	2	3	3	2	2	2	3	2	2.3
MARCCPR125.4	2	2	2	3	3	3	2	2	2	2	2.3
<b>Average (PLO)</b>	<b>2.0</b>	<b>2.5</b>	<b>2.5</b>	<b>2.5</b>	<b>2.5</b>	<b>2.25</b>	<b>2.0</b>	<b>2.0</b>	<b>2.5</b>	<b>2.5</b>	<b>2.5</b>

### **Suggested Readings:**

1. Carver, M., & Hummler, M. (2024). *Archaeological investigation* (2nd ed.). Routledge.
2. Cobb, H., Greene, K., & Moore, T. (2024). *Archaeology: An introduction* (6th ed.). Routledge.
3. Dillon, B. D. (Ed.). (1989). *Practical archaeology: Field and laboratory techniques and archaeological logistics*. Institute of Archaeology, University of California.
4. Fagan, B. M., & Durrani, N. (2022). *Archaeology: The basics* (4th ed.). Routledge. <https://doi.org/10.4324/9781003183556>
5. Harris, E. C. (1993). *Principles of archaeological stratigraphy*. Academic Press.
6. Heizer, R. F. (Ed.). (1969). *The archaeologist at work: A source book in archaeological method and interpretation*. Harper & Row.
7. Hodder, I. (1999). *The archaeological process: An introduction*. Blackwell Publishers.
8. Hodder, I., & Orton, C. (1979). *Spatial analysis in archaeology*. Cambridge University Press.
9. Rajan, K. (2002). *Archaeology: Principles and methods*. Manoo Pathippakam.
10. Rajan, K. (2016). *Understanding archaeology: Field methods, theories and practices*. Manoo Pathippakam.
11. Raman, K. V. (1986). *Principles and methods of archaeology*. Parthajan Publications.
12. Renfrew, C., & Bahn, P. (2012). *Archaeology: Theories, methods and practice* (6th ed.). Thames & Hudson.
13. Wheeler, M. (1954). *Archaeology from the earth*. Oxford University Press.

### Prehistory of South Asia (MARCDPS125)

<b>Course Code: (MARCDPS125)</b>		<b>Credits: 4</b>		<b>Semester: 1<sup>st</sup></b>	
<b>Course Title: Prehistory of South Asia</b>					
<b>Internal Assessments</b>				28 Marks	
<b>Semester-End Examination</b>				72 Marks	
<b>Course Learners Outcomes (CLOs):</b>					
<ul style="list-style-type: none"> <li>• <i>CLO 1:</i> Define the subject matter, scope, and aims of prehistory, and describe the major subdivisions of the Quaternary period, linking climatic changes to human adaptability and cultural evolution.</li> <li>• <i>CLO 2:</i> Compare the technological and cultural developments across Lower, Middle, and Upper Palaeolithic periods, and analyze the transition to Mesolithic lifeways in relation to ecological shifts.</li> <li>• <i>CLO 3:</i> Interpret the significance of rock art and other symbolic behaviours by examining their geographical distribution and cultural contexts, and evaluate their role in understanding prehistoric cognition and social structures.</li> <li>• <i>CLO 4:</i> Debate the origins and impact of early farming in South Asia by contrasting Neolithic cultures of North-West, Southern, and Central India, and assess their socio-economic transformations on prehistoric communities.</li> </ul>					
<b>Unit</b>	<b>Content</b>			<b>Hours (L+T+P)</b>	<b>Credits</b>
<b>1</b>	<u><b>Prehistory: An Introduction</b></u> a. Prehistory: Subject matter, Scope and Aims b. Introduction to prehistoric cultural sequences. c. The Quaternary period: Major subdivisions d. Climatic changes and human adaptability,			15	1
<b>2</b>	<u><b>Prehistoric Cultures</b></u> a. Lower Palaeolithic b. Middle Palaeolithic c. Upper Palaeolithic d. Mesolithic Culture			15	1
<b>3</b>	<u><b>Rock Art and other Symbolic Behaviours</b></u> a. Introduction to Symbolic Behaviour b. Geographical distribution of Rock art c. Significance of rock art d. Important Rock art sites.			15	1
<b>4</b>	<u><b>Origins of farming and Neolithic Cultures</b></u> a. Origins of farming: An introduction b. Neolithic cultures of North West India and its adjoining regions. c. Neolithic cultures of Southern & Central India. d. Significance of Early farming in South Asia & its impact.			15	1

#### CLO-PLO mapping matrix for course

<u>Unit-wise CLOS</u>	<u>PLO1</u>	<u>PLO2</u>	<u>PLO3</u>	<u>PLO4</u>	<u>PLO5</u>	<u>PLO6</u>	<u>PLO7</u>	<u>PLO8</u>	<u>PLO9</u>	<u>PLO10</u>	<u>Average CLO</u>
MARCDPS125.1	3	2	2	2	2	1	2	1	2	2	1.9
MARCDPS125.2	3	2	2	2	3	1	2	2	2	2	2.1
MARCDPS125.3	3	1	2	2	3	2	2	2	2	2	2.1
MARCDPS125.4	3	2	3	2	3	2	2	2	3	3	2.5
<b>Average (PLO)</b>	<b>3.0</b>	<b>1.75</b>	<b>2.25</b>	<b>2.0</b>	<b>2.75</b>	<b>1.5</b>	<b>2.0</b>	<b>1.75</b>	<b>2.25</b>	<b>2.25</b>	<b>2.5</b>

### **Suggested Readings:**

1. Allchin, B. and F.R. Allchin. 1977. *Origins of Civilization in India*. New Delhi: Penguin.
2. Allchin, B. and F.R. Allchin 1982. *Rise of Civilizations in India and Pakistan*. Cambridge: Cambridge University Press.
3. Agrawal, D.P. 1992. *Man and Environment in India Through Ages*. New Delhi: Books and Books.
4. Agrawal, D.P. and J. Kharakwal. 2002. *South Asian Prehistory*. New Delhi: Aryan Books.
5. Bhattacharya, D. K. 1994. *An outline of Indian prehistory* (4th rev. & updated ed). Palaka Prakashan.
6. Bordes, F. 1968. *The Old Stone Age*. London: Weidenld and Nicolson.
7. Chakravarty, K.K. (ed.) 1984. *Rock art of India*. New Delhi: Arnold-Heinemann.
8. Deraniyagala, S. 1992. *Prehistory of Sri Lanka: an Ecological Perspective*. Colombo: Archaeological Survey of Sri Lanka.
9. Foote, R.B. 1916. *The Foote Collection of Indian Prehistoric and Protohistoric Antiquities: Notes on Their Ages and Distribution*. Madras: Government Museum.
10. Kosambi, D. D. 2022. *CULTURE AND CIVILISATION OF ANCIENT INDIA IN HISTORICAL OUTLINE*. ROUTLEDGE. <https://doi.org/10.4324/9781003321385>
11. Mathpal, Y. 1984. *Prehistoric Rock Paintings of Bhimbetka, Central India*. New Delhi: Abhinav.
12. Mishra, S. 1992. "The Age of the Acheulian in India." *Current Anthropology* 33:325-328.
13. Neumayer, Erwin. 1993. *Lines on Stone: The Prehistoric Rock Art of India*. New Delhi: Manohar
14. Paddayya, K. 1982. *Acheulian Culture of Hunsgi Valley, (Pennisular India): A Settlement System Approach*. Deccan College: Pune.
15. Paddayya, K. (ed.). 2002. *Recent Studies in Indian Archaeology*. New Delhi: ICHR and Munshiram.
16. Pappu, R.S. and S.G. Deo. 1994. *Man-Land Relationship during the Palaeolithic Times in the Kaladgi Basin, Karnataka*. Pune: Deccan College.
17. Pappu, R.S. 2000. *The Acheulian Culture of Peninsular India*. New Delhi: D.K. Printworld.
18. 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.
19. Sankalia, H.D. 1974. *Prehistory and Protohistory of India and Pakistan*. Pune: Deccan College.
20. Sankalia, H.D. 1974. *Stone Age Tools: Their Names and Probable Functions*. Pune: Deccan College.
21. Settar, S. and R. Korisettar (ed.). 2002. *Indian Archaeology in Retrospect*, Volume 1. Delhi: ICHR and Manohar.
22. Sharma, G.R. and J. D. Clark 1983. *Palaeoenvironments and Prehistory in the Middle Son Valley*. Allahabad: Abhinav Prakashan

### **Archaeology of Ancient Jammu & Kashmir (MARCDK125)**

<b>Course Code: (MARCDAA125)</b>		<b>Credits: 4</b>		<b>Semester: 1<sup>st</sup></b>	
<b>Course Title: Archaeology of Ancient Jammu &amp; Kashmir</b>					
<b>Internal Assessments</b>				28 Marks	
<b>Semester-End Examination</b>				72 Marks	
<b>Course Learners Outcomes (CLOs):</b>					
<ul style="list-style-type: none"> <li>• <i>CLO 1:</i> Reconstruct Kashmir's geo-chronology and paleo-environmental shifts during early human settlement, and categorize the cultural sequences of Palaeolithic, Neolithic, and Megalithic phases, including Harappan and PGW influences.</li> <li>• <i>CLO 2:</i> Analyze the socio-economic practices and tool technologies of Neolithic/Megalithic communities, and correlate archaeological evidence from sites like Semthan, Harwan, and Kanispora with early historic events in the region.</li> <li>• <i>CLO 3:</i> Interpret the evolution of sculptural traditions (terracotta, stone, metal) and religious architecture (stupas to temples), and assess the significance of numismatic, epigraphic, and rock art evidence (e.g., Ladakh Maitreya sculptures) in understanding cultural transitions.</li> <li>• <i>CLO 4:</i> Evaluate the political and cultural contributions of local dynasties (Karkota, Utpalas, Loharas) through archaeological and historical sources, and debate their legacy in shaping Kashmir's identity within broader South Asian contexts.</li> </ul>					
<b>Unit</b>	<b>Content</b>			<b>Hours (L+T+P)</b>	<b>Credits</b>
1	<u><b>Pre and Proto-History</b></u> <ol style="list-style-type: none"> <li>Geo-chronology, Paleo-environment &amp; Landscape: Climate and ecosystems during early human settlement in Kashmir.</li> <li>Palaeolithic Period: Overview of the Lower, Middle, and Upper Palaeolithic phases and important archaeological discoveries.</li> <li>Neolithic &amp; Megalithic Phases: Geographical Distribution, important sites lifestyle, tools, and socio-economic practices.</li> <li>Harappan and PGW elements</li> </ol>			15	1
2	<u><b>Early Historic Period</b></u> <ol style="list-style-type: none"> <li>Early History: Overview and major historical events</li> <li>Archaeological Sites: Semthan, Harwan, Kanispora</li> </ol>			15	1
3	<u><b>Art &amp; Architecture</b></u> <ol style="list-style-type: none"> <li>Art and Architecture: Sculptural traditions (terracotta, stone, metal, ivory) and the transition from stupas to temples</li> <li>Numismatics and Epigraphy</li> <li>Ladakh Maitreya Sculptures, Rock Art, Monasteries.</li> </ol>			15	1
4	<u><b>Beginning of local dynasties</b></u> <ol style="list-style-type: none"> <li>Karkota</li> <li>Utpalas</li> <li>Loharas</li> </ol>			15	1

#### CLO-PLO mapping matrix for course

<u>Unit-wise CLOS</u>	<u>PLO1</u>	<u>PLO2</u>	<u>PLO3</u>	<u>PLO4</u>	<u>PLO5</u>	<u>PLO6</u>	<u>PLO7</u>	<u>PLO8</u>	<u>PLO9</u>	<u>PLO10</u>	<u>Average CLO</u>
MARCDAA125.1	3	2	3	2	3	2	2	2	2	2	2.3
MARCDAA125.2	3	3	3	2	3	2	2	2	2	2	2.4
MARCDAA125.3	3	2	3	3	3	3	2	2	2	3	2.6
MARCDAA125.4	3	2	3	3	3	3	2	2	2	3	2.6
<b>Average (PLO)</b>	<b>3.0</b>	<b>2.25</b>	<b>3.0</b>	<b>2.5</b>	<b>3.0</b>	<b>2.5</b>	<b>2.0</b>	<b>2.0</b>	<b>2.0</b>	<b>2.5</b>	<b>2.5</b>

#### Suggested Readings:

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# **Second Semester**

### Field Archaeology (Excavation) (MARCCFA225)

<b>Course Code: (MARCCFA225)</b>		<b>Credits: 4</b>		<b>Semester: 2<sup>nd</sup></b>	
<b>Course Title: Field Archaeology (Excavation)</b>					
<b>Internal Assessments</b>				28 Marks	
<b>Semester-End Examination</b>				72 Marks	
<b>Course Learners Outcomes (COs):</b>					
<ul style="list-style-type: none"> <li>• <i>CLO 1:</i> Trace the history of archaeological excavations and explain the planning and strategic considerations involved in designing an excavation project, with reference to methodological examples from key excavated sites.</li> <li>• <i>CLO 2:</i> Apply vertical and horizontal excavation methods to diverse archaeological contexts (e.g., Stone Age sites, burials, stupas) and demonstrate the use of sondage for preliminary site investigation.</li> <li>• <i>CLO 3:</i> Utilize recording techniques such as stratigraphy, three-dimensional documentation, and the Harris Matrix, and execute archaeological photography, drawing methods (plans, sections, artifacts), and digital documentation for accurate data collection.</li> <li>• <i>CLO 4:</i> Conduct post-excavation analysis by sorting, classifying, and cataloguing finds, perform basic laboratory techniques for material analysis, and prepare comprehensive excavation reports that interpret and contextualize findings.</li> </ul>					
<b>Unit</b>	<b>Content</b>			<b>Hours</b>	<b>Credits</b>
1	<b><u>Introduction to Excavation.</u></b> a. A brief history of Archaeological excavations. b. Planning and Strategy c. <b>Methodological examples from excavated sites.</b>			15+0	1
2	<b><u>Excavation Methods in Archaeology</u></b> a. Vertical and Horizontal b. Stone Age, Burial Sites, and Stupas. c. Sondage			15+0	1
3	<b><u>Recording Methods and Analysis in Archaeology</u></b> a. Stratigraphy, three-dimensional recording, <b>Harris Matrix</b> . Contextual approach, <b>Flotation Technique</b> , and <b>digital documentation</b> . b. Archaeological Photography, <b>Methods of Drawings: Plan, Section</b> , Pottery, Tools. c. Recording of Artefacts and Eco facts			15+0	1
4	<b><u>Post-Excavation Analysis and Interpretation</u></b> a. <b>Sorting, classification, and cataloguing of finds</b> b. <b>Basic Laboratory techniques for material analysis</b> c. <b>Interpretation of excavated data and preparation of excavation reports</b>			15+0	1

### CLO-PLO mapping matrix for course

<u>Unit-wise CLOS</u>	<u>PLO1</u>	<u>PLO2</u>	<u>PLO3</u>	<u>PLO4</u>	<u>PLO5</u>	<u>PLO6</u>	<u>PLO7</u>	<u>PLO8</u>	<u>PLO9</u>	<u>PLO10</u>	<u>Average CLO</u>
MARCCFA225.1	3	3	3	2	2	2	2	2	2	2	<b>2.3</b>
MARCCFA225.2	3	3	3	2	2	2	2	2	2	2	<b>2.3</b>
MARCCFA225.3	3	3	3	3	3	2	2	2	2	3	<b>2.6</b>
MARCCFA225.4	3	3	3	3	3	3	2	2	2	3	<b>2.7</b>
<b>Average (PLO)</b>	<b>3.0</b>	<b>3.0</b>	<b>3.0</b>	<b>2.5</b>	<b>2.5</b>	<b>2.25</b>	<b>2.0</b>	<b>2.0</b>	<b>2.0</b>	<b>2.5</b>	<b>2.5</b>

### **Suggested Readings:**

1. Carver, M., & Hummler, M. (2024). *Archaeological investigation* (2nd ed.). Routledge.
2. Cobb, H., Greene, K., & Moore, T. (2024). *Archaeology: An introduction* (6th ed.). Routledge.
3. Dillon, B. D. (Ed.). (1989). *Practical archaeology: Field and laboratory techniques and archaeological logistics*. Institute of Archaeology, University of California.
4. Fagan, B. M., & Durrani, N. (2022). *Archaeology: The basics* (4th ed.). Routledge. <https://doi.org/10.4324/9781003183556>
5. Harris, E. C. (1993). *Principles of archaeological stratigraphy*. Academic Press.
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9. Rajan, K. (2002). *Archaeology: Principles and methods*. Manoo Pathippakam.
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### Practical II (MARCCPR225)

<b>Course Code: (MARCCPR225)</b>		<b>Credits: 4</b>		<b>Semester: 2<sup>nd</sup></b>		
<b>Course Title: Practical II</b>						
<b>Internal Assessments</b>				28 Marks		
<b>Viva-voce/ Demonstration</b>				72 Marks		
<b>Course Learners Outcomes (CLOs):</b>						
<ul style="list-style-type: none"> <li>• <i>CLO 1:</i> Design clear aims and methodologies for archaeological excavation projects, and implement systematic fieldwork strategies to collect and record site data (artifacts, features, stratigraphy) in a field notebook.</li> <li>• <i>CLO 2:</i> Demonstrate accurate on-site recording of excavation processes, artifacts, and spatial data using standardized archaeological methods (e.g., context sheets, photography, scaled drawings).</li> <li>• <i>CLO 3:</i> Analyze collected field data through basic post-excavation techniques (sorting, classification), and interpret findings to reconstruct site formation processes and cultural contexts.</li> <li>• <i>CLO 4:</i> Synthesize results into a structured field report with data visualizations (plans, sections, tables), and demonstrate teamwork in excavation tasks while adhering to ethical and professional standards.</li> </ul>						
<b>Unit</b>	<b>Content</b>				<b>Hours</b>	<b>Credits</b>
	<p>Students will participate in excavation-based fieldwork and submit a report based on daily observations. Each student must maintain a field notebook, document excavation processes, record artefacts and features, and apply basic post-excavation analysis techniques. The final report should include excavation methods used, data presentation, and interpretation.</p> <p><b>Key Components of Assignment</b></p> <ol style="list-style-type: none"> <li>a) Aims of proposed assignment</li> <li>b) Nature of data to be collected</li> <li>c) Presentation of data</li> <li>d) Conclusions</li> </ol> <p><b>Assessment</b></p> <ol style="list-style-type: none"> <li>a. Field notebook</li> <li>b. Accuracy of recording</li> <li>c. Quality of report</li> <li>d. Teamwork and Demonstration</li> </ol>				60	4

### CLO-PLO mapping matrix for course

<u>Unite-wise CLOS</u>	<u>PLO1</u>	<u>PLO2</u>	<u>PLO3</u>	<u>PLO4</u>	<u>PLO5</u>	<u>PLO6</u>	<u>PLO7</u>	<u>PLO8</u>	<u>PLO9</u>	<u>PLO10</u>	<u>Average CLO</u>
<b>MARCCPR225.1</b>	3	3	3	2	2	2	2	2	2	2	<b>2.3</b>
<b>MARCCPR225.2</b>	3	3	3	3	2	2	2	2	2	2	<b>2.4</b>
<b>MARCCPR225.3</b>	3	3	3	2	3	2	2	2	2	2	<b>2.4</b>
<b>MARCCPR225.4</b>	3	2	3	3	2	3	2	3	2	3	<b>2.6</b>
<b>Average (PLO)</b>	<b>3.0</b>	<b>2.75</b>	<b>3.0</b>	<b>2.5</b>	<b>2.25</b>	<b>2.25</b>	<b>2.0</b>	<b>2.25</b>	<b>2.0</b>	<b>2.25</b>	<b>2.5</b>

### **Suggested Readings:**

1. Carver, M., & Hummler, M. (2024). *Archaeological investigation* (2nd ed.). Routledge.
2. Cobb, H., Greene, K., & Moore, T. (2024). *Archaeology: An introduction* (6th ed.). Routledge.
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4. Fagan, B. M., & Durrani, N. (2022). *Archaeology: The basics* (4th ed.). Routledge. <https://doi.org/10.4324/9781003183556>
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### Science in Archaeology (MARCCSA225)

<b>Course Code: (MARCCSA225)</b>		<b>Credits: 4</b>		<b>Semester: 2<sup>nd</sup></b>	
<b>Course Title: Science in Archaeology</b>					
<b>Internal Assessments</b>				28 Marks	
<b>Semester-End Examination</b>				72 Marks	
<b>Course Learners Outcomes (CLOs):</b>					
<ul style="list-style-type: none"> <li>• <i>CLO 1:</i> Identify and classify plant fossils (woods, grains, phytoliths, pollen) from archaeological contexts, and apply carbonization principles and flotation methods to recover botanical remains.</li> <li>• <i>CLO 2:</i> Analyze mammalian and human skeletal remains using osteological techniques, and determine age, sex, and pathology markers to interpret past lifeways and domestication processes.</li> <li>• <i>CLO 3:</i> Distinguish common rocks/minerals and evaluate soil properties (texture, pH, organic content) for site formation studies, while utilizing GIS and remote sensing basics for spatial archaeology.</li> <li>• <i>CLO 4:</i> Compare relative (stratigraphy, seriation) and absolute (radiocarbon, luminescence) dating techniques, and assess their applications for constructing archaeological chronologies.</li> </ul>					
Unit	Content	Hours	Credits		
1	<b>Archaeobotany</b> a. Introduction to plant fossils found in archaeological contexts (woods, food grains, impressions, compressions, casts, petrification's, coprolites, phytoliths, pollen and spores). b. Carbonisation of Seeds. c. Flotation method.	15	1		
2	<b>Archaeozoology</b> 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, reconstruction. c. Gender determination, age estimation, demography, and pathology.	15	1		
3	<b>Archaeometallurgy and Geoarchaeology</b> 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.	15	1		
4	<b>Archaeological Dating Methods</b> a. Relative Dating Methods: Stratigraphy, Seriation, Dendrochronology, Palaeomagnetism and Biochronology b. Absolute Dating Methods: Radiocarbon and AMS, Luminescence, Electron Spin Resonance, Potassium Argon, Fission Track, Obsidian hydration and Cosmogenic dating	15	1		

#### CLO-PLO mapping matrix for course

Unite-wise CLOS	PLO1	PLO2	PLO3	PLO4	PLO5	PLO6	PLO7	PLO8	PLO9	PLO10	Average CLO
MARCCSA225.1	3	3	2	2	2	2	2	2	2	2	2.2
MARCCSA225.2	3	3	3	2	3	2	2	2	2	2	2.4
MARCCSA225.3	3	3	3	2	3	3	2	3	2	3	2.7
MARCCSA225.4	3	3	3	2	3	2	2	2	2	2	2.4
<b>Average (PLO)</b>	<b>3.0</b>	<b>3.0</b>	<b>2.75</b>	<b>2.0</b>	<b>2.75</b>	<b>2.25</b>	<b>2.0</b>	<b>2.25</b>	<b>2.0</b>	<b>2.25</b>	<b>2.5</b>

## Suggested Readings

1. Aitken, M.J. (1990). *Science-Based Dating in Archaeology* (1st ed.). Routledge. <https://doi.org/10.4324/9781315836645>
2. Albarella, U., Rizzetto, M., Russ, H., Vickers, K., & Viner-Daniels, S. (Eds.). (2017). *The Oxford handbook of zooarchaeology*. Oxford University Press. <https://doi.org/10.1093/oxfordhb/9780199686476.001.0001>
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15. Fuller DQ (2000) The Emergence of Agricultural Societies in South India: botanical and archaeological perspectives, PhD thesis edn. University of Cambridge, Cambridge
16. Goudie, A. (1990). *Geomorphological techniques* (2nd ed.). Routledge
17. Griffiths, S. (2022). *Scientific dating in archaeology* (Studying Scientific Archaeology, Vol. 5). Oxbow Books.
18. Klein, R. G., & Cruz-Urbe, K. (1984). *The analysis of animal bones from archaeological sites*. University of Chicago Press.
19. Libby, Willard F. 1955. *Radiocarbon Dating*. Chicago: University of Chicago Press
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21. McKenzie, W. S., & Guilford, C. (2004). *Atlas of rock-forming minerals in thin section*. Pearson Education.
22. Moore, P. D., Webb, J. A., & Collinson, M. E. (1992). *Pollen analysis*. Blackwell.
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26. Taylor, R. E., & Aitken, M. J. (Eds.). (1997). *Chronometric dating in archaeology*. Springer. <https://doi.org/10.1007/978-1-4757-9694-0>
27. Tourigny, E., Gordon, R. (2023). Zooarchaeology of the Modern Era: An Introduction. *International Journal of Historical Archaeology* 27, 267–273.

### Digital Applications in Archaeology (MARCSDA225)

<b>Course Code: (MARCSDA225)</b>		<b>Credits: 4</b>		<b>Semester: 2<sup>nd</sup></b>	
<b>Course Title: Digital Applications in Archaeology</b>					
<b>Internal Assessments</b>				28 Marks	
<b>Semester-End Examination</b>				72 Marks	
<b>Course Learners Outcomes (CLOs):</b> <ul style="list-style-type: none"> <li>• <i>CLO 1:</i> Explain the role, scope, and transformative impact of computational archaeology, supported by case studies, and describe the functions of essential hardware (drones, GPS, GPR, scanners) in archaeological research.</li> <li>• <i>CLO 2:</i> Operate key computational tools (ArcGIS, QGIS, photogrammetry software) and utilize open-source data platforms (Bhuvan, USGS, NASA) for spatial analysis and site documentation.</li> <li>• <i>CLO 3:</i> Apply geophysical survey techniques (e.g., GPR, total stations) and demonstrate skills in 3D modeling, simulation, and generative AI for archaeological reconstruction and visualization.</li> <li>• <i>CLO 4:</i> Design interactive multimedia or virtual reality projects to interpret archaeological data, and evaluate the ethical implications of computational methods in heritage management.</li> </ul>					
Unit	Content	Hours	Credits		
<b>1</b>	<b><u>Introduction</u></b> <ol style="list-style-type: none"> <li>a. Computer Applications in Archaeology</li> <li>b. Role and scope of computational archaeology</li> <li>c. Impact of computational archaeology – important case studies</li> </ol>	15	<b>1</b>		
<b>2</b>	<b><u>Introduction to essential Hardware in Computational archaeology</u></b> <ol style="list-style-type: none"> <li>a. Introduction to essential computational hardware in Archaeology</li> <li>b. Drone and Satellite imagery</li> <li>c. GPS, GPR and Total stations</li> <li>d. Applications of various kinds of scanners</li> </ol>	15	<b>1</b>		
<b>3</b>	<b><u>Computational software and their applications</u></b> <ol style="list-style-type: none"> <li>a. ArcGIS, QGIS, open-source data</li> <li>b. Photogrammetry (cameras)</li> <li>c. Reality capture; capture one; Faro scene) AutoCAD, Illustrator, MS Office</li> <li>d. Introduction to different kind of open-source data (Bhuvan, Survey of India, USGS, NASA, ESA).</li> </ol>	15	<b>1</b>		
<b>4</b>	<b><u>Practical uses of Computational Archaeology</u></b> <ol style="list-style-type: none"> <li>a. Geophysical surveys</li> <li>b. Modelling, Simulation, Generative AI and Virtual Reality,</li> <li>c. Interactive multimedia</li> </ol>	15	<b>1</b>		

#### CLO-PLO mapping matrix for course

<u>Unit-wise CLOS</u>	<u>PLO1</u>	<u>PLO2</u>	<u>PLO3</u>	<u>PLO4</u>	<u>PLO5</u>	<u>PLO6</u>	<u>PLO7</u>	<u>PLO8</u>	<u>PLO9</u>	<u>PLO10</u>	<u>Average CLO</u>
MARCSDA225.1	2	2	2	2	2	2	2	3	2	2	<b>2.1</b>
MARCSDA225.2	2	3	2	2	2	2	3	3	2	3	<b>2.4</b>
MARCSDA225.3	3	3	3	2	3	2	3	3	2	3	<b>2.7</b>
MARCSDA225.4	2	2	2	3	3	3	3	3	2	3	<b>2.6</b>
<b>Average (PLO)</b>	<b>2.25</b>	<b>2.5</b>	<b>2.25</b>	<b>2.25</b>	<b>2.5</b>	<b>2.25</b>	<b>2.75</b>	<b>3.0</b>	<b>2.0</b>	<b>2.75</b>	<b>2.5</b>

## **Suggested Readings**

1. Aldenderfer, M. (1996). *Introduction: Computers in archaeology*. In M. Aldenderfer & H. D. G. Maschner (Eds.), *Anthropology, Space, and Geographic Information Systems* (pp. 1–11). Oxford University Press.
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18. Parcak, S. H. (2009). *Satellite remote sensing for archaeology* (1st ed.). Routledge.

19. Rajani, M. B. (2021). *Patterns in past settlements: Geospatial analysis of imprints of cultural heritage on landscapes*. Springer.
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2. CAA, Computer Applications and Quantitative Methods in Archaeology Conference, <http://www.caaconference.org/>
3. CVRO, Cultural Virtual Reality Organization, <http://www.cvro.org/>
4. DC, Dublin Core Metadata Initiative, <http://dublincore.org/>
5. DCQ, Dublin Core Qualifiers, <http://dublincore.org/documents/dcmes-qualifiers>
6. GML, OpenGIS® Geography Markup Language (GML) Implementation Specification, Version 2.0, OGC Document Number: 01-029, OpenGIS® Implementation Specification, 20 February 2001, <http://www.opengis.net/gml/01-029/GML2.html>
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8. NASA, <https://urs.earthdata.nasa.gov/>
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10. SVG, Scalable Vector Graphics (SVG) 1.0 Specification, W3C Proposed Recommendation, 19 July, 2001, <http://www.w3.org/TR/SVG>
11. USGS, <https://www.usgs.gov/>
12. X3D, X3D™ Extensible 3D: New-Generation Open Web3D Standard, <http://www.web3d.org/x3d/>
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14. XML, eXtensible Markup Language (XML), <http://www.w3.org/XML/>
15. XSL, eXtensible Stylesheet Language (XSL), <http://www.w3.org/Style/XSL/>
16. XSLT, eXtensible Stylesheet Language Transformations (XSLT), <http://www.w3.org/TR/xslt/>

### Protohistory of South Asia (MARCDPS225)

<b>Course Code: (MARCDPS225)</b>		<b>Credits: 4</b>		<b>Semester: 2<sup>nd</sup></b>	
<b>Course Title: Protohistory of South Asia</b>					
<b>Internal Assessments</b>				28 Marks	
<b>Semester-End Examination</b>				72 Marks	
<b>Course Learners Outcomes (CLOs):</b> <ul style="list-style-type: none"> <li>• <i>CLO 1:</i> Define proto-history and its scope, trace the cultural sequences of proto-historic periods, and explain the significance of early metallurgy in socio-cultural transformations.</li> <li>• <i>CLO 2:</i> Analyze the origin, urban planning, technological advancements, and decline of the Harappan Civilization, and evaluate its agrarian systems, trade networks, and artistic achievements.</li> <li>• <i>CLO 3:</i> Compare the architectural features, material culture, and regional variations of key Chalcolithic cultures (Ahar, Kayatha, Malwa), and assess the implications of OCP/Copper Hoards and Chalcolithic decline.</li> <li>• <i>CLO 4:</i> Debate the origins and spread of iron technology in South Asia, and differentiate between Northern (PGW, NBPW) and Southern (Megalithic) Iron Age cultural manifestations.</li> </ul>					
Unit	Content	Hours	Credits		
<b>1</b>	<u><b>Proto-History: An Introduction</b></u> <ol style="list-style-type: none"> <li>a. Proto-history; Subject matter; Scope and Aims</li> <li>b. Introduction to Proto-historic cultural sequence.</li> <li>c. Beginning of Metallurgy</li> </ol>	15	1		
<b>2</b>	<u><b>Harappan Civilization</b></u> <ol style="list-style-type: none"> <li>a. Origin and development of the Harappan Civilization</li> <li>b. Early Harappan Cultures</li> <li>c. Town planning, technology, arts and Crafts, Ceramics and script</li> <li>d. Agriculture, Trade and commerce</li> <li>e. Late Harappan Cultures and Decline</li> </ol>	15	1		
<b>3</b>	<u><b>Chalcolithic Cultures</b></u> <ol style="list-style-type: none"> <li>a. Distribution, architecture, features and contributions: Ahar, Ganeshwar and Jodhpura, Kayatha, Malwa and Jorwe.</li> <li>b. OCP and Copper Hoards: distribution and cultural tradition</li> <li>c. Decline of the Chalcolithic- causes and consequences</li> </ol>	15	1		
<b>4</b>	<u><b>Iron Age</b></u> <ol style="list-style-type: none"> <li>a. Origins of Iron in South Asia: Problems and perspectives</li> <li>b. Iron Age in Southern India and Sri Lanka: Megalithic phase</li> <li>c. Iron Age in Northern India: PGW and NBPW</li> </ol>	15	1		

### CLO-PLO mapping matrix for course

<u>Unite-wise CLOS</u>	<u>PLO1</u>	<u>PLO2</u>	<u>PLO3</u>	<u>PLO4</u>	<u>PLO5</u>	<u>PLO6</u>	<u>PLO7</u>	<u>PLO8</u>	<u>PLO9</u>	<u>PLO10</u>	<u>Average CLO</u>
<b>MARCDPS225.1</b>	3	2	2	1	2	2	2	2	2	2	<b>2.0</b>
<b>MARCDPS225.2</b>	3	2	3	2	3	3	2	2	2	3	<b>2.5</b>
<b>MARCDPS225.3</b>	3	2	3	1	3	2	2	2	2	2	<b>2.2</b>
<b>MARCDPS225.4</b>	3	2	2	2	2	3	2	2	2	3	<b>2.3</b>
<b>Average (PLO)</b>	<b>3.0</b>	<b>2.0</b>	<b>2.5</b>	<b>1.5</b>	<b>2.5</b>	<b>2.5</b>	<b>2.0</b>	<b>2.0</b>	<b>2.0</b>	<b>2.5</b>	<b>2.5</b>

### **Suggested Readings:**

1. Agrawal D.P. 2007. *Indus Civilization: An Interdisciplinary Perspective*. New Delhi: Aryan Books International.
2. Agrawal D.P. and J.S. Kharakwal 2003. *Bronze and Iron ages in South Asia*. New Delhi: Aryan Books International.
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4. Allchin, F.R. and B. Allchin 1993. *The Birth of Civilization in India*. Revised ed. New Delhi: Penguin Books.
5. Allchin, Bridget and Raymond Allchin 1982. *Rise of Civilization in India and Pakistan*. Cambridge: Cambridge University Press.
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9. Dales, G.F. and J.M. Kenoyer. 1986. *Excavations at Mohenjo Daro: The Pottery*. Philadelphia: The University of Pennsylvania.
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38. Shinde V.S. 1990. The Malwa culture in Maharashtra: a study of settlement and subsistence patterns. *Man and Environment* XV (2): 53-60.
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### Historical Archaeology (MARCDHA225)

<b>Course Code: (MARCDHA225)</b>		<b>Credits: 4</b>		<b>Semester: 2<sup>nd</sup></b>	
<b>Course Title: Historical Archaeology</b>					
<b>Internal Assessments</b>				28 Marks	
<b>Semester-End Examination</b>				72 Marks	
<b>Course Learners Outcomes (CLOs):</b>					
<ul style="list-style-type: none"> <li>• <i>CLO 1:</i> Define historical archaeology and its scope in India, correlate literary sources with archaeological evidence, and classify major ceramic types (NBPW, BRW, RPW) to establish cultural chronologies.</li> <li>• <i>CLO 2:</i> Analyze the archaeological evidence for the Second Urbanization (6th-4th BCE), and evaluate the material culture, administrative systems, and spread of the Mauryan Empire through archaeological remains.</li> <li>• <i>CLO 3:</i> Compare the archaeological signatures of Indo-Greek, Kushan, and Gupta periods, and assess the socio-political and artistic developments during post-Gupta dynasties.</li> <li>• <i>CLO 4:</i> Reconstruct cultural sequences of key historical sites (Taxila, Ahichchhatra, Arikamedu etc.) through their stratigraphy, artifacts, and architectural remains, and interpret their regional significance in Indian history.</li> </ul>					
<b>Unit</b>	<b>Content</b>			<b>Hours</b>	<b>Credits</b>
<b>1</b>	<b>Introduction</b> a. Historical Archaeology: Definition and scope. b. Literary tradition and Archaeology c. Ceramic assemblage: Northern black polished ware, black and red ware, red polished ware, Rang Mahal ware, rouletted ware, russet coated ware,			15	1
<b>2</b>	<b>Pre Mauryan Period and Mauryan Period</b> a. Brief review of archaeology of pre-Mauryan period from 6 <sup>th</sup> century BCE to 4 <sup>th</sup> century BCE and contemporary cultural assemblage. b. Second Urbanization c. Archaeology of Mauryan period			15	1
<b>3</b>	<b>Post Mauryan Period</b> a. Archaeology: Indo-Greeks till Kushan period b. Archaeology of the Guptas period and other contemporary dynasties c. Archaeology of Post Gupta Period			15	1
<b>4</b>	<b>Cultural Sequence of Important Sites</b> a. Hastinapur, Taxila, Ahichchhatra, Purana Qila, Thanesar (Harshaka-Tila), Rajghat, Rajgir, Sisupalgarh, Adam, Nagarjunakonda, Arikamedu and Chandraketugarh			15	1

### CLO-PLO mapping matrix for course

<u>Unit-wise CLOS</u>	<u>PLO1</u>	<u>PLO2</u>	<u>PLO3</u>	<u>PLO4</u>	<u>PLO5</u>	<u>PLO6</u>	<u>PLO7</u>	<u>PLO8</u>	<u>PLO9</u>	<u>PLO10</u>	<u>Average CLO</u>
<b>MARCDHA225.1</b>	3	2	2	1	2	2	2	1	2	2	<b>1.9</b>
<b>MARCDHA225.2</b>	3	2	3	2	3	3	2	2	2	3	<b>2.5</b>
<b>MARCDHA225.3</b>	3	2	3	2	3	3	2	2	2	3	<b>2.5</b>
<b>MARCDHA225.4</b>	3	2	3	2	3	3	3	2	2	3	<b>2.6</b>
<b>Average (PLO)</b>	<b>3.0</b>	<b>2.0</b>	<b>2.8</b>	<b>1.8</b>	<b>2.8</b>	<b>2.8</b>	<b>2.3</b>	<b>1.8</b>	<b>2.0</b>	<b>2.8</b>	<b>2.56</b>

## Suggested Readings

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19. Sharma, R. S. (1985). *Material culture and social formation in ancient India*. Macmillan India.
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21. Shastri, K. A. N. (1966). *History of South India (3rd ed.)*. Oxford University Press.
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24. Thapar, R. (2002). *Early India: From the origins to AD 1300*. Penguin Books.
25. Thapar, R. (2004). *Asoka and the decline of the Mauryas* (Rev. ed.). Oxford University Press.
26. Thapar, R. (2013). *The past before us: Historical traditions of early North India*. Permanent Black; Harvard University Press.

# **Third Semester**

### Research Methodology (MARCCRM325)

<b>Course Code: (MARCCRM325)</b>		<b>Credits: 4</b>		<b>Semester: 3<sup>rd</sup></b>	
<b>Course Title: Research Methodology</b>					
<b>Internal Assessments</b>				28 Marks	
<b>Semester-End Examination</b>				72 Marks	
<b>Course Learners Outcomes (CLOs):</b>					
<ul style="list-style-type: none"> <li>• <i>CLO 1:</i> Formulate comprehensive archaeological research designs incorporating field data collection techniques, and apply ethical principles to research publication and thesis writing.</li> <li>• <i>CLO 2:</i> Implement scientific methods in archaeological investigations, and differentiate between inductive and deductive approaches to archaeological reasoning.</li> <li>• <i>CLO 3:</i> Analyze processual archaeology frameworks including behavioral archaeology and middle-range theory, and critique their limitations that led to post-processual developments.</li> <li>• <i>CLO 4:</i> Evaluate post-processual trends (cognitive, structuralist, hermeneutical), and apply gender archaeology and postmodern perspectives to interpret past societies.</li> </ul>					
Unit	Content	Hours	Credits		
<b>1</b>	<b>Research design and Ethics</b> <ol style="list-style-type: none"> <li>a. Principal aspects of research design formulation; examples of planned archaeological research</li> <li>b. Techniques of field data collection and analysis.</li> <li>c. Publication, Thesis/proposal writing.</li> <li>d. Ethics in Archaeology</li> </ol>	15	1		
<b>2</b>	<b>Research Methodology in Archaeology</b> <ol style="list-style-type: none"> <li>a. Scientific methods in Archaeology</li> <li>b. Methods: Induction, deduction</li> <li>c. Theoretical Archaeology</li> </ol>	15	1		
<b>3</b>	<b>Processual Archaeology</b> <ol style="list-style-type: none"> <li>a. Processual archaeology</li> <li>b. Behavioural archaeology</li> <li>c. Middle Range Theory</li> <li>d. Criticism of Processual archaeology and the rise of Post-Processual archaeology</li> </ol>	15	1		
<b>4</b>	<b>Post-Processual Archaeology</b> <ol style="list-style-type: none"> <li>a. Main Trends</li> <li>b. Cognitive Archaeology,</li> <li>c. Structuralist, Hermeneutical and Postmodernism</li> <li>d. Gender Archaeology.</li> </ol>	15	1		

#### CLO-PLO mapping matrix for course

Unite-wise CLOS	PLO1	PLO2	PLO3	PLO4	PLO5	PLO6	PLO7	PLO8	PLO9	PLO10	Average CLO
MARCCRM325.1	3	3	3	3	2	3	3	2	3	3	2.8
MARCCRM325.2	3	3	2	2	3	3	3	2	2	3	2.6
MARCCRM325.3	3	2	3	2	3	3	3	2	2	3	2.6
MARCCRM325.4	3	2	2	2	3	3	3	2	2	3	2.5
<b>Average (PLO)</b>	<b>3.0</b>	<b>2.5</b>	<b>2.5</b>	<b>2.3</b>	<b>2.8</b>	<b>3.0</b>	<b>3.0</b>	<b>2.0</b>	<b>2.3</b>	<b>3.0</b>	<b>2.51</b>

## Suggested Readings

1. Bernard Knapp, B. (Ed.). 1992. *Archaeology, Annales and Ethnohistory*. Cambridge University Press.
2. Binford, L.R. 1989. *Debating Archaeology*. New York: Academic Press.
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21. Preucel, R.W. and I. Hodder (eds.). 1996. *Contemporary Archaeology in Theory: A Reader*. Blackwell Publishers.
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29. VanPool, C.S. and Todd L. VanPool. 1999. *The Scientific Nature of Postprocessualism*. *American Antiquity*. Vol.64: 33-53.
30. Yoffee, N. and A. Sherratt (ed.) 1993. *Archaeological Theory: Who sets the agenda?* Cambridge University Press.

### Practical III (MARCCPR325)

<b>Course Code: (MARCCPR325)</b>	<b>Credits: 4</b>	<b>Semester: 3<sup>rd</sup></b>
<b>Course Title: Practical III</b>		
<b>Internal Assessments</b>	28 Marks	
<b>Viva-voce/Demonstration</b>	72 Marks	
<b>Course Learners Outcomes (CLOs):</b> <ul style="list-style-type: none"> <li>• <i>CLO 1:</i> Demonstrate proficiency in field documentation by producing accurate on-site sketches of architectural plans and elevations, and identify key structural elements of temples and historical buildings.</li> <li>• <i>CLO 2:</i> Apply estampage and tracing methods to record inscriptions, and explain the significance of epigraphic evidence in historical reconstruction.</li> <li>• <i>CLO 3:</i> Perform coin punching techniques and analyze numismatic evidence to interpret historical trade and political systems.</li> <li>• <i>CLO 4:</i> Compile a comprehensive field report integrating architectural, epigraphic, and numismatic observations, and defend findings through viva voce examinations.</li> </ul>		
<b>Content</b>	<b>Hours</b>	<b>Credits</b>
Students will visit different temples, museums and inscription sites and learn their practical aspects and also submit a report based on their own observations. <b>Components:</b> <ol style="list-style-type: none"> <li>a. On-site sketching of plans and elevations</li> <li>b. Identification of key architectural elements</li> <li>c. Estampage and tracing of inscriptions</li> <li>d. Demonstration of coin punching technique</li> </ol> <b>Assessment:</b> <ol style="list-style-type: none"> <li>a. Practical work and record file</li> <li>b. On-site exercise report</li> <li>c. Viva voce</li> </ol>	60	4

#### CLO-PLO mapping matrix for course

<u>Unite-wise CLOS</u>	<u>PLO1</u>	<u>PLO2</u>	<u>PLO3</u>	<u>PLO4</u>	<u>PLO5</u>	<u>PLO6</u>	<u>PLO7</u>	<u>PLO8</u>	<u>PLO9</u>	<u>PLO10</u>	<u>Average CLO</u>
<b>MARCCPR325.1</b>	2	3	3	2	2	2	1	2	2	2	2.1
<b>MARCCPR325.2</b>	2	3	2	2	2	2	1	2	1	2	1.9
<b>MARCCPR325.3</b>	2	3	3	2	3	2	1	1	2	3	2.2
<b>MARCCPR325.4</b>	2	2	3	3	3	2	2	2	3	3	2.5
<b>Average (PLO)</b>	<b>2.0</b>	<b>2.75</b>	<b>2.75</b>	<b>2.25</b>	<b>2.5</b>	<b>2.0</b>	<b>1.25</b>	<b>1.75</b>	<b>2.0</b>	<b>2.5</b>	<b>2.5</b>

### Ancient Indian Architecture (MARCCIA325)

<b>Course Code: (MARCCIA325)</b>		<b>Credits: 4</b>		<b>Semester: 3<sup>rd</sup></b>	
<b>Course Title: Ancient Indian Architecture</b>					
<b>Internal Assessments</b>				28 Marks	
<b>Semester-End Examination</b>				72 Marks	
<b>Course Learners Outcomes (CLOs):</b>					
<ul style="list-style-type: none"> <li>• <i>CLO 1:</i> Understand the genesis and growth of early Indian architecture and its cultural significance.</li> <li>• <i>CLO 2:</i> Identify and describe key architectural features from the pre-Mauryan, Mauryan, and early fortified settlements.</li> <li>• <i>CLO 3:</i> Analysis of the stupa and rock-cut architecture and its patterns of development, including major examples like Sanchi, Amaravati, and Ajanta.</li> <li>• <i>CLO 4:</i> Distinguishing features between the main styles of temple architecture i.e., Nagara, Vesara/Karnata, Bhumija and Dravida—and recognize important temple sites across India.</li> </ul>					
<b>Unit</b>	<b>Content</b>			<b>Hours</b>	<b>Credits</b>
<b>1</b>	<b><u>Introduction and Development of Early Architecture</u></b> a. Evolution, spread, and Development of Architecture b. Architecture during the Pre-Mauryan and Mauryan Periods c. Ancient Fortified Settlements			15	1
<b>2</b>	<b><u>Development of Stupa Architecture</u></b> a. Origin and Conceptual development of Stupa Architecture: Pre-Mauryan and Mauryan Periods b. Notable Stupas: Sanchi, Bharhut, Amaravati, and Nagarjunakonda c. Other Stupas of Architectural Importance Across Indian Subcontinent			15	1
<b>3</b>	<b><u>Development of Rock-Cut Architecture</u></b> a. Origin, Spread and Development of Rock-Cut Architecture b. Architecture of Chaityas and Viharas: Key Examples and Diagnostic Features c. Major Rock-Cut Sites: Bhaja, Bedsa/Bedase, Pitalkhora, Karle, Ajanta, Kanheri and Ellora			15	1
<b>4</b>	<b><u>Temple Architecture in India</u></b> a. Origin and Development of Temple Architecture b. Forms and modes of Temple Architecture: Nagara, Vesara/Karnata Dravida, and Dravida c. Important Temples: Gupta, Chalukya, Chandel-Khajuraho, Odissa, Pallava, Chola and Hoysala			15	1

### CLO-PLO mapping matrix for course

<u>Unite-wise CLOS</u>	<u>PLO1</u>	<u>PLO2</u>	<u>PLO3</u>	<u>PLO4</u>	<u>PLO5</u>	<u>PLO6</u>	<u>PLO7</u>	<u>PLO8</u>	<u>PLO9</u>	<u>PLO10</u>	<u>Average CLO</u>
<b>MARCCIA325.1</b>	3	2	2	2	2	2	1	2	2	2	2.0
<b>MARCCIA325.2</b>	3	2	2	2	2	1	1	1	2	1	1.7
<b>MARCCIA325.3</b>	3	2	2	2	3	1	1	2	1	2	1.9
<b>MARCCIA325.4</b>	3	2	2	2	3	2	1	2	2	2	2.1
<b>Average (PLO)</b>	<b>3.0</b>	<b>2.0</b>	<b>2.0</b>	<b>2.0</b>	<b>2.5</b>	<b>1.5</b>	<b>1.0</b>	<b>1.75</b>	<b>1.75</b>	<b>1.75</b>	<b>2.5</b>

### Suggested Readings

1. Behrendt, K. (2004). *The Buddhist architecture of Gandhāra*. E. J. Brill.
2. 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.
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4. Bharme, V., & Krusche, K. (Eds.). (2014). *Rediscovering the Hindu temple: The sacred architecture and urbanism of India*. Cambridge Scholars Publishing.
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7. Brancaccio, P. (2021). Views from the Black Mountain: The rock-cut Mahāvihāra at Kānheri/Kṛṣṇagiri in Konkan. In A. S. Amar, N. Morrissey, & A. Shimada (Eds.), *On the regional development of early medieval Buddhist monasteries in South Asia* (pp. 73–88). Center for South Asian Studies, Ryukoku University.
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20. Hardy, A. (1995). *Indian temple architecture: Form and transformation—The Karnāṭa Drāviḍa tradition, 7th to 13th centuries*. Indira Gandhi National Centre for the Arts; Abhinav Publications.
21. Hardy, A. (2007). *The temple architecture of India*. Wiley.
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24. Jones, L. (2000). *The hermeneutics of sacred architecture: Experience, interpretation, comparison*. Harvard University Press.

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## Indian Art and Iconography (MARCCAI325)

<b>Course Code: (MARCCAI325)</b>		<b>Credits: 4</b>	<b>Semester: 3<sup>rd</sup></b>
<b>Course Title: Indian Art and Iconography</b>			
<b>Internal Assessments</b>			28 Marks
<b>Semester-End Examination</b>			72 Marks
<b>Course Learners Outcomes (CLOs):</b>			
<ul style="list-style-type: none"> <li>• <i>CLO 1:</i> Trace the evolution of Indian art from prehistoric to medieval periods, analyze distinctive features of major schools (Mauryan, Sunga, Satavahana), and evaluate the significance of terracotta, ivory, and bronze artifacts in cultural contexts.</li> <li>• <i>CLO 2:</i> Compare stylistic characteristics of key art schools (Mathura, Gandhara, Sarnath, Deccan), and interpret the socio-religious influences reflected in sculptures, murals (Ajanta, Bagh), and temple architecture (Pallava, Chola, Hoysala).</li> <li>• <i>CLO 3:</i> Apply concepts of Iconometry (<i>Talamana</i>) from Shilpa texts, and demonstrate understanding of ritual symbolism in image worship through analysis of archaeological and textual sources.</li> <li>• <i>CLO 4:</i> Identify and interpret iconographic attributes of major Hindu (Shiva, Vishnu), Buddhist (Dhyani Buddhas), and Jain (Tirthankaras) deities, and correlate their visual</li> </ul>			
Unit	Content	Hours	Credits
<b>1</b>	<b><u>Evolution and Development of Early Art</u></b> <ol style="list-style-type: none"> <li>a. Evolution and development of art.</li> <li>b. Pre Mauryan and Mauryan art.</li> <li>c. Sunga and Satavahana Art: Besnagar Pillar, Bharhut Stupa, and Western Indian Buddhist caves.</li> <li>d. Terracotta, Ivories, and Bronzes: Importance and characteristics of these art forms.</li> </ol>	15	<b>1</b>
<b>2</b>	<b><u>Art Schools and Developments</u></b> <ol style="list-style-type: none"> <li>a. Kushan art: Mathura and Gandhara schools.</li> <li>b. Gupta (Sarnath School) Art: Brahmanical, Buddhist, and Jain sculptures, along with Ajanta and Bagh murals.</li> <li>c. Art schools of Deccan and South India: Early Chalukya, Rashtrakuta, Pallava, Chola, and Hoysala.</li> <li>d. Chandela, Pala-Sena, and Eastern Ganga art.</li> </ol>	15	<b>1</b>
<b>3</b>	<b><u>Introduction to Iconography</u></b> <ol style="list-style-type: none"> <li>a. Significance and Sources: Importance and sources of iconographic studies.</li> <li>b. Concept and Symbolism: Symbolism and ritual aspects of image worship.</li> <li>c. Iconometry and Shilpa Texts: Overview of Iconometry (<i>Talamana</i>) and the role of Ancient Indian Shilpa Texts.</li> <li>d. Antiquity of Image Worship: Historical development of image worship practices.</li> </ol>	15	<b>1</b>
<b>4</b>	<b><u>Iconography of Major Traditions</u></b> <ol style="list-style-type: none"> <li>a. Hindu Iconography: Key deities including Shiva, Vishnu (Dashavataras), and Brahma.</li> <li>b. Iconography of Surya, Ganesha, Kartikeya, Durga, Lakshmi, Parvati, Saraswati, Saptamtrakas, Ashtadikpalas, and Navagrahas.</li> <li>c. Buddhist Iconography: Buddha, Dhyani Buddhas, Bodhisattvas, and Buddhist goddesses</li> <li>d. Jaina Iconography: Tirthankaras and associated deities</li> </ol>	15	<b>1</b>

**CLO-PLO mapping matrix for course**

<b><u>Unite-wise CLOS</u></b>	<b><u>PLO1</u></b>	<b><u>PLO2</u></b>	<b><u>PLO3</u></b>	<b><u>PLO4</u></b>	<b><u>PLO5</u></b>	<b><u>PLO6</u></b>	<b><u>PLO7</u></b>	<b><u>PLO8</u></b>	<b><u>PLO9</u></b>	<b><u>PLO10</u></b>	<b><u>Average CLO</u></b>
<b>MARCCAI325.1</b>	3	2	2	1	2	2	1	2	2	1	1.8
<b>MARCCAI325.2</b>	3	2	2	2	3	2	1	2	2	2	2.1
<b>MARCCAI325.3</b>	2	1	2	2	2	2	1	3	2	1	1.8
<b>MARCCAI325.4</b>	3	2	2	2	3	2	1	2	2	1	2.0
<b>Average (PLO)</b>	<b>2.75</b>	<b>1.75</b>	<b>2.00</b>	<b>1.75</b>	<b>2.50</b>	<b>2.00</b>	<b>1.00</b>	<b>2.25</b>	<b>2.00</b>	<b>1.25</b>	<b>2.76</b>

**Suggested Readings:**

1. Agrawala, P. K. (1994). *Studies in Indian iconography*. Jaipur: Publication Scheme.
2. Bakker, H. (1997). *The Vakatakas: An essay in Hindu iconology* (Gonda Indological Series). Groningen: Egbert Forsten.
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13. Colas, G. (2004). The competing hermeneutics of image worship in Hinduism (Fifth to eleventh century AD). In P. Granoff & K. Shinohara (Eds.), *Images in Asian religions: Texts and contexts* (pp. 149–179). University of Toronto Press.
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18. Cutler, N. J., Waghorne, J., & Narayanan, V. (Eds.). (1985). *Gods of flesh, gods of stone: The embodiment of divinity in India*. New York: Columbia University Press.
19. Czuma, S. J. (1985). *Kushana sculpture: Images from early India*. Ohio: The Cleveland Museum.
20. Daheja, V. (1986). *Yogini cult and temples*. New Delhi: National Museum.

21. Deglurkar, G. B. (2004). *Portrayal of women in the art and literature of the ancient Deccan*. Jaipur: Publications Scheme.
22. Desai, D. (1996). *The religious imagery of Khajuraho*. Mumbai: Project for Indian Cultural Studies Publication.
23. Desai, K. (1973). *Iconography of Vishnu*. New Delhi: Abhinav Publications.
24. Dehejia, V. (Ed.). (1999). *Devi, the great goddess: Female divinity in South Asian art*. Ahmedabad.
25. Dowson, J. (1879). *A classical dictionary of Hindu mythology*. [Reprints: 1888, 1891].
26. Gopinath Rao, T. A. (1985). *Elements of Hindu iconography* (2nd ed.). Varanasi: Motilal Banarasidas.
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28. Krishan, Y. (1996). *The Buddha image: Its origin and development*. New Delhi: Munshiram Manoharlal.
29. Lokesh, C. (1987). *Buddhist iconography* (2 vols.). New Delhi: Aditya Prakashan.
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35. Zimmer, H. (2010). *Myths and symbols in Indian art and civilization*. New Delhi: Motilal Banarassidas.

### Epigraphy and Numismatics (MAARCDEN325)

<b>Course Code: (MAARCDEN325)</b>		<b>Credits: 4</b>		<b>Semester: 3<sup>rd</sup></b>	
<b>Course Title: Epigraphy and Numismatics</b>					
<b>Internal Assessments</b>				28 Marks	
<b>Semester-End Examination</b>				72 Marks	
<b>Course Learners Outcomes (CLOs):</b>					
<ul style="list-style-type: none"> <li>• <i>CLO 1:</i> Analyze the development of Brahmi, Kharosthi, and Aramaic scripts through orthographic features, and apply decipherment techniques to Ashokan edicts and major historical inscriptions.</li> <li>• <i>CLO 2:</i> Interpret the historical significance of key inscriptions (Hathigumpha, Allahabad Prashasti, etc.), and demonstrate estampage techniques for epigraphic documentation and preservation.</li> <li>• <i>CLO 3:</i> Reconstruct historical timelines using Indian calendrical eras (Vikrama, Shaka, Gupta), and evaluate numismatic evidence for dating and socio-economic analysis.</li> <li>• <i>CLO 4:</i> Classify coin types from punch-marked to Gupta periods, and assess coinage iconography, metallurgy, and provenance through scientific analytical methods.</li> </ul>					
Unit	Content	Hours	Credits		
<b>1</b>	<b><u>Introduction to Epigraphy and Palaeography</u></b> <ol style="list-style-type: none"> <li>a. Epigraphy and Palaeography: Terminology, scope, and significance in historical reconstruction.</li> <li>b. Antiquity of Writing in India: Early evidence and materials used for writing.</li> <li>c. Brahmi, Aramic and Kharosthi Scripts: Origin theories, orthographic features, and decipherment.</li> </ol>	15	<b>1</b>		
<b>2</b>	<b><u>Edicts of Ashoka and Major Inscriptions</u></b> <ol style="list-style-type: none"> <li>a. Edicts of Ashoka: Nature, geographic distribution, categories, and languages used, Decipherment of Major Rock Edicts: Girnar version of Edicts I, II, IV, VI, IX, XII</li> <li>b. Important Inscriptions: Sohgaure Copperplate, Besnagar Garuda Pillar, Hathigumpha, Nasik Cave Inscriptions, Inscriptions of Nahapana and Vasithiputa Pulumavi, Junagarh Inscription of Rudradamana, Nagarjunikonda Inscription of Virapurisadatta, Mathura inscription of Huviska, Allahabad Prashasti of Samudragupta, Aihole Inscription of Pulakesin II</li> <li>c. Methods of decipherment and estampage technique.</li> </ol>	15	<b>1</b>		
<b>3</b>	<b><u>Calendrical Systems and Numismatics</u></b> <ol style="list-style-type: none"> <li>a. Calendrical Systems: Chronograms, dates, and prominent Indian eras like Vikrama, Shaka, Kalachuri-Chedi, and Gupta.</li> <li>b. Numismatics as Historical Sources: Role of coinage in reconstructing history</li> <li>c. Antiquity and Typology of Indian Coins: Development, symbolism, and classification of coin types.</li> <li>d. Scientific Analysis of Coins: Methods of study, including destructive and non-destructive techniques for coin provenance and preservation</li> </ol>	15	<b>1</b>		
<b>4</b>	<b><u>Coins of Historical Importance</u></b> <ol style="list-style-type: none"> <li>a. Punch-Marked, Indo-Greek, Indo-Scythian and Indo Parthian dynasties, Tribal.</li> <li>b. Kushana, Satavahana, Western Kshatrapa.</li> <li>c. Gupta Coins: Iconography and inscriptions.</li> </ol>	15	<b>1</b>		

**CLO-PLO mapping matrix for course**

<b><u>Unite-wise CLOS</u></b>	<b><u>PLO1</u></b>	<b><u>PLO2</u></b>	<b><u>PLO3</u></b>	<b><u>PLO4</u></b>	<b><u>PLO5</u></b>	<b><u>PLO6</u></b>	<b><u>PLO7</u></b>	<b><u>PLO8</u></b>	<b><u>PLO9</u></b>	<b><u>PLO10</u></b>	<b><u>Average CLO</u></b>
<b>MAARCDEN325.1</b>	3	2	2	2	3	2	1	1	2	2	2.0
<b>MAARCDEN325.2</b>	3	2	2	2	3	2	1	2	2	2	2.1
<b>MAARCDEN325.3</b>	2	2	2	2	3	2	1	1	2	2	1.9
<b>MAARCDEN325.4</b>	3	3	3	2	3	2	1	2	2	2	2.3
<b>Avg. (PLO)</b>	<b>2.75</b>	<b>2.25</b>	<b>2.25</b>	<b>2.00</b>	<b>3.00</b>	<b>2.00</b>	<b>1.00</b>	<b>1.50</b>	<b>2.00</b>	<b>2.00</b>	<b>2.5</b>

**Suggested Readings**

- Allan, J. (1935). *Catalogue of Coins of Ancient India*. London: British Museum.
- Allchin, F. R., & Norman, K. R. (1985). Guide to the Ashokan inscriptions. *South Asian Studies*, 1, 43–50.
- Altekar, A. S. (1957). *Coinage of the Gupta Empire*. Varanasi: Numismatic Society of India.
- Chattopadhyaya, Brajadulal. (1977). *Coins and Currency System in South India*. Delhi: Munshiram Manoharlal.
- Dasgupta, K. K. (1974). *A Tribal History of Ancient India: A Numismatic Approach*. Calcutta: Nababharat Publications.
- Gardener, P. (1886). *The Coinage of the Greek and Scythic Kings of Bactria and India in the British Museum*. London: British Museum.
- Gupta, P. L. (1979). *Coins* (2nd rev. ed.). New Delhi: National Book Trust.
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- Gupta, P. L., & Kulashreshtha, S. (1993). *Kushana Coins and History*. New Delhi: D. K. Publishers.
- Hultzsch, D. (1969). *Corpus Inscriptionum Indicarum*, Vol. I (Reprint). Varanasi: Indological Book House.
- Jha, A. K. (1998). Observations on the principles of typology: A study of ancient Indian coinage. In A. K. Jha & S. Garg (Eds.), *Ex Moneta: Essays on Numismatics in Honour of Dr. David W. MacDowall* (Vol. 1, pp. 33–42). New Delhi: Harman Publishing House.
- Jha, A., & Rajgor, D. (1994). *Studies in the Coinage of Western Kshatrapas*. Anjaneri (Nasik): Indian Institute of Research in Numismatic Studies.
- Lahiri, A. N. (1965). *Corpus of Indo-Greek Coins*. Calcutta: Publication.
- Mala Datta. (1990). *A Study of the Satavahana Coinage*. Delhi: Harman Publishing House.
- Mangalam, S. J. (1990). *Kharoshthi Script*. Delhi: Eastern Book Linkers.
- Mangalam, S. J. (2002). *Anegondi Inscriptions*. Pune: Deccan College.
- Pandey, R. (1957). *Indian Palaeography*. Delhi: Motilal Banarsidass.
- Rajgor, D. (2001). *Punch-marked Coins of Early Historical India*. California: Resha Books International.
- Sahni, B. (1973). *The Technique of Casting Coins in Ancient India*. Varanasi: Bharatiya Publishing House.
- Salomon, R. (1998). *Indian epigraphy: A guide to the study of inscriptions in Sanskrit, Prakrit, and the other Indo-Aryan languages*. Oxford University Press.
- Sarma, I. K. (1980). *Coinage of the Satavahana Empire*. Delhi: Agam Kala Prakasan.

22. Sircar, D. C. (1965). *Indian Epigraphy*. Delhi: Motilal Banarsidass.
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24. Srivastava, A. K. (1969). *Catalogue of Indo-Greek Coins in the State Museum, Lucknow*. Lucknow: State Museum.
25. Srivastava, A. K. (1972). *Catalogue of Saka Pahlava Coins of Northern India in the State Museum, Lucknow*. Lucknow: State Museum.
26. *Studies in South Indian Coins*: Journal published by South Indian Numismatic Society, Madras.

### Environmental Archaeology (MARCDEA325)

<b>Course Code: (MARCDEA325)</b>		<b>Credits: 4</b>		<b>Semester: 3<sup>rd</sup></b>	
<b>Course Title: Environmental Archaeology</b>					
<b>Internal Assessments</b>				28 Marks	
<b>Semester-End Examination</b>				72 Marks	
<b>Course Description:</b> 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.					
<b>Course Outcomes (COs):</b> 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 analyse 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	Content	Hours	Credits		
1	<b>Introduction</b> a. Nature and Scope. b. Geological Time Scale. c. Quaternary Period d. Human impact on Ecology	15	1		
2	<b>Distinctive Features of Quaternary Period</b> a. Glacial. b. Fluvial c. Lacustrine d. Aeolian	15	1		
3	<b>Palaeo-environmental Reconstruction</b> a. Ancient Vegetation. b. Ancient Fauna c. Climatic Variation	15	1		
4	<b>Quaternary Stratigraphy</b> a. Aeolian Stratigraphy (Western India). b. Indian Rivers (Northern India). c. Sea Level Fluctuations. d. Tectonics and Landforms	15	1		

#### CLO-PLO mapping matrix for course

<u>Unit-wise CLOS</u>	<u>PLO1</u>	<u>PLO2</u>	<u>PLO3</u>	<u>PLO4</u>	<u>PLO5</u>	<u>PLO6</u>	<u>PLO7</u>	<u>PLO8</u>	<u>PLO9</u>	<u>PLO10</u>	<u>Average CLO</u>
MARCDEA325.1	3	2	2	1	2	2	2	1	2	2	1.9
MARCDEA325.2	3	3	2	1	3	2	2	1	2	2	2.1
MARCDEA325.3	3	3	3	1	3	2	2	1	2	2	2.2
MARCDEA325.4	3	3	3	1	2	2	2	1	2	2	2.1
Avg. (PLO)	<b>3.00</b>	<b>2.75</b>	<b>2.50</b>	<b>1.00</b>	<b>2.50</b>	<b>2.00</b>	<b>2.00</b>	<b>1.00</b>	<b>2.00</b>	<b>2.00</b>	<b>2.5</b>

### **Suggested Reading:**

1. Abeyratne, M., N. A. Spooner, R. Grun, and J. M. Head. 1997. Multidating studies of
2. Batadomba Cave, Sri Lanka. *Quaternary Science Reviews* 16:243-255.
3. Bacon, A.-M., F. Demeter, P. Düringer, 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.
4. Barker, G. 2005. The archaeology of foraging and farming at Niah Cave, Sarawak. *Asian Perspectives* 44:90-106.
5. Barker, G., H. Barton, M. Bird, P. Daly, I. Datan, A. Dykes, L. Farr, D. Gilbertson, B. Harrison, 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.
6. 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.
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8. 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*.
9. Bridgland, D. R., and R. Westaway. 2008. Climatically controlled river terrace staircases: A worldwide Quaternary phenomenon. *Geomorphology* 98:285-315.
10. 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.
11. 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* 28:379382.
12. Goldberg, P., and R. I. Macphail. 2006. *Practical and Theoretical Geoarchaeology*. Oxford: Blackwell.
13. 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.
14. Holliday, Vance T. 2004. *Soils in Archaeological Research*. Oxford: Oxford University Press.
15. 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. *Palaeoanthropology* 2010:1-60.
16. Kealhofer, L., P. Grave, H. Genz, and B. Marsh. 2009. Post-Collapse: the re-emergence of polity in Iron age Bogazkoy, Central Anatolia. *Oxford Journal of Archaeology* 28:275-300.

17. Kourampas, N., I. A. Simpson, N. Perera, S. U. Deraniyagala, and W. H. Wijeyapala. 2009. Rock shelter sedimentation in a dynamic tropical landscape: Late Pleistocene-Early Holocene archaeological deposits in Kitulgala Beli-lena, southwestern Sri Lanka. *Geoarchaeology* 24:677-714.
18. Marriner, N., and C. Morhange. 2007 Geoscience of ancient Mediterranean harbours. *Earth-Science Reviews* 80:137-194.
19. O'Sullivan, P. B. 2008. The 'collapse' of civilizations: what paleoenvironmental reconstruction cannot tell us, but anthropology can. *The Holocene* 18.
20. 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,
21. R. Korisettar, and V. S. Kale, pp. 414-434. Bangalore: *Memoirs of the geological Society of India* 32.
22. Pollard, A. M. 1999 *Geoarchaeology: an introduction*. Geological Society, London, *Special Publications* 165:7-14.
23. 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.
24. Weiss, H., and R. S. Bradley. 2001 What Drives Societal Collapse? *Science* 291:609-61.
25. 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.
26. 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.

# **Fourth Semester (Research only)**

**(Students can choose either Research Work (Dissertation) of 16 Credits With one Course Paper or Course Work of 20 Credits in 4<sup>th</sup> Semester)**

### Dissertation (MAARCCDI425)

<b>Course Code: (MAARCCDI425)</b>	<b>Credits: 16</b>	<b>Semester: 4<sup>th</sup></b>
<b>Dissertation</b>		
<b>Dissertation</b>	300 Marks	
<b>Open Viva-Voce</b>	100 Marks	
<p><b>Course Learners Outcomes (CLOs):</b></p> <ul style="list-style-type: none"> <li>• <i>CLO 1:</i> Develop and present a comprehensive research proposal, including aims, methodology, and expected contributions to the field.</li> <li>• <i>CLO 2:</i> Conduct independent research, applying appropriate archaeological methods and analysis.</li> <li>• <i>CLO 3:</i> Write and submit a scholarly dissertation that reflects an understanding of the chosen topic and contributes to existing knowledge in the discipline.</li> <li>• <i>CLO 4:</i> Demonstrate the ability to manage a research project from conception to completion, including data collection, analysis, and synthesis.</li> </ul>		
<p><b>DISSERTATION</b></p> <ol style="list-style-type: none"> <li>1. A student may opt for writing a Dissertation in lieu of Course Work for semester IV.</li> <li>2. The dissertation application form shall be submitted by the student within 30 days of the commencement of teaching for semester III.</li> <li>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.</li> <li>4. The synopsis shall be signed by the student and the research guide and shall consist of:             <ol style="list-style-type: none"> <li>a. Current status of knowledge of the topic of research;</li> <li>b. Aims of proposed research and methodology to be adopted;</li> <li>c. Nature of data to be collected;</li> <li>d. Proposed method of analysis of data;</li> <li>e. Expected contribution to the knowledge of the subject; and</li> <li>f. A detailed bibliography of the literature on the topic selected.</li> </ol> </li> <li>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.</li> <li>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.</li> <li>7. The cover of the dissertation shall mention the topic of the dissertation and shall contain the following matter:             <p><b>"Dissertation submitted to Department of Archaeology, CCAS in partial fulfilment of the Degree of Master of Arts".</b></p> <ol style="list-style-type: none"> <li>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.</li> <li>9. The dissertation shall have the following certificate from the research guide:</li> </ol> </li> </ol>		

### **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)

10. Revaluation of the dissertation shall be done only when a student gets 40 and above marks.
11. 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.
12. 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.

### Data Analysis (MARCCDA425)

<b>Course Code: (MARCCDA425)</b>		<b>Credits: 4</b>		<b>Semester: 4<sup>th</sup></b>	
<b>Course Title: Data Analysis</b>					
<b>Internal Assessments</b>				28 Marks	
<b>Semester-End Examination</b>				72 Marks	
<b>Course Learners Outcomes (CLOs):</b>					
<ul style="list-style-type: none"> <li>• <i>CLO 1:</i> Apply appropriate methods of archaeological data collection, documentation, and field recording using both traditional and digital tools.</li> <li>• <i>CLO 2:</i> Analyse and interpret archaeological data through classification, quantification, and visualization using relevant software and theoretical frameworks.</li> <li>• <i>CLO 3:</i> Design and structure a research dissertation, demonstrating clear academic writing, argumentation, and correct citation practices.</li> <li>• <i>CLO 4:</i> Evaluate ethical considerations in archaeological research and confidently present their work through oral presentations and academic formats.</li> </ul>					
Unit	Content	Hours	Credits		
<b>1</b>	<b><u>Fieldwork and Data Collection in Archaeology</u></b> <ol style="list-style-type: none"> <li>a. Retrieval of Archaeological data: exploration, excavation, Ethnography and Ethno-archaeology.</li> <li>b. Types of field data: artefactual, Eco factual, spatial, and contextual.</li> <li>c. Documentation techniques</li> <li>d. Ethical protocols in data collection and community engagement.</li> </ol>	15	1		
<b>2</b>	<b><u>Data Analysis and Interpretation</u></b> <ol style="list-style-type: none"> <li>a. Classification and quantification of archaeological materials.</li> <li>b. Use of software for data analysis.</li> <li>c. Interpreting material culture: linking data to human behaviour and cultural processes.</li> </ol>	15	1		
<b>3</b>	<b><u>Dissertation Design and Writing</u></b> <ol style="list-style-type: none"> <li>a. Research design: framing objectives, hypothesis, and methodology.</li> <li>b. Structure of dissertation: abstract, introduction, chapters, conclusion, and references.</li> <li>c. Referencing styles (Chicago, APA, MLA, Harvard).</li> </ol>	15	1		
<b>4</b>	<b><u>Academic Ethics, Review, and Presentation</u></b> <ol style="list-style-type: none"> <li>a. Plagiarism, copyright, and citation ethics.</li> <li>b. Preparing for dissertation viva: oral presentation techniques.</li> <li>c. Transforming dissertation into research papers or conference presentations.</li> </ol>	15	1		

#### CLO-PLO mapping matrix for course

<u>Unite-wise CLOS</u>	<u>PLO1</u>	<u>PLO2</u>	<u>PLO3</u>	<u>PLO4</u>	<u>PLO5</u>	<u>PLO6</u>	<u>PLO7</u>	<u>PLO8</u>	<u>PLO9</u>	<u>PLO10</u>	<u>Average CLO</u>
MARCCDA425.1	3	3	3	2	2	2	2	2	3	3	<b>2.5</b>
MARCCDA425.2	2	3	3	2	3	2	2	2	3	3	<b>2.5</b>
MARCCDA425.3	2	3	3	2	2	2	2	2	2	2	<b>2.2</b>
MARCCDA425.4	2	3	3	2	3	3	3	3	3	3	<b>2.8</b>

## **Suggested Readings**

1. Ashmore, W., & Sharer, R. J. (2013). *Discovering our past: A brief introduction to archaeology* (6th ed.). McGraw-Hill.
2. Barker, P. (1993). *Techniques of archaeological excavation* (3rd ed.). Routledge.
3. Hodder, I. (1999). *The archaeological process: An introduction*. Blackwell.
4. Renfrew, C., & Bahn, P. (2020). *Archaeology: Theories, methods and practice* (8th ed.). Thames & Hudson.
5. Silverman, D. (2017). *Doing qualitative research* (5th ed.). SAGE Publications.
6. Turabian, K. L. (2018). *A manual for writers of research papers, theses, and dissertations* (9th ed.). University of Chicago Press.
7. Wheeler, M. (1954). *Archaeology from the earth*. Oxford University Press.

**4<sup>th</sup> Semester**  
**Course Work Only**

### Indian Knowledge System (MARCCIK425)

<b>Course Code: (MARCCIK425)</b>		<b>Credits: 4</b>		<b>Semester: 4<sup>th</sup></b>	
<b>Course Title: Indian Knowledge System</b>					
<b>Internal Assessments</b>				28 Marks	
<b>Semester-End Examination</b>				72 Marks	
<b>Course Learners Outcomes (CLOs):</b>					
<ul style="list-style-type: none"> <li>• <i>CLO 1:</i> Explain the scope and significance of Indian Knowledge Systems (IKS), and trace their historical evolution from Harappan to classical periods through archaeological and textual sources.</li> <li>• <i>CLO 2:</i> Analyze ancient Indian achievements in astronomy, mathematics, and metallurgy, and evaluate medical practices (e.g., Ayurveda) through archaeological and historical evidence.</li> <li>• <i>CLO 3:</i> Interpret principles of Vastu Shastra and Shilpa Shastra in temple architecture and urban planning, and correlate these with extant archaeological remains.</li> <li>• <i>CLO 4:</i> Assess traditional water management systems (stepwells, tanks) and sustainable agricultural practices, and demonstrate their relevance for contemporary environmental challenges.</li> </ul>					
Unit	Content	Hours	Credits		
<b>1</b>	<b><u>Introduction to the Indian Knowledge Systems</u></b> a. Concept, scope, and significance of IKS b. Historical evolution: Harappan, Vedic, post-Vedic, and classical knowledge traditions.	15	1		
<b>2</b>	<b><u>Science and Technology</u></b> a. Astronomy, mathematics, and Metallurgy. b. Ancient medical practices	15	1		
<b>3</b>	<b><u>Indian Art and Architectural Traditions</u></b> a. Vastu Shastra b. Shilpa Shastra.	15	1		
<b>4</b>	<b><u>Environmental Management</u></b> a. Traditional water harvesting systems: Stepwells, tanks, canals and sacred grooves. b. Sustainable agricultural practices and their archaeological evidences.	15	1		

#### CLO-PLO mapping matrix for course

<u>Unite-wise CLOS</u>	<u>PLO1</u>	<u>PLO2</u>	<u>PLO3</u>	<u>PLO4</u>	<u>PLO5</u>	<u>PLO6</u>	<u>PLO7</u>	<u>PLO8</u>	<u>PLO9</u>	<u>PLO10</u>	<u>Average CLO</u>
<b>MARCCIK425.1</b>	3	2	2	2	2	2	2	3	2	2	<b>2.2</b>
<b>MARCCIK425.2</b>	3	3	2	1	2	2	2	2	2	2	<b>2.1</b>
<b>MARCCIK425.3</b>	3	2	2	1	2	2	2	2	2	1	<b>1.9</b>
<b>MARCCIK425.4</b>	3	2	3	1	2	3	2	2	2	2	<b>2.2</b>
<b>Avg. (PLO)</b>	<b>3.00</b>	<b>2.25</b>	<b>2.25</b>	<b>1.25</b>	<b>2.00</b>	<b>2.25</b>	<b>2.00</b>	<b>2.25</b>	<b>2.00</b>	<b>1.75</b>	<b>2.5</b>

### **Suggested Readings:**

1. Chakradeo, U. (2024). *Indian knowledge systems: innovative research perspectives from emerging scholars*. Bharatiya Gyan, Sanskrit evam Yog Kendra (BHAGYASY Kendram) SNTD Women's University in association with Authorspress, New Delhi.
2. Mahadevan, B. (2022). *Introduction to Indian knowledge system: Concepts and applications*. PHI Learning.
3. Priya, P., Yadav, A. K., & Devi, R. (Eds.). (2024). *Indian knowledge system: Educational book*. Uttkarsh Prakashan.
4. Iyer, U., Sharan, M., Maniar, A., & Bhangaokar, R. (2023). *Indian knowledge systems (IKS): A family and community sciences perspective*. Kaav Publications.
5. Jha, A. (2014). *Traditional knowledge system in India*. Atlantic Publishers.
6. Dalrymple, W. (2024). *The golden road: How ancient India transformed the world*. Bloomsbury Publishing.
7. Rao, S. (2019). *Indian mathematics and astronomy: Some landmarks*. Hindustan Book Agency.
8. Subbarayappa, B. V. (2001). *Science in India: A historical perspective*. Rupa & Co.
9. Singh, S. (2021). *Revisiting the educational heritage of India*. Vitasta Publishing Pvt. Ltd.
10. Shinde, V. (2022). *Bhartiya Knowledge System*. Bhisma Prakashan.
11. Danino, M. (2010). *The lost river: On the trail of the Sarasvati*. Penguin India.

### **Research Articles:**

1. Mandavkar, P. (2023). Indian knowledge system (IKS). SSRN Electric Journal.
2. Khan, S. Meeta, S. (2024). An overview on Indian knowledge system. *Integrated Journal for Research in arts and humanities* 4(4).
3. Khare, P. S. (2025). Indian knowledge system and globalization: An intensive study. *International Journal of Research and Reviews*, 12(1),

**Ethno-Archaeology (MARCCEA425)**

<b>Course Code: (MARCCEA425)</b>		<b>Credits: 4</b>		<b>Semester: 4<sup>th</sup></b>	
<b>Course Title: Ethno-Archaeology</b>					
<b>Internal Assessments</b>				28 Marks	
<b>Semester-End Examination</b>				72 Marks	
<b>Course Outcomes (COs):</b>					
<ul style="list-style-type: none"> <li>• <i>CLO 1:</i> Understand the principles and methods of ethno-archaeology and their application in archaeological research.</li> <li>• <i>CLO 2:</i> Analyse the relevance of contemporary ethnographic data to the interpretation of past cultures.</li> <li>• <i>CLO 3:</i> Evaluate ethno-archaeological studies conducted in India and abroad, including the study of living hunter-gatherers and shifting cultivation practices.</li> <li>• <i>CLO 4:</i> Apply ethno-archaeological insights to scientific fields such as biological anthropology, ethnobotany, and archaeo-zoology.</li> </ul>					
<b>Unit</b>	<b>Content</b>	<b>Hours</b>	<b>Credits</b>		
<b>1</b>	<b>Concepts in Ethnoarchaeology</b> a. Definition, scope, methods and Limitations of ethnoarchaeology b. Ethnoarchaeological researches in India: An Overview	15	<b>1</b>		
<b>2</b>	<b>Ethnoarchaeological studies in Indian settings</b> a. Forager/collector model to Palaeolithic and Mesolithic societies. b. Ethnoarchaeological researches on the living hunter-gatherers, early agro-pastoral communities in India. c. Living Megalithic traditions in India.	15	<b>1</b>		
<b>3</b>	<b>Ethnoarchaeological studies outside India</b> a. Important Ethnoarchaeological studies of living hunter-gatherer societies outside India. b. Eskimos of Alaska, Bushmen of the Kalahari Desert and Australian Aborigines.	15	<b>1</b>		
<b>4</b>	<b>Ethnoarchaeological applications for Sciences in Archaeology</b> a. Role of analogy in problems pertaining to the application of Sciences in Archaeology b. Ethics in Ethnoarchaeology	15	<b>1</b>		

**CLO-PLO mapping matrix for course**

<u>Unit-wise CLOS</u>	<u>PLO1</u>	<u>PLO2</u>	<u>PLO3</u>	<u>PLO4</u>	<u>PLO5</u>	<u>PLO6</u>	<u>PLO7</u>	<u>PLO8</u>	<u>PLO9</u>	<u>PLO10</u>	<u>Average CLO</u>
MARCCEA425.1	3	2	2	1	2	2	2	2	2	1	1.9
MARCCEA425.2	3	2	2	1	3	2	2	2	2	2	2.1
MARCCEA425.3	3	2	2	1	3	2	2	2	2	2	2.1
MARCCEA425.4	3	2	2	1	2	3	2	3	2	2	2.2
Avg. (PLO)	<b>3.00</b>	<b>2.00</b>	<b>2.00</b>	<b>1.00</b>	<b>2.50</b>	<b>2.25</b>	<b>2.00</b>	<b>2.25</b>	<b>2.00</b>	<b>1.75</b>	<b>2.5</b>

### **Suggested Readings:**

1. 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.
2. Allchin, B. 1994. *Living Traditions: South Asian Ethnoarchaeology*. New Delhi: Oxford & IBH Co Pvt Ltd.
3. Allchin, F. R. 1959. Poor Men's Thalys: A Deccan Potter's Technique, *Bulletin of the School of Oriental and African Studies*, 22(2): 250-7.
4. Ansari, S. 2000. Small game hunting Musahars: An Ethnoarchaeological Approach, *Puratattva*, 30: 141-150.
5. Ansari, S. 2001. Fishing Practices Among the Mallahs of Allahabad District, Uttar Pradesh, *Man and Environment*, 26 (1): 39-55.
6. 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.
7. Ansari, S. 2011. *Ethnoarchaeological Perspectives of Prehistoric settlement Patterns of South-Central Ganga Valley* Oxford: BAR International Series.
8. Arati Deshpande-Mukherjee 2000. An Ethnographic Account of Contemporary Shellfish Gathering on the Konkan Coast, Maharashtra, *Man and Environment* 25 (2): 79-92.
9. Gautam Sengupta, Griffin, P.B. and W.G. Solheim II. 1990. Ethnoarchaeological Research in Asia, *Asian Perspectives* 28 (2): 145-161.
10. Grigg, D.B. 1980. *The Agricultural Systems of the World*. Cambridge: Cambridge University Press.
11. Jain, S.K. 1991. *Contributions to Indian Ethnobotany*. Jodhpur: Scientific Publishers.
12. Jochim, M.A. 1976. *Hunter Gatherer Subsistence and Settlement: A Predictive Model*. New York: Academic Press.
13. Kanungo, A.K. 2004. Glass Beads in Ancient India and afurnace-Wound Beads at Purdalpur: An Ethnoarchaeological Approach, *Asian Perspective*, Vol 43(1) : 123 -150.
14. Kanungo, A.K. 2004. *Glass Beads in Indian Archaeology: An Ethnoarchaeological Approach*. Oxford: BAR International Series 1242.
15. Kenoyer, J.M. 1983. *Shell working Industries of the Indus Civilization: An Archaeological and Ethnographic Perspective*. Ph.D. Dissertation. Berkeley: University of California.
16. Kenoyer, J.M., M. Vidale and K.K. Bhan 1991. Contemporary Stone bead –Making in Khambat, India: Patterns of Craft Specialization in the Archaeological Record, *World Archaeology* 23 (1): 44-63.
17. Kramer David N. 2001. *Ethnoarchaeology in Action*. Cambridge: Cambridge University Press.
18. Kramer, C. 1980. *Ethnoarchaeology*. Guildford Survey: Columbia Survey: Columbia University Press.
19. Kramer, C. 1994. A Tale of Two Cities: Ceramic Ethnoarchaeology in Rajasthan, in *Living Traditions* (B. Allchin Ed.), pp 307-22. New Delhi: Oxford-IBH.
20. Lee, R.B. and I. Devore 1975. *Man, the Hunter*. Chicago: Aldine Publishing Co.
21. Leshnik, L.S. and G. Sontheimer. 1975. *Pastoralists and Nomads*. Wiesbaden: Otto Harrassowitz.
22. Maheshwari, J.K. 1996. *Ethnobotany in South Asia*. Jodhpur: Scientific Publishers.
23. Maheshwari, J.K. and R. Jones 1988. *Archaeology with Ethnography: An Australian Perspective*. Canberra: Department of Prehistory, Research School of Pacific Studies, Australian National University.

24. Meehan, B. and R. Jones 1988. *Archaeology with Ethnography: An Australian Perspective*. Canberra: Department of Prehistory, Research School of Pacific Studies, Australian National University.
25. Misra, V.N. 1984. The Van Vagris Lost Hunters of Thar Desert, Rajasthan, *Man and Environment* 15 (2) 89-108.
26. Murty, M.L.K. 1981. Hunter-Gatherer Ecosystems and Archaeological Patterns of Subsistence Behaviour on the South-East Coast of India: An Ethnographic Model, *World Archaeology* 13: 47-58.
27. Murty, M.L.K. and G.D. Sontheimer 1980. Prehistoric Background to Pastoralism in the Southern Deccan in the Light of Oral Traditions and Cults of Some Pastoral Communities, *Anthropos* 75: 163-84.
28. Nagar, M. 1975. Role of Ethnographic Evidence in the Reconstruction of Archaeological Data, *Eastern Anthropologist* 28 (1): 13-22.
29. Nagar, M. and V.N. Misra. 1993 The Pardhis: A Hunting gathering Community of Central and Western India. *Man, and Environment* XVIII (1): 113 144.
30. Pakem, B, J.B., Bhattacharya, B.B. Dutta, and B. Datta Ray. 1980. *Shifting Cultivation in North-East India*, Shillong: North East India Council for Social Science Research.
31. Panja, S. 1996. Mobility Strategies, Site Structure and Subsistence Settlement Organizations: An Actualistic Perspective, *Man and Environment* 21 (1): 58-73.
32. Raju, D.R. 1988. *Stone Age Hunter-Gatherers: An Ethnoarchaeology of Cuddapah Region, South-East India*. Pune: Ravish Publishers.
33. Richard B. Lee and Richard Daly 1999. *Hunters and Gatherers*. Cambridge: Cambridge University Press.
34. Rivers, W. H. R. 1967. *The Todas*. London.
34. Roy, S.K. 1981. Aspects of Neolithic Agriculture and Shifting Cultivation, Garo Hills, Meghalaya, *Asian Perspective* 24: 193-221.
35. Satapathy, K.K. and B.K. Sarma 2002. Shifting Cultivation in India: An Overview, *Asian Agri-History*, 6 (2): 121-139.
36. Schiffer, M. 1978. Methodological Issues in Ethnoarchaeology, in *Exploration in Ethnoarchaeology* (R. Gould Ed.), pp 229-47. Albuquerque: University of New Mexico Press.
37. Sinopali, C.M. 1991. Seeking the Past through the Present: Recent Ethnoarchaeological Research in South Asia, *Asian Perspectives* 28 (2): 145-161.
38. Smiley, F.E. et al. 1980. *The Archaeological Correlates of the Hunter-Gatherer Societies: Studies from the Ethnographic Record*. Ann Arbor: Michigan University Press.
39. Stiles, D. 1977. Ethnoarchaeology: A Discussion of Method and Application, *Man* 12: 87-103.

**Practical IV(MARCCPR425)**

<b>Course Code: (MARCCPR425)</b>	<b>Credits: 4</b>	<b>Semester: 4<sup>th</sup></b>
<b>Course Title: Practical IV</b>		
<b>Internal Assessments</b>	28 Marks	
<b>Viva-voce/ Demonstration</b>	72 Marks	
<b>Course Learners Outcomes (CLOs):</b> <ul style="list-style-type: none"> <li>• <i>CLO 1:</i> Demonstrate proficiency in replicating ancient technologies including bead-making (drilling, polishing), flint knapping, and pottery production (coiling, firing) using traditional methods and materials.</li> <li>• <i>CLO 2:</i> Reconstruct prehistoric subsistence activities by practicing fire-making, shelter construction, and food processing techniques, and analyze their socio-economic implications in ancient contexts.</li> <li>• <i>CLO 3:</i> Apply basic conservation principles to archaeological materials (structural elements, manuscripts), and assess appropriate preservation methods for different artifact types.</li> <li>• <i>CLO 4:</i> Document experimental processes through systematic record-keeping, and evaluate technological choices in ancient societies through comparative analysis of replicated artifacts.</li> </ul>		
<b>Content</b>	<b>Hours</b>	<b>Credits</b>
Students will get training in replicating ancient technologies through experimental methods. Also, they will learn basic conservation skills relevant to archaeological materials. They also need to submit a report based on daily observations. <b>Components</b> <ol style="list-style-type: none"> <li>a. <b>Bead Making:</b> Techniques of drilling, shaping, and polishing beads using traditional tools. Use of stone, terracotta, shell, and faience replicas</li> <li>b. <b>Flint Knapping:</b> Basics of stone tool making</li> <li>c. <b>Pottery Making:</b> Hand-building techniques: pinching, coiling, slab. Surface treatment, firing methods (open fire/kiln demonstration)</li> <li>d. <b>Subsistence and Survival Activities:</b> Fire-making, basic tool use, temporary shelter construction. Grinding, cooking, and food processing techniques.</li> <li>e. <b>Conservation Basics:</b> Structural Conservation, Manuscript.</li> </ol> <b>Assessment:</b> <ol style="list-style-type: none"> <li>a. Practical work and record file</li> <li>b. On-site exercise report</li> <li>c. Viva voce</li> </ol>	60	4

**CLO-PLO mapping matrix for course**

<u>Unite-wise CLOS</u>	<u>PLO1</u>	<u>PLO2</u>	<u>PLO3</u>	<u>PLO4</u>	<u>PLO5</u>	<u>PLO6</u>	<u>PLO7</u>	<u>PLO8</u>	<u>PLO9</u>	<u>PLO10</u>	<u>Average CLO</u>
<b>MARCCPR425.1</b>	2	3	3	1	2	2	2	3	1	2	2.1
<b>MARCCPR425.2</b>	2	3	3	1	3	2	2	3	1	2	2.2
<b>MARCCPR425.3</b>	2	3	2	1	2	3	2	2	1	2	2.0
<b>MARCCPR425.4</b>	2	2	3	2	2	2	2	3	2	3	2.3
<b>Avg. (PLO)</b>	<b>2.00</b>	<b>2.75</b>	<b>2.75</b>	<b>1.25</b>	<b>2.25</b>	<b>2.25</b>	<b>2.00</b>	<b>2.75</b>	<b>1.25</b>	<b>2.25</b>	<b>2.5</b>

### Experimental Archaeology (MARCSEA425)

<b>Course Code: (MARCSEA425)</b>		<b>Credits: 4</b>		<b>Semester: 4<sup>th</sup></b>	
<b>Course Title: Experimental Archaeology</b>					
<b>Internal Assessments</b>				28 Marks	
<b>Semester-End Examination</b>				72 Marks	
<b>Practical</b>				100 Marks	
<b>Course Learners Outcomes (CLOs):</b>					
<ul style="list-style-type: none"> <li>• <i>CLO 1:</i> Define experimental archaeology's scope and methodologies, and critique its limitations in archaeological interpretation through case studies.</li> <li>• <i>CLO 2:</i> Replicate stone tool production (flint knapping) and bone/antler tool-making techniques, and demonstrate butchery/food processing methods to analyze prehistoric subsistence strategies.</li> <li>• <i>CLO 3:</i> Execute ancient craft technologies including pottery-making (clay preparation to firing), bead production, and basic metalworking (smelting/casting), while documenting technical processes.</li> <li>• <i>CLO 4:</i> Reconstruct ancient dwellings/artifacts, evaluate gender roles in technological processes, and design public outreach programs using experimental methods for heritage education.</li> </ul>					
<b>Unit</b>	<b>Content</b>			<b>Hours</b>	<b>Credits</b>
<b>1</b>	<b><u>Introduction to Experimental Archaeology</u></b> a. Definition, and development of experimental archaeology b. Methodologies and Limitations in experimental archaeology c. Documentation in experimental archaeology			15	1
<b>2</b>	<b><u>Stone, and Organic Material Technologies</u></b> a. Flint knapping and tool utilization b. Bone and antler tool-making: Carving, shaping, and usage c. Butchery, cooking and food-processing experiments in archaeology			15	1
<b>3</b>	<b><u>Pottery, Bead and Metalworking Technologies</u></b> a. Pottery-making techniques: Clay sourcing, shaping, and firing methods b. Bead-making and ornament production in ancient cultures c. Experimental metalworking: Copper, bronze, and iron smelting and casting			15	1
<b>4</b>	<b><u>Application of Experimental Archaeology in Interpretation</u></b> a. Reconstruction of ancient dwellings, daily-use artifacts and site formation b. Replication of prehistoric and early historic fire-making techniques c. Role of experimental archaeology in heritage education and public outreach, Gender Perceptions			15	1

#### CLO-PLO mapping matrix for course

<u>Unite-wise CLOS</u>	<u>PLO1</u>	<u>PLO2</u>	<u>PLO3</u>	<u>PLO4</u>	<u>PLO5</u>	<u>PLO6</u>	<u>PLO7</u>	<u>PLO8</u>	<u>PLO9</u>	<u>PLO10</u>	<u>Average CLO</u>
MARCSEA425.1	3	2	2	2	3	2	2	3	2	2	<b>2.3</b>
MARCSEA425.2	2	3	3	1	3	2	2	3	1	2	<b>2.2</b>
MARCSEA425.3	2	3	3	2	2	2	2	3	1	3	<b>2.3</b>
MARCSEA425.4	2	3	3	3	3	3	2	3	2	2	<b>2.6</b>
<b>Avg. (PLO)</b>	<b>2.25</b>	<b>2.75</b>	<b>2.75</b>	<b>2.00</b>	<b>2.75</b>	<b>2.25</b>	<b>2.00</b>	<b>3.00</b>	<b>1.50</b>	<b>2.25</b>	<b>2.5</b>

### **Suggested Readings:**

1. Hurcombe, Linda M. (2014). *Perishable Material Culture in Prehistory: Investigating the Missing Majority*. Routledge.
2. Mathieu, James R. (ed.). (2002). *Experimental Archaeology: Replicating Past Objects, Behaviors, and Processes*. Oxford: Archaeopress.
3. Mishra, A. (2008). *Beyond Pots and Pans: A Study on Chalcolithic Balathal*. Aryan Book International.
4. Nigam, J. S. (2014). *Ceramic Traditions in Indian archaeology*. Rishi Publications.
5. Olausson, Deborah, & Ljungkvist, John (eds.). (2015). *Experimental Archaeology: Between Enlightenment and Experience*. Acta Archaeologica Lundensia.
6. Orton, C. (2013). *Pottery in Archaeology*. Cambridge University Press.
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18. Ingersoll, D. W., Yellen, J. E., & Macdonald, W. (Eds.). (1977). *Experimental archaeology*. Columbia University Press.
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21. Outram, A. K. (2008). Introduction to experimental archaeology. *World Archaeology*, 40(1), 1-6.
22. Pelegrin, J. (1990). Prehistoric lithic technology: Some aspects of research. *Archaeological Review from Cambridge*, 9(1), 116-125.
23. Reynolds, P. J. (1999). *The nature of experiment in archaeology*. In P. J. Reynolds (Ed.), *The experiment in archaeology* (pp. 156-162). Oxbow Books.
24. Schoville, B. J., Brown, K. S., Harris, J. A., & Wilkins, J. (2021). New experiments and a model-driven approach for interpreting Middle Stone Age lithic point function using the edge damage distribution method. *PLOS ONE*, 16(3), e0247251.

25. Shea, J. J. (1988). Spear points from the Middle Paleolithic of the Levant. *Journal of Field Archaeology*, 15(4), 441-450.
26. Souyouzoglou-Haywood, C., & O'Sullivan, A. (Eds.). (2019). *Experimental archaeology: Making, understanding, story-telling*. Archaeopress.

## Cultural Heritage Management and Conservation (MARCDCH425)

<b>Course Code: (MARCDCH425)</b>		<b>Credits: 4</b>		<b>Semester: 4<sup>th</sup></b>	
<b>Course title: Cultural Heritage Management and Conservation</b>					
<b>Internal Assessments</b>				28 Marks	
<b>Semester-End Examination</b>				72 Marks	
<b>Course Learners Outcomes (CLOs):</b>					
<ul style="list-style-type: none"> <li>• <i>CLO 1:</i> Explain the principles of cultural heritage management, analyze UNESCO's World Heritage criteria, and evaluate the roles of government/NGOs in Indian heritage preservation (ASI, INTACH).</li> <li>• <i>CLO 2:</i> Assess threats to heritage sites (natural/man-made), and design community-based conservation strategies incorporating sustainable tourism approaches, with special reference to J&amp;K case studies.</li> <li>• <i>CLO 3:</i> Classify ancient construction materials/methods, diagnose causes of structural deterioration, and apply appropriate conservation/restoration techniques for built heritage.</li> <li>• <i>CLO 4:</i> Differentiate conservation requirements for organic vs. inorganic artifacts, and document preservation practices through field-based reports following professional standards.</li> </ul>					
<b>Unit</b>	<b>Content</b>			<b>Hours</b>	<b>Credits</b>
<b>1</b>	<b><u>Introduction to Cultural Heritage and Management</u></b> a. Definition, scope, and importance of heritage and heritage management b. World Heritage Sites, criteria and the role of UNESCO c. Cultural heritage management in India: Government bodies and legislations d. Role of non-government organizations in heritage preservation			15	1
<b>2</b>	<b><u>Challenges and Community Involvement in Heritage Conservation</u></b> a. Natural and man-made threats to cultural heritage b. Public participation in heritage preservation and management c. Heritage tourism and sustainable conservation strategies d. Heritage management in Jammu and Kashmir: Case studies			15	1
<b>3</b>	<b><u>Conservation of Ancient Structures</u></b> a. Types of ancient structures and materials used in their construction b. Causes of deterioration of heritage structures c. Preservation methods, conservation techniques, and restoration approaches			15	1
<b>4</b>	<b><u>Conservation of Archaeological Materials</u></b> a. Inorganic materials: Types, causes of deterioration, and conservation techniques b. Organic materials: Material culture, degradation factors, and preservation strategies c. Field study and report writing: Documentation of heritage conservation practices in J&K			15	1

### CLO-PLO mapping matrix for course

<u>Unit-wise CLOS</u>	<u>PLO1</u>	<u>PLO2</u>	<u>PLO3</u>	<u>PLO4</u>	<u>PLO5</u>	<u>PLO6</u>	<u>PLO7</u>	<u>PLO8</u>	<u>PLO9</u>	<u>PLO10</u>	<u>Average CLO</u>
MARCDCH425.1	3	2	2	2	2	3	2	2	2	2	2.2
MARCDCH425.2	2	2	3	3	3	3	2	3	1	3	2.5
MARCDCH425.3	2	3	3	2	2	2	2	2	1	3	2.2
MARCDCH425.4	2	3	2	3	2	3	2	2	2	2	2.3
<b>Avg. (PLO)</b>	<b>2.25</b>	<b>2.5</b>	<b>2.5</b>	<b>2.5</b>	<b>2.25</b>	<b>2.75</b>	<b>2.00</b>	<b>2.25</b>	<b>1.50</b>	<b>2.5</b>	<b>2.5</b>

### Suggested Readings:

1. Batra, M. L. 1996. Conservation: Preservation and Restoration of Monuments. New Delhi: Aryan Books International.
2. Basham, A.L. 2007. The Illustrated Cultural History of India. Oxford University Press.
3. Bhandari, N.K. 2007. Cultural Heritage of India. Delhi: Eastern Book Corporation.
4. Bhowmik, S. K. 2004 Heritage Management: Care, Understanding and Appreciation of Cultural Heritage. Jaipur: Publication Scheme.
5. Biswas, Sachindra Sekhara. 1999. Protecting the Cultural Heritage (National Legislation and International Conservation). New Delhi: Aryan Books International.
6. Deshpande, M. N. 1994. Care of Cultural Heritage. New Delhi : National Museum Institute.
7. Dhawan, Shashi. 1996. Recent Trends in Conservation of Art Heritage. Delhi: Agam Kala Prakashan.
8. Ghoshmaulik, S. K. and K.K. Bass 2001. Understanding Heritage: Role of Museum. Bhubaneswar: Academic Staff College.
9. Howard, Peter. 2003. Heritage: Management, Interpretation, Identity. London: Continuum.
10. Paddayya, K. 2004. Heritage management with special reference to modern impacts on Archaeology sites of lower Deccan. Deccan Studies 1 (2): 7-24.
11. Rao, P.R. 1988. Cultural Heritage of India. Delhi: Sterling.
12. Renfrew, C. 2000. Loot, Legitimacy and Ownership. London: Duckworth.
13. Singh, L.K. 2008. Indian Cultural Heritage from Tourism Perspective. Delhi: ISHA Books.
14. Thapar, B.K. 1989 Conservation of the Indian Heritage. New Delhi: Cosmo Publication.

### Museum Management (MARCDMM425)

<b>Course Code: (MARCDMM425)</b>		<b>Credits: 4</b>		<b>Semester: 4<sup>th</sup></b>	
<b>Course title: Museum Management</b>					
<b>Internal Assessments</b>				28 Marks	
<b>Semester-End Examination</b>				72 Marks	
<b>Course Learners Outcomes (CLOs):</b>					
<ul style="list-style-type: none"> <li>• <i>CLO 1:</i> Understand the basic principles and practices of museology, including the history and classification of museums in a global and Indian context.</li> <li>• <i>CLO 2:</i> Develop skills in the ethical collection, documentation, and classification of museum artifacts, including the use of modern technologies for data management.</li> <li>• <i>CLO 3:</i> Gain knowledge of museum administration, including staff roles, public relations, and the legal frameworks that govern museums in India.</li> <li>• <i>CLO 4:</i> Appreciate the educational role of museums, learning how to design exhibitions that serve as effective educational tools.</li> </ul>					
<b>Unit</b>	<b>Content</b>			<b>Hours</b>	<b>Credits</b>
<b>1</b>	<b>Museology: Basic Principles and Practice</b> <ul style="list-style-type: none"> <li>a. Definition of Museum, Museology and New Museology;</li> <li>b. History of World and Indian Museum Movement.</li> <li>c. Types of Museums and their Classification.</li> <li>d. Museum in an age of Globalisation.</li> </ul>			15	1
<b>2</b>	<b>Collection and Documentation of Artifacts</b> <ul style="list-style-type: none"> <li>a. Collection: Aims, methods and ethics</li> <li>b. Documentation; Identification, classification, accessioning, cataloguing, indexing, data processing, information retrieval, computerization, insurance of museum objects, photographic record of museum collection</li> </ul>			15	1
<b>3</b>	<b>Museum Administration and Legislation</b> <ul style="list-style-type: none"> <li>a. Museum and its administrative control</li> <li>b. Museum and Public Relations</li> <li>c. Supervision and security.</li> <li>d. Acts and Laws</li> </ul>			15	1
<b>4</b>	<b>Museum Exhibition and Education</b> <ul style="list-style-type: none"> <li>a. Exhibition: Concept and Development</li> <li>b. Museum Education</li> <li>c. Report Writing on one of the following: Indian Museum Kolkata, National Museum New Delhi, Bihar Museum, Central Asian Museum University of Kashmir, SPS Museum Srinagar, Dogra Museum Jammu.</li> </ul>			15	1

#### CLO-PLO mapping matrix for course

<u>Unite-wise CLOS</u>	<u>PLO1</u>	<u>PLO2</u>	<u>PLO3</u>	<u>PLO4</u>	<u>PLO5</u>	<u>PLO6</u>	<u>PLO7</u>	<u>PLO8</u>	<u>PLO9</u>	<u>PLO10</u>	<u>Average CLO</u>
MARCDMM425.1	3	2	2	2	2	2	2	1	1	2	1.9
MARCDMM425.2	2	3	3	2	2	3	2	2	1	2	2.2
MARCDMM425.3	2	2	2	2	2	3	2	1	1	2	1.9
MARCDMM425.4	2	1	2	3	2	2	2	2	1	2	1.9
<b>Avg. (PLO)</b>	<b>2.25</b>	<b>2.0</b>	<b>2.25</b>	<b>2.25</b>	<b>2.0</b>	<b>2.5</b>	<b>2.0</b>	<b>1.5</b>	<b>1.0</b>	<b>2.0</b>	<b>2.5</b>

#### Suggested Reading

1. Anderson, G. (2012). *Reinventing the museum: the evolving conversation on the paradigm shift* (2nd ed.). AltaMira Press.
2. Bachmann, K. (1992). *Conservation concerns: a guide for collectors and curators*. Cooper-Hewitt National Museum of Design, Smithsonian Institution; Smithsonian

- Institution Press.
3. Baxi, S.J. and V. Dwivedi. 1973. *Modern Museum: Organisation and Practice in India*. New Delhi: Abhinav Publication.
  4. 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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  12. Edson, G & Dean David. 1994. *Handbook for Museums*. London: Routledge.
  13. Eid, H. (2019). *Museum innovation and social entrepreneurship: a new model for a challenging era*. Routledge, Taylor & Francis Group.
  14. Gaynor, K. (Ed.). (1994). *Museum provision and professionalism*. Routledge.
  15. Ghosh, D.P. 1968. *Studies in Museum and Museology in India*. Calcutta: Indian publication.
  16. Gupta, S. P., & Srivastava, M. (2010). *Modern museum management*. D. K. Printworld Pvt. Ltd.
  17. Hooper-Greenhill, E. (1992). *Museums and the shaping of knowledge*. Routledge.
  18. Knell, S. J. (1994). *Care of collections*. Routledge.
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  20. Light, R.B. *et al.* 1986. *Museum Documentation Systems: Developments and Application*. London: Butterworths.
  21. Macdonald, S. (2011). *A companion to museum studies*. Wiley-Blackwell.
  22. McClellan, A. (2003). *Art and its publics: museum studies at the millennium*. Blackwell Pub. Co.
  23. Moore, Kevin (Ed.). 1994. *Museum Management*. London: Routledge.
  24. Pearce, S.M. 1990. *Archaeological Curatorship*. London: Leicester University Press.
  25. Punja, S. 1990. *Illustrated Guide to Museum of India*. Hong Kong: Guide Book Co. Ltd.
  26. UNESCO Publication. 1960. *The Organization of Museums: Practical Advice*. Paris: UNESCO.
  27. Zaheer, M. 1963. *Museum Management, accession, indexing, custody, labelling and verification & object*. Lucknow: Ram Advani Book Seller.
  28. Salar Jung Museum. 1968. *Brief Guide to the Salar Jung Museum*. Hyderabad: Salar Jung Museum Board.
  29. Kak, R.C. 1923. *Handbook of the Archaeological and Numismatic Sections of the Sri Pratap Singh Museum, Srinagar, Calcutta, Thacker Spink & CO.*