

**DEPARTMENT OF AIH & ARCHAEOLOGY
UNIVERSITY OF LUCKNOW**

SYLLABUS

P. G. DIPLOMA IN ARCHAEOLOGY & MUSEOLOGY

Introduction:

The title of course is “P. G. Diploma in Archaeology and Museology” (PGDAM). It will be run by the Department of Ancient Indian History and Archaeology, Faculty of Arts, Lucknow University as Self Finance Course. The objective of this course of study is to teach and train the students for the Archeological and Museological works. The course of study is drafted in four semesters of six months, each which will be covered in two academic years.

Qualification for the Admission:

Master’s Degree in Ancient Indian History, Culture and Archaeology/ Medieval History/ Modern History/ Anthropology/ Sanskrit /Geology/ Zoology/ Chemistry/ Physics/ Botany and Fine Arts. The admission process will be the same as per Lucknow University rules.

Fee Structure:

I Semester	Rs. 6000.00 (Rs.5500.00 tuition fee and 500.00 Examination fee)
II Semester	Rs 2000.00 (Field work and Laboratory charges)
III Semester	Rs. 6000.00 (Rs.5500.00 tuition fee and 500.00 Examination fee)
IV Semester	Rs. 2000.00 (Field work and tour)

Attendance:

A minimum of 75 % attendance will be compulsory for appearing in the examination. The field experience certificate will be issue with the signature of Director of the excavation, Head of the Department and Dean, Faculty of Arts, jointly.

SEMESTER- I

PAPER- I: Prehistory: 100 Marks

UNIT- I

1. Palaeo environment: Geological chronology, Climatic condition of Pleistocene Period and Holocene Period
2. Palaeolithic Cultures of India: Lower, Middle and Upper Palaeolithic: Climate, Tool technique, Tool typology, Settlement pattern, Fauna and Chronology.

UNIT- II

3. Mesolithic Cultures of India: Climate, Tool typology, Tool technique, Settlement pattern, Fauna, and Chronology.
4. Paleo- art and Rock paintings

UNIT- III

1. Neolithic Cultures of India: Climate, Tool typology, Tool technique, Settlement pattern, Fauna, Rock paintings, Chronology, Agriculture and Animal husbandry.

UNIT- IV

A brief survey of Prehistoric Cultures of Africa and Europe with special reference to Olduwai Gorge and La Mas d’ Azil.

Books Recommended:

1. Alimen, H.: The Prehistory of Africa.
2. Allchin, Bridget: The Stone-tipped Arrow: Late Stone Age Hunters of Tropical World
3. Bordes, F.: Old Stone Age
4. Butzer, K. W.: Environment and Archaeology
5. Childe, V.Gordoa: The Prehistory of European Society.
6. Chaube, Ramesh: iqjkrkfRod ekuo foKku
7. Clark, J. D.: The prehistory of Africa
8. Clark, J. G. D.: World Prehistory-A new outline.
9. Clark Grahmme and S. Piggot: Prehistoric Societies
10. Dani, A. H.: Prehistory and Protohistory of Eastern India, Calcutta
11. Daniel, G.: 150 Years of Archaeology
12. De Terra, H. and T. T. Petterson: Studies on the Ice Age India
13. Goel, Sriram- izkxSfrgkfld ekuo ,oa laLd’ fr;kj
14. Gordon, D. H.: The Prehistoric Background of India Culture. Bombay

15. Jaiswal, Vidula: Palaeohistory of India. Delhi
16. Majumdar, D. N.: izkxSfrgkl
17. Man and Environment,: Journal of Indian Society for Prehistoric and Quaternary Studies, Pune
18. Mathpal, Y.: Prehistoric Art of India. Delhi
19. Mishra, V. N. and M. S. Mate: Indian Prehistory. Poona
20. Oakley, K. P.: Man the Tool Maker (4th edition) London
21. Pal, J. N.: Archaeology of Southern Uttar Pradesh
22. Pandey, J. N.: iqjkrRo foe'kZ
23. Pant, P. C.: Prehistoric Uttar Pradesh. Delhi
24. Piggot, S.: Approach to Archaeology, Cambridge
25. Sankalia, H. D.: Prehistory and Protohistory of India and Pakistan
26. Sankalia, H. D.: Stone Age Tools, Their Techniques, Names and Functions
27. Sharma, G. R. et. al.: Beginning of Agriculture
28. Verma, A. K.: Neolithic Culture of Eastern India. Delhi
29. Zeuner, F. E.: The Pleistocene Period, its climate, chronology and faunal succession, London

PAPER- II: Proto-historic Archaeology of India: 100 Marks

UNIT- I

1. Pre Indus Cultures of India
2. Indus Civilization: Origin, Extent, Date, Religion, Pottery, and Art (Terracotta figurines, Terracotta beads, Seals, sealing and sculptures) Architecture, Trade and burial system)
3. Cemetery-H Culture (Pottery types and burials)

UNIT- II

4. Chalcolithic Cultures of India with special reference to Bara, Ahar, Malwa, Jorwe, Kayatha, Diamabad, Narhan, and Senuwar
5. Excavation reports of the following sites:
 - a. Kalibangan
 - b. Lothal
 - c. Bhagwanpura
 - d. Diamabad
 - e. Narhan

UNIT- III

6. Black-and-Red Ware: Stratigraphical context, pottery types, associated wares, antiquities, settlement pattern and economy
7. Ochre Colour Pottery Culture: Stratigraphical context, pottery types, associated wares, antiquities, settlement pattern and economy

UNIT- IV

8. Copper Hoards
9. Megalithic Cultures of India: Northern group and southern group

Books Recommended:

1. Agrawal, D. P. & A. Ghosh (ed.): Radiocarbon and Indian Archaeology
2. Agrawal, D.P.: The Copper Bronze Age in India. Delhi
3. Agrawal, D.P. and D. K. Chakrabarti (eds): Essays in Indian Protohistory
4. Allchin, B., A.S. Goudie and K.T.H. Hegde: The Prehistory & Protohistory of the Great Indian Desert. London
5. Ansari, X. D. and M. K. Dhavalikar: Excavation at Kayatha, Poona
6. Asthana, S.: Pre-harappan Cultures of India and the Border Lands. New Delhi
7. Chakrabarti, D. K.: The External Trade of the Indus Civilization. Delhi
8. Dani, A. H.: Prehistory and Protohistory of Eastern India, Calcutta
9. Gaur, R. C.: The Ochre-coloured Pottery- A Reassessment of the Evidence. South Asian Archaeology 1973. (Eds. J. E. Van Lohizen de Leeuw and J. J. H. Ubagh)
10. Gaur, R. C.: Excavation at Atranjikhhera: Early Civilization of the Upper Ganga Basin. Delhi
11. Ghosh, A.: The City in Early Historical India
12. Gupta, S. P.: Disposal of Dead and Physical Types in Ancient India
13. Gururaja Rao, B. K.: Megalithic Culture in South India
14. Kamalkar, G. (editor): South Indian Archaeology
15. Leakey, L. S. B.: The Oldurai Gorge
16. Manchanda, O.: The Study of Harappan Pottery. Delhi
17. Marshal, Sir John (ed.): Mohenjodaro and the Indus Civilization 3 Volumes
18. Mishra, S. M.: gMIik IH;rk
19. Mishra, V. D.: Some Aspects of Indian Archaeology

20. Mughal, N. R.: The Early Harappan Period in the Greater Indus Valley and Northern Baluchistan (C. 3000-2400 BC) University of Microfilms. Michigan
21. Nautiyal, K. P.: Proto-historic India. Delhi
22. Pandey, J. N.: iqjkrRo foe'kZ
23. Possshell, G. (ed.): Ancient Cities of the Indus
24. Ram Chandran: Bibliography of Indian Megaliths
25. Rao, S. R.: Lothal and Indus Civilization
26. Sankalia, H. D.: The Ahar Excavation
27. Sankalia, H. D.: Prehistory and Protohistory of India and Pakistan.
28. Srinivasan, K.R. and N.R.Banerjee: Survey of South Indian Megaliths, Ancient India No 9, 1953, PP 103-115.
29. Sharma, V. D. and G. B. Sharma: Bara Culture and its Housing Remains with special reference to Sanghol. In Indian Archaeology. New Perspectives, (ed. R. K. Sharma), New Delhi
30. Singh, Bhagwan: fIU/kq IH;rk
31. Singh, H. N.: History and Archaeology of Black-and-red ware. Delhi
32. Thaplyal, K. K. and S. P. Shukla: fIU/kq IH;rk
33. Verma, R. K.: iqjkrRo vuq"kyu
34. Yele, P.: Metal Work of the Bronze Age in India. Munich

PAPER- III: Early Historic Archaeology of India:100 Marks

UNIT- I

1. Painted Grey Ware Culture: Stratigraphical context, pottery types, associated wares, antiquities, settlement pattern and economy

UNIT- II

2. Northern Black Polished Ware Culture: Stratigraphical context, pottery types, associated wares, antiquities, settlement pattern, economy, Punch marked and Bent Bar coins, Mauryan Art (Ashokan Pillar of Sarnath, Caves of Barabar and Nagarjuni, Dhamekh and Dharmarajik Stupa of Sarnath, Salient features of Mauryan Brahmi Script, Paleographic features of Rummindei pillar inscription

UNIT- III

3. Archaeological components of Sunga-Kushana Period: Stratigraphical context, pottery types, antiquities, structures, settlement pattern, Salient features of Kushana coins, Salient features of the coins of Demetrius and Menander, Stupas of Sanchi, Bharhut and Amaravati, Salient features of Kushana Brahmi Script, Paleographic features of Ayodhya inscription of Dhande and Hathibara inscription of Sarvatat.

UNIT- IV

4. Excavation Report of the followings:
 - a. Hastinapur
 - b. Kumrahar
 - c. Saunphari
 - d. Kalli-Pachchim
 - e. Charda

Books Recommended:

1. Agarwal, P. K.: izkphu Hkkjrh; dyk ,oa okLrq
2. Agarwal, V. S.: Studies in Indian Art
3. Agarwal, V. S.: Hkkjrh; dyk
4. Allan, J.: Catalogue of Coins of Ancient India in the British Museum
5. Ancient India Bulletin of Archaeological Survey of India, New Delhi
6. Banerjee, N. R.: Iron Age in India. Delhi
7. Brown, Percy: Indian Architecture Buddhist and Hindu
8. Buhler, G.: Indian Paleography
9. Burgess and Fergusson: Cave Temples of India
10. Chakrabarti, Dilip K.: The Early Use of Iron in India. Delhi
11. Chakrabarty, S. K.: A Study of Ancient Indian numismatics
12. Chattopadhyaya, B.: Age of Kushana- A Numismatic Study
13. Chandra, Pramod: Studies in Temple Architecture
14. Coomaraswamy, A. K.: History of Indian and Indonesian Art
15. Mani, C. (ed.): A Micro Study of Early Indian Coins
16. Mathur, Suman: Art and Culture under the Kushanas
17. Mishra, A. K.: The Indian Black ware
18. Ojha, G. H.: izkphu Hkkjrh; fyfiekyk

19. Pandey, J. N.: Hkkjrh; dyk
20. Pandey, R. B.: Indian Paleography
21. Puratatva- Journal of Indian Archaeological Society, New Delhi
22. Ray, Amita: Towns, Villages and Secular Buildings in Ancient India
23. Rowland, B.: Art and Architecture of India
24. Sircar, D. C.: Select Inscriptions
25. Srivastava, P.: Aspects of Ancient Indian Numismatics, 1996
26. Srivastava, P.: Art motifs on Ancient Indian Coins, 2004
27. Tewari, D. P.: Antiquarian Remains from Kalli-Pachchhim, 1999
28. Tewari, D. P.: Excavations at Charda, 2002
29. Tewari, D. P.: Excavations at Saunphari
30. Thaplyal, K.K. and P. Srivastava: Coins of Ancient India.
31. Tripathi, Vibha- Painted Grey Ware: An Iron Age Cultures of Northern India. Delhi
32. Verma, T. P.: The Paleography of Brahmi script in Northern India
33. Wheeler, R. E. M.: Indus Civilization

PAPER- IV: Museum Organization and Administration: 100 Marks

UNIT- I

1. Aims and function of museum
2. History of Indian and International Museum Movement
3. Types of Museums: Local Museums, Private Museums, Municipal Museums, Institutional Museums, Public Museums, Industrial Museums Science Museums, Natural History Museums and Mobile Museums

UNIT- II

4. Museum personal: Recruitment, Duties, Supervision and Report of Works
5. Office method: Rules and Regulations, Special bodies related to museum and museum work

UNIT- III

6. General maintenance and supervision
7. Museum security, Theft and War

UNIT- IV

8. Public relations: Liaison with outside experts, Laboratories, Institutions, Cooperation with mass media, Public comfort and convenience
9. Museum Finance: Source of funds, Method of preparing budgets, Check and audit.

Books Recommended:

1. Baroda: New Museology
2. Belcher, Michael, Ed.: Exhibition in Museums
3. Chandhary, R. D.: Museums of India and their Maladies
4. Dwivedi, V. P and Smita J. Baxi: Modern Museum, Delhi 1972
5. Grace Marley Felicitation Volume: Dimensions of Museology
6. Hooper, Eilean Greenhill: Educational Role of the Museum
7. Kavanagh, Gaynor: Museum Language; Objects and Texts
8. Knell, Simon: Care of Collections
9. Light, Richard B.: Museum Documentation Systems; Developments and Applications
10. Liston, David: Museum Security and Protection; A Handbook for Cultural Heritage Institutions
11. Malaro, Masie C.: Museum Governance
12. Miles, R. S.: Design of Educational Exhibits
13. Nigam, Anupama: Museum and New Museology
14. Nigam, M. L.: Fundamentals of Museology
15. Orna, Elizabeth; Pettitt, Charles: Information Management in Museums
16. Pearce, Susan, M.: Archaeological Curatorship
17. Punja, Shobita: Museums of India
18. Sivarammurti, C.: Directory of Museums in India.
19. Thomson, Garry: Museum Environment
20. UNESCO Publication: Museum Practice
21. Viswas, T. K.: Museum Educatio

SEMESTER- II

PAPER- V: Field Archaeology: 100 Marks

UNIT- I

1. Map reading: Types of map, Symbols used in topography maps, Latitude, Longitude, Contour, Bench-mark, Mean Sea Level.
2. Exploration: Aims and objectives of Archaeological explorations, Method of finding ancient sites, Village to village exploration, Documentation of sites and antiquarian remains.

UNIT- II

3. Excavation: Aims and objectives of excavations, Equipment and accessories of excavation, Planning of excavation, Lay out of trenches, Methods of excavation, Excavation techniques and methods of recording.
4. Post Excavation Analysis: Classification of Objects/ Findings, Reconstruction of Socio-Economic aspects including contextual and site catchment analysis.

UNIT- III

5. Methods of archaeological drawing: Area map, Site plan, Section, Floor, Structure and Pottery.
6. Methods of Surveying: Chain survey, Plain table survey, Prismatic compass surveying, Leveling and Contouring.

UNIT- IV

7. Photography: Use and importance of photography in Archaeology, Methods of archaeological photography.
8. Publication of Report: Preparation of texts and Drawings, Method of editing digital photographic data in computer, Preparation of Dummy, Proof reading.

Books Recommended:

1. Allchin, F. R. and Dilip K. Chakrabarti (eds.): A Source-Book of Indian Archaeology, Vol. I. New Delhi
2. Atkinson, R. J. C.: Field Archaeology, London
3. Binford, S. R. and L. R.: New Perspective in Archaeology
4. Cookson, M. B.: Photography for Archaeology
5. Crawford, O. G. S.: Archaeology in the Field, 7th edition, London
6. Chakrabarti, D. K.: Theoretical Issues in India Archaeology. New Delhi
7. Ghosh, A. (ed.): An Encyclopedia of India Archaeology, 2 Volumes. New Delhi
8. Pandey, J. N.: *iqjkrRo foe'kZ*
9. Srivastava, K. M.: New Era of Indian Archaeology
10. Verma, R. K.: {ks=h; *iqjkrRo*
11. Wheeler, R. E. M.: Archaeology from the Earth (Eng. and Hindi)

PAPER- VI: Applied sciences: 100 Marks

UNIT- I

1. Elements of Geology
 - a. Geomorphology, Topography, Slope, Altitude, Drainage pattern, Rock shelter and caves, Land forms Khadar and Bhangar, Bhur, Mound, Desert, Mountain, Plain and Coastal areas.
 - b. Glaciers and their functions
 - c. Rivers and their functions
2. Archaeological Chemistry: Phosphate and nitrogen analysis to determine human and animal activity areas, Trace element analysis to determine plant and animal food in human diet.
3. Archaeozoology: Fundamentals of vertebrate Zoology, Bones in the field- their excavation, measurement, treatment, packing and transport; Bones in the laboratory- their cleaning, strengthening and reconstruction.

UNIT- II

4. Elements of Anthropology
 - a. Evolution of Man
 - b. Australopithecus

- c. Homo - Erectus
- d. Neanderthals
- e. Homo-sapians-sapians
- f. Human Osteology: study of bones to determine Age, Sex, Disease, and Causes of death
- g. Elements of Ethno archaeology: Definition & application, Collection and analysis of ethnographic material and oral history

UNIT- III

- 5. Methods of Dating
 - a. Methods of Relative dating: Stratigraphy, Typology, Palaeontology, Palynology, Fluorine test.
 - b. Methods of Absolute dating: Radio Carbon Dating Method, Potassium Argon Dating Method, Thermoluminescence dating method

UNIT- IV

- 6. Palaeo Ethnobotany
 - a. Definition and description
 - b. Method of sample collection of seed grains
 - c. Types of botanical remains
 - d. Method of sample collection for pollen analysis

Books Recommended:

1. Allchin, F. R.: 'Early Domestic Animals in India and Pakistan.' The Domestication and Exploitation of Plants and Animals. (eds.: UCKO and Dimbleby) London
2. Aitken, M.J.: Physics and Archaeology, Oxford university press, 1983
3. Aitken, M.J.: Thermoluminescence dating, Academic press, London, 1985
4. Brothwell, D. R.: Science in Archaeology (revised) London
5. Beals, R.L and H. Hoijar: An Introduction to Anthropology, 1959
6. Clark, W. Legros: The Fossil Evidence Human Evolution, Chicago
7. Cotton, C. A.: Geomorphology (4th edition) London
8. Chaplon, R.E.: The study of Animal Bones from Archaeological Sites, Sominar Press London and New York.
9. Cornwall, W.: Bones for Archaeologists, London, 1956
10. Cornwall, I.W.: Soils for Archaeologist, London, 1958
11. Faegri, K. and J. Iverson: Textbook of Ollen analysis, Blackwell scientific Publications, Oxford, 1975
12. Fleming, S.: Dating in Archaeology, Dent, London, 1976
13. Fraser, J. E.: Anatomy of the Human Skeleton, 1948
14. Flint, R. F.: Glacial Geology and Pleistocene Epoch (4th revised edition), New York
15. Kramer, Carol, & David Nicholas: Ethno-archaeology in Action, 2001
16. Lawrence, A.: The Ethno-archaeology of an Andean Herding Community
17. Lealey, L. S. B.: Adam's Ancestors (4th edition), New York
18. Michael, H. Dray: Guide Fossil Man (3rd revised edition), New York
19. Michael, Deal: Ethno-archaeology in the Central Maya Highlands
20. Orme, Bryony: Anthropology for Archaeologist. An Introduction, London
21. Pearsall, Deborah M.: Palaeo-ethno botany: A handbook of Procedures Second edition, 2000, Academic press, USA.
22. Schmid, E.: Atlas of Animal Bones, Amsterdam, 1972
23. Wadia, D. N.: Geology of India
24. Zeuner, F.: The Pleistocene Period, London, 1959.

PAPER- VII: Field work: 100 Marks

The student will go to the field for archaeological explorations. He will explore an area as per the direction of the Director of the course and collect the required data and samples. He will document the site and antiquities supported by maps, drawings and photographs.

In the same manner he will participate in the excavation and remain on the site for full period of excavation and prepare a site note book/trench diary of his own work supported by plans, diagrams, drawings and photographs.

The Director of exploration/excavation will observe his performance on the site and the Director Excavation/ Exploration and Head of the Department shall award the marks jointly. The maximum marks for exploration will be 40 and for excavation will be 60.

PAPER- VIII: Practical: 100 Marks

1. Archaeological drawing: Area map, Site plan, Section, Floor, Structure, and Pottery.
2. Methods of Surveying: Chain survey, Plain table survey, Prismatic compass surveying, Leveling and Contouring.

3. Editing of digital photographic data in computer.
4. Pottery mending
5. Modeling
6. Taking of stampage
7. Photography

Semester-III

PAPER- IX: Historical Archaeology of India: 100 Marks

UNIT- I

1. Archaeological components of Gupta and Post-Gupta Period: Stratigraphical context, Pottery types, Antiquities, Structures, Settlement Pattern.
2. Salient features of Gupta coins (Gold coins of Samudragupta and Silver coins of Chandragupta II)
3. Salient features of Gupta Brahmi Script, Paleographic features of Udaigiri Cave Inscription of Virsen Shab.
4. Deogarh Dashavtar Temple, Brick temple of Bhitargaon.

UNIT- II

5. Archaeological components of Early Medieval Period: Stratigraphical context, Pottery types, Antiquities, Structures, Settlement Pattern
6. Characteristic features of Rajputa coins with special reference to Pratihara, Chandel and Chahman coins.
7. Kailash temple of Ellora, Lingraj Temple of Bhuvaneshwar, Kandaria Mahadeo Temple of Khajuraho, Inscription of Yashoverman Chandel at Lakshman temple, Khajuraho.

UNIT- III

8. Archaeological components of Medieval Period: Pottery types (Red ware and Glazed ware), Antiquities, Structures
9. Coins of Akabar
10. Architectural features of Qutub minar, Mughal Architecture: Tomb of Humayun and Red fort of Delhi; Architecture of Nawabs of Awadh with special reference to Bara Imambara of Lucknow and Lalbaradari Lucknow University, Lucknow.

UNIT- IV

11. Salient features of Colonial architecture: La Martiniere Boys College of Lucknow.
12. Excavation report of the following sites of medieval period:
 - a. Hampi
 - b. Champaner
 - c. Fatehpur Sikari
 - d. Lalkot

Books Recommended:

1. Agarwal, P. K.: izkphu Hkkjrh; dyk ,oa okLrq
2. Agarwal, V. S.: Studies in Indian Art
3. Agarwal, V. S.: Hkkjrh; dyk
4. Agarwal, V. S.: Evolution of Hindu Temples and Other Essays
5. Altekar, A. S.: Coinage of the Gupta Empire (Eng. and Hindi)
6. Brown, Percy: Indian Art
7. Buhler, G.: Indian Paleography
8. Chakrabarty, S. K.: A Study of Ancient Indian Numismatics
9. Chandra, Pramod: Studies in Temple Architecture
10. Gopal, L.: Early Medieval Coin Types of Northern India
11. Krishna, Deo: Temples of North India
12. Mathur, Vijaya Kumar: Art & Culture under the Shungas
13. Niharika: A study of Stone Beads in Ancient India
14. Ojha, G. H.: izkphu Hkkjrh; fyfiestyk
15. Pandey, R. V.: Indian Paleography
16. Rowland, B.: Art and Architecture of India
17. Singh, Onkar: xqIrksRrj dkyhu mRrj Hkkjrh; eqnzk,a
18. Suresh, K.M.: Kandaria Mahadev temple of Khajuraho
19. Thakran, R.C.: Dynamics of settlement Archaeology
20. Verma, T. P.: The Paleography of Brahmi script in Northern India

PAPER- X: Iconography, Sculptures and Paintings: 100 Marks

UNIT- I

1. Meaning of Iconography: Nature and Importance of Iconography, Materials for the study of Iconography, Antiquity of Image-worship in India, Classification of Images
2. Buddhist and Jain Iconography: Origin and the development of the Buddha image in Mathura and Gandhara up to the Gupta Period, General characteristics of the Tirthankara images

UNIT- II

3. Vishnu: Sthanaka, Āsana and Sayana Murtis, Ten Incarnations
4. Siva: A short account of Siva-lingas, Uma-Mahesvara Murti, Nataraja, Mahesvara Murti, Anugraha Murtis, Sanghara Murtis, Kalyanasundara Murti.

UNIT- III

5. Iconography of Surya, and Ganapati.
6. Iconography of Mahisasurmardini Durga, Lakshmi, Saraswati, and Saptmatrikas

UNIT- IV

6. Terracotta and Sculptural Art of Mauryan, Sunga, Kushana, Gupta, post Gupta, early medieval and Medieval periods
7. Ajanta Paintings

Books Recommended:

1. Agarwal, P. K.: izkphu Hkkjrh; dyk ,oa okLrq
2. Agarwal, V. S.: Studies in Indian Art
3. Agarwal, V. S.: Hkkjrh; dyk
4. Awasthi, Ramasrya: [ktqjkgks dh nso izfrek,a
5. Banerjea, J. N.: Development of Hindu Iconography
6. Bhattacharya, B.: The Indian Buddhist Iconography
7. Bhattacharya, B. C.: The Jain Iconography
8. Brown, Percy: Indian Art
9. Brown, Percy: Indian Paintings
10. Bhadauria, G. S.: Women in Indian Art
11. Coomaraswamy, A. K.: Origin of the Buddha Image
12. Dereck, M. M.: Indian Sculpture
13. Joshi, N. P.: izkphu Hkkjrh; ewfrZfoKku
14. Khandalvala, K.: Indian Paintings
15. Kramrisch, Stella: Indian Sculpture
16. Kramrisch, Stella: A Survey of Indian Paintings in the Deccan
17. Mathur, Vijaya Kumar: Art & Culture under the Shungas
18. Rao, T. A. Gopinath; Elements of Hindu Iconography
19. Saraswati, S. K.: Survey of Indian Sculpture
20. Shastri, Ajai Mitra: *Ajanta*
21. Shukla, D. N.: Hindu Canons of Iconography with an anthology of Pratima Laksana
22. Srivastava, Brij Bhusan: izkphu Hkkjrh; izfrekfoKku ,oa ewfrZdyk
23. Suresh, K.M: Iconography of Vishnu from Khajuraho
24. Tiwari, Maruti Nandan Prasad: *tSu izfrekfoKku*

**PAPER- XI: Structural conservation of Monuments:
100 Marks**

UNIT- I

1. Meaning, definition, concept and principles of conservation and preservation
2. Brief history of conservation in India.
3. Methodological study of monuments

UNIT- II

4. Types of monuments
5. Materials used in the ancient buildings: Stone, brick, wood, iron and mortars

UNIT- III

6. Causes of decay of monuments
7. Techniques of conservation

UNIT- IV

8. Conservation of excavated sites
9. Salvaging, transplantation and restoration
10. The students are also required to attend the structural conservation work as and when they are asked to do so.

Books recommended:

1. Agrawal, O. P., A. K. Mishra & K. K. Jain: Removal of Plants and Trees from Monuments
2. Murthy, K. L.: Structural Conservation of Monuments in South India
3. Batra N. L.: Heritage Conservation, and Restoration of Monuments in India.
4. Reddy, E.Siva Nagi: Evolution of building technology
5. Shah, N. R.: Studies on Some Fungal Bioderogens

PAPER- XII: Museum Methods: 100 Marks**UNIT- I**

1. Museum building: Planning of museum building, Reception, Booking office, clock room, Security room, Administrative block, Auditorium, Galleries, laboratory, workshops, Modeling room, Photography room, Graphics room, Library and research room, Public conveniences, Sale counter, Provision for extension.
2. Collection documentation: Documentation, Principles of classification, Methods of identifications, Accession and numbering, Cataloguing, Indexing, Technical terminology, Registration of museum objects.

UNIT- II

1. Display and exhibition:
 - a. Various theories of display, Selection of objects, Visual elements of display, circulation space
 - b. Furniture: Types of show cases, Pedestals and other accessories.
 - c. Special techniques for display of sculptures, terracotta objects, coins, and paintings.
 - d. Background, environment of particular object and display
2. Labeling: Materials used, the fabric and style, colour of backgrounds for label, texture of the materials used for the base, Texts and language of label, their nature to suit the very wide range of visitors, space of labels, and method of effective labeling.

UNIT- III

1. Lighting: Natural and Artificial for various types of objects, reflections, causes of reflections and methods of avoiding them, effects of strong light on material exhibited, causes of bleaching of colours of objects, protective measures.
2. Planning and programming of temporary and permanent exhibitions
3. Audiovisual aids and their preparation and use.

UNIT- IV

1. Library: procurement of books, Accession of books, classification and cataloging of books and journals, Preparation of index cards (Subject wise and Author wise), Issue system.
2. Technical aids: data processing, information retrievals, and computerization
3. Museum education:
 - a. Special exhibitions
 - b. Conducted tours in the museum galleries
 - c. Seminar, conferences and workshops
 - d. Loan services to various institutions / museums
 - e. Facilities for school, collage students and teachers

Books recommended:

1. Bedekar, V. H.: New Museology for India
2. Bhatnagar, Anupama: Museum, Museology and New Museology
3. Edson, Gary, Ed.: Museum Ethics
4. Lord, Gail Dexter; Lord, Barry: Manual of Museum Planning
5. Mirzoeff, Nicholas: Visual Culture Reader
6. Moore, Kevin, Ed.: Museum Management
7. Ramlingam, M.S.: Library Cataloguing and Classification
8. Ramlingam, M.S.: Library and Information Technology
9. Sarkar, H., A. U.: Museum and Protection of Monuments and Antiquities in India
10. Thompson, John, M. A.: Manual of Curatorship: A guide of Museum Practice

SEMESTER- IV**PAPER- XIII: Chemical Conservation: 100 Marks****UNIT- I**

1. Meaning and definition of chemical conservation
2. Paper materials:
 - a. General properties of paper

- b. Preparation of Paper and their types
- c. Composition of Ink
- d. Deterioration factors of paper: Biological deterioration, Physical deterioration, and Chemical deterioration
- e. Care and maintenance of documents
- f. Restoration of Paper documents

UNIT- II

- 3. Deterioration and Conservation of - Wall paintings, Paper paintings, Textile paintings, 4. Leather paintings
- 5. Wooden objects

UNIT- III

- 6. Chemical treatment of Metallic objects: Gold, Silver, Copper, Bronze, Lead and Iron objects
- 7. Chemical conservation of siliceous objects
- 8. Chemical cleaning and mending of pottery and terracotta objects

UNIT- IV

- 9. Deterioration and Conservation of- Textiles, Ivory objects, Bone object
- 10. Deterioration and Restoration of- Animal skins/Leather objects
- 11. Deterioration and Restoration of- Natural history specimens

Books recommended:

1. Agrawal, D. P.: Ancient metal technology and Archaeology of south Asia
2. Agrawal, O. P.: Restoration of Indian Art
3. Agrawal, O. P. and Mandana Barkeshli: Conservation of Books Manuscripts and Paper documents
4. Agrawal, O. P.: Conservation of manuscripts and paintings of South East Asia
5. Agrawal, O. P.: Wall paintings of India- A Historical Perspective
6. Agrawal, O. P.: Preservation of Art objects and library materials
7. Agrawal, O. P.: Conservation of Wall Paintings in India- Achievements and Problems
8. Agrawal, O. P. (ed.): Conservation of Manuscript and Documents
9. Agrawal, O. P. & M. Barkeshly: Conservation of Manuscripts and Documents
10. Agrawal, O. P.; S. Dhawan & K. L. Garg: Microbial deterioration of Paintings
11. Agrawal, O. P. & S. Dhawan: Microbial Deterioration of Wood- A Review
12. Agrawal, O. P.: Examination and Conservation of Wall paintings of Sheeshmahal Nagaur
13. Agrawal, O. P.: Care and Preservation of Museum Objects (NRLC), New Delhi, 1977
14. Agrawal, O.P.: Conservation of Paintings in south east Asia
15. Lande, Sheila: Conservation of Textile
16. Naresh, R. Shah, Arya Arun: Studies on some fungal biodeteriogens
17. Plederleith, H. J.: Conservation of Antiquities and Works of Arts, Oxford University Press, New York, Toronto, 1956
18. Sarma, Suguna V: Studies in Indian textiles
19. William, Johan C: Preservation of Paper and Textiles and Artistic Value, Volume I, American Chemical Society, Washington, 1984

PAPER- XIV: Antiquarian laws: 100 Marks

UNIT- I

1. The Ancient Monuments and Archaeological sites and Remains Act 1958
2. The Ancient Monuments and Archaeological sites and Remains Rules 1959

UNIT- II

3. The Indian Treasure Trove Act 1878
4. The Antiquities and Art treasures Act 1972

UNIT- III

5. The Antiquities and Art treasures Rules 1973
6. The Indian custom Act 1962

UNIT- IV

7. Land Acquisition act 1894
8. International Conventions: Code and guideline for Protection of Cultural Property, return of stolen in illegally exported cultural objects, Prohibiting and Preventing illicit import, export and transfer of ownership of cultural property.
9. Acts and Rules of Archaeology of U.P.

Books recommended:

1. Srivastava Alok: Antiquarian Laws of India

2. Biswas, S.S.: Protecting the Cultural Heritage, New Delhi
 3. H. Sirkar: Museums and protection of Monuments and Antiquities in India
- Government of India publications on the above referred Acts and Rules

PAPER- XV: Dissertation on Exploration and Excavation: 100 Marks

The student will prepare and submit two dissertations to the Director of exploration/ excavation, on the basis of his two years fieldwork supported with site plan, drawings, photographs and maps. The Director of Exploration/ Excavation and Director of the course/ Head of the Department will examine the dissertations in 100 marks:

1. Dissertation on Archaeological explorations: 40 Marks
2. Dissertation on Archaeological excavation: 60 Marks

PAPER- XVI: Viva voce examination: 100 Marks

Course Director: Dr. D.P.Tewari, Professor, Department of A.I.H. and Archaeology, will manage the course as Director and will look after the Departmental Archaeological Museum as a Director.

Scheme of examination:

1. Each paper will carry 100 marks. The evaluation pattern and examination of paper no I, II, III, IV, V, VI, IX, X, XI, XII, XIII and XIV shall be as under:
 - a. Class Test/ Presentation: 10 marks
 - b. Mid semester Test : 20 marks
 - c. Attendance, Participation in curricular and co-curricular Activities : 10 marks
 - d. Semester end examination: 60 marks

PAPER- VII:

This paper will be based on the performance of fieldwork of student. The Director of Exploration/Excavation will observe his performance and award marks for exploration and excavation accordingly. If the Director of the course is holding the post of Director Exploration / Excavation, the Head of the Department will act as a co- examiner. The maximum marks for exploration will be 40 and maximum marks for the excavation will be 60. In case the Department of A. I. H. & Archaeology, Lucknow University, Lucknow, does not undertake any exploration / excavation in any season, the Director of course will direct the students to attend the excavation of the nearby area conduct by any other agency. In such circumstance, the Director of Course will be co-examiner.

PAPER- VIII: Practical: 100 Marks

Practical examination shall be conducted by the Director of the course and one external examiner recommended by the Board of Studies of the Department.

Drawing:

Section	: 05
Floor	: 05
Structure	: 05
Pottery	: 05

Surveying

Area map:	10
Site Plan:	: 15

Leveling and Contouring : 20

Pottery mending : 05

Modeling ; 10

Taking of stampage : 05

Photography : 10

Editing of Photographs : 05

Viva voce Examination: 100 Marks

Viva voce examination shall be conducted by the Director of the course and one external examiner recommended by the Board of Studies of the Department.