# **SYLLABUS**

# **MASTER OF ARTS (M.A.)**

IN

# ANCIENT INDIAN HISTORY, CULTURE AND ARCHAEOLOGY

**SEMESTER III** 

(UNDER CBCS)



# DECCAN COLLEGE POST GRADUATE AND RESEARCH INSTITUTE PUNE – 411 006 (INDIA)

(Declared as Deemed to be University under section 3 of UGC Act 1956)

2017

# ARC 301: ART AND ARCHITECTURE OF INDIA (FROM $6^{TH}$ CENTURY B.C.E. TO $6^{TH}$ CENTURY C.E.)

# **Course Objectives**

Students will be introduced to emergence and development of art traditions upto  $6^{th}$  century C.E.

Monuments will be studied in their cultural context.

## **Course Outcomes:**

Students will able to understand the monuments in their religious, regional and stylistic context.

Students will be able to prepare plans of the monuments.

# Unit 1: Introduction to traditions of Art and Architecture in India (5 hrs)

- i. Introduction to Art and Architecture and prelude to historical art.
- ii. Art of the pre-Mauryan period.
- iii. Art and Architecture of Mauryan Period
- iv. Sources of Inspiration of Mauryan Art and Architecture: Foreign and Indigenous.

# **Unit 2: Emergence and Development of Structural Stupa Architecture** (10 hrs)

- i. Origin of Stupa Architecture.
- ii. Stupa Architecture Pre-Mauryan and Mauryan periods.
- iii. North India, Central India, Deccan and Gandhara
- iv. Structural monasteries and Chaityas.

# Unit 3: Emergence and Development of Rock-cut Architecture (12 hrs)

- i. Origin of Rock-cut Architecture.
- ii. Eastern India, Western Deccan, Eastern Deccan, Central India.

# Unit 4: Emergence and Development of Temple Architecture (08 hrs)

- i. Origin of Temple Architecture- Theoretical aspects.
- ii. Concept and symbolism of Temple.
- iii. Archaeological remains of structural temples.
- iv. Temple Architecture during the Gupta period.
- v. Temple Architecture during the Vakataka period.

# **Unit 5: Sculptural Art and Paintings - Emergence and Development**

- i. Sculptural Art and Paintings -Concept and Symbolism.
- ii. Terracottas, Ivories and Bronzes
- iii. Paintings
- iv. Stone sculptures-Gandhara, Mathura, Sarnath and Andhra schools of Art.
- v. Art during the Gupta-Vakataka period.

# **Unit 6: Field Visit and Practical Training**

(30 hrs)

(10 hrs)

- i. Visit to Western Indian Rock-Cut caves
- ii. Practical training of preparation of Plan

- i. Barua, B. 1934-37. Barhut Vol. I-III. Calcutta: Indian Research Institute.
- ii. Cunningham, Alexander 1966. The Bhilsa Topes. Varanasi: Indological Book Corporation.
- iii. Cunningham, Alexander 1965. *The Stupa of Bharhut*. Varanasi: Indological Book Corporation.
- iv. Dallapiccola, L.S.Z. Lallemant. 1980. *The Stupa: Its Religious, Historical, and Architectural Significance*. Wiesbaden: Franz Steiner Verlag.
- v. Dehejia, Vidya 1972. Early Buddhist Rock Temples A Chronological Study. London: Thames and Hudson.
- vi. Dehejia, Vidya 1997. *Discourse in Early Buddhist Art*, New Delhi: Munishiram Manoharlal Publishers Pvt. Ltd.
- vii. Dhavalikar, M.K. 1977. *Masterpieces of Indian Terracottas*. Bombay: D.B.Taraporevala Sons and Co. Pvt. Ltd.
- viii. Dhavalikar, M. K. 1985. Late Hinayana Caves of Western India. Pune: Deccan College.
- ix. Dhavalikar, M. K. 2004. Satavahana Art. Delhi: Sharada Publishing House.
- x. Dwivedi, V.K.1976. *Indian Ivories*. New Delhi: Agam Kala Prakashan.
- xi. Ghosh, A.1967. Ajanta Murals. New Delhi: Archaeological Survey of India.
- xii. Gupta, S.P. 1980. Roots of Indian Art. New Delhi: B.R. Publishing Corporation.
- xiii. Gupta, S.P. (ed.). 2003. Kushana Sculptures from Sanghol. New Delhi: National Museum.
- xiv. Huntington, Susana. L. with John Huntington 1985. *The Art and Architecture of India*. New York: Weatherhill.

- xv. Joshi N.P. 1966. Mathura Sculptures. Mathura: Archaeological Museum.
- xvi. Khandalwala, Karl(ed.) 1991. *Golden Age: Gupta Art Empire, Province and Influence*. Bombay: Marg Publications.
- xvii. Knox, Robert 1992. *Amravati- Buddhist Sculpture from the Great Stupa*. London: BritishMuseum Press.
- xviii. Marshall, John1960. *The Buddhist Art of Gandhara*. Cambridge: Cambridge University Press.
  - xix. Meister, Michael W. and M.A. Dhaky (ed.) 1999. Encyclopedia of Indian Temple Architecture. Vol. II, Part 1, North India: Foundations of North Indian Style C 250 BC-AD 1100. Delhi:American Institute of Indian Studies and Oxford University Press.
  - xx. Nagaraju, S. 1981. *Buddhist Architecture of Western India*. New Delhi: Agam Kala Prakashan.
  - xxi. Sharma, R.C. 1984. Buddhist Art of Mathura. New Delhi: Agam Kala Prakashan.
- xxii. Sivaramamurti, C .1942. Amaravati Sculptures in the Madras Government Museum. Madras:Government Press.
- xxiii. Snodgrass, Adrian1992. The Symbolism of the Stupa. Delhi: Motilal Banarasidass.
- xxiv. Stone, Elizabeth Rosen 1994. *The Buddhist Art of Nagarjunkonda*. Delhi: Motilal Banarassidas Publisher Pvt. Ltd.
- xxv. Williams, Joanna 1982. The Art of Gupta Indian-Empire and Province. New Jersey: Princeton

# ARC 302: ANCIENT INDIAN ICONOGRAPHY

# **Course Objectives:**

The objective of this course is to introduce students to the iconography of the images of the different religious traditions of Hinduism, Buddism and Jainism. The development of iconographic depictions in each of these traditions is also outlined.

# **Course Outcome:**

Students learn about the different iconographic traditions in the Indian Subcontinent with concern to the religious ideas and trends.

Credits 5 core elective L (3): T (2): P (0)

# **Unit 1: Introduction to Iconography**

(5 hrs)

- i. Significance of iconographic studies, sources
- ii. Concept and symbolism of icon and image worship c. Origin and Antiquity of image worship in India
- iii. Iconometry
- iv. Text and image: Brief review of Ancient Indian Shilpa Texts and their role in development of iconography

# **Unit 2: Hindu Iconography**

(20 hrs)

- i. Emergence and development of Iconography of Vishnu: Sadharan murtis, incarnations, other important representations of Vishnu, Regional traits of Vaishnava iconography
- ii. Emergence and development of Iconography of Shiva: Anugraha murtis ,Samhara murtis ,Vishesha murtis, Regional traits of Shaiva iconography
- iii. Brahma, Ganesha, Surya, Karttikeya
- iv. Development of Iconography of Goddesses: Saptamatrikas, Durga, Lakshmi, Saraswati, Mahishsuramardini, Chamunda, Bhairavi, Regional traits of Shakta iconography
- v. Other Important divinities: Ashtadikpalas, Navagrahas

# **Unit 3: Buddhist Iconography**

(7 hrs)

- i. Origin and development of Buddhist imagery
- ii. Aniconic representation of the Buddha: Concept and meaning
- iii. Origin of the Buddha image, various theories of the origin of Buddha image, Different iconographic forms
- iv. Manushi and Dhyani Buddhas
- v. Bodhisattvas: Concept and symbolism, emergence and development of Bodhisattva images, Avalokiteshvara, Vajrapani, Maitreya, Manjushri
- vi. Female Buddhist deities: Origin and development, Tara, Pradnyaparamita, Chunda, Bhrukuti, Marichi, Vasudhara, Mahamayuri, Hariti
- vii. Important Buddhist Deities: Trilokyavijaya, Aparajita, Shambara, Jambhala

# **Unit 4: Jaina Iconography**

(5 hrs)

- i. Origin and development of Jain images
- ii. Ayagapatta
- iii. Jaina Tirthankaras: Forms of Tirthankara images ,Sarvatobhadra ,Chaturvinshati
- iv. Jaina Yakshas and Yakshinis: Ambika, Chakreshvari, Padmavati, Saraswati, Kubera

# **Unit 5: Miscellaneous iconographic forms**

(8 hrs)

- i. Role and significance of minor deities in ancient religious setting
- ii. Pastoral Deities
- iii. Goddesses of Fertility
- iv. Yakshas, Nagas
- v. Vidyadharas, Gandharvas, Kinnaras
- vi. Surasundaris and Mithun Shilpas
- vii. Hero stones and Sati stones
- viii. Composite animals
  - ix. Syncretic and Composite Iconic Forms: Origin, development and significance.

- i. Agrawala, P.K.1994. Studies in Indian Iconography. Jaipur: Publication Scheme.
- Agrawala, Urmila. 1995. North Indian Temple Sculpture. New Delhi: Munshiram Manoharlal.
   Bakkar, Hans. 1997. The Vakatakas an Essay in Hindu Iconology (Gonda Indological Series).
   Groningen: Egbert Forsten.
- iii. 1989. Buddhist Iconography. New Delhi: Tibet House.
- iv. Banerjee, J.N.1974. Development of Hindu Iconography. New Delhi: Munshiram Manoharlal. Bhattacharya, A.K.2010. Historical Development of Jaina Iconography (A comprehensive study), Delhi: Bharatiya Kala Prakashan.
- v. Bhattacharya, B. 1958. Indian Buddhist Iconography. Calcutta: K.L.Mukhopadhyaya. Bhattacharya, D. 1980. Iconology of Composite Images. New Delhi: Munshiram Manoharlal Publications.
- vi. Bruhn, Klaus 1963. Jina Images of Deogarh vol.I. Leiden: Brill.

- vii. Champaklakshmi, R.1981. Vaishnava Iconography in the Tamil Country. Delhi: Orient Longman.
- viii. Chawla, J.1990. The Rigvedic Deities and their Iconic Froms. New Delhi: Munshiram Manoharlal.
- ix. Czuma, Stanislaw.J.1985. Kushana sculpture: Images from early India. Ohio: The Cleveland Museum.
- x. Dandwate P. P. 1995. "A Cultural Study of Brahmarical Sycretistic Icons" Pune: Ph.D. Thesis Submitted to University of Pune.
- xi. Deglurkar, G.B. 2004. Portrayal of the Women in the Art and Literature of the Ancient Deccan. Jaipur: Publications Scheme.
- xii. Deglurkar, G.B. 2007. Vishnumurti Namastubhyam. Sri Dwarkadhish Charities, Karnala, Raigad.
- xiii. Daheja, Vidya 1986. Yogini Cult and Temples. New Delhi: National Museum.
- xiv. Desai, Devangana 1996. The Religious Imagery of Khajuraho. Mumbai: Project for the Indian Cultural Studies Publication.
- xv. Desai, Kalpana 1973. Iconography of Vishnu. New Delhi: Abhinav Publications.
- xvi. Gopinath Rao, T.A. 1985. (2nd ed.) Elements of Hindu Iconography. Varanasi: Motilal Banarasidas.
- xvii. Gupte, R.S. 1971. Iconography of Hindus, Buddhists and Jainas. Bombay: D.B. Taraporewala Sons and Co.
- xviii. Huntington, Susan 1984. The Pala-Sena School of Sculpture. Leiden: E. J. Brill. Joshi N.P. 1966. Mathura Sculptures. Mathura: Archaeological Museum.
  - xix. Joshi, N.P.1979. Bhartiya Murtishastra. Nagpur: Maharashtra Grantha Nirmiti Mandal.
  - xx. Kamalakar, G.(ed.).1993. Vishnu in Art, Thought and Literature. Hyderabad: Birla Archaeological and Cultural Research.
  - xxi. Kim, Inchang.1997. The Future Buddha Maitreya: An Iconological Study. New Delhi: D. K. Print World.
- xxii. Khandalwala, Karl (ed.) 1991. Golden Age: Gupta Art Empire, Province and Influence. Bombay: Marg Publications.
- xxiii. Krishnan, Y.1996. The Buddha image: Its origin and Development. New Delhi: Munshiram Manoharlal Pvt. Ltd.
- xxiv. Lal, Shyam Kishor 1980. Female Divinities in Hindu Mythology and Ritual. Pune: University of Poona
- xxv. Liebert, Gosta 1985, Iconographic Dictionary of the Indian Religions: Hinduism, Buddhism and Jainism. Delhi: Sri Satguru Publications.
- xxvi. Lokesh, Chandra 1987. Buddhist Iconography 2 vols. New Delhi: Aditya Prakashan.
- xxvii. Mani, V.R.1995. Saptamatrikas in Indian Religion and Art. New Delhi: Mittal Publications.
- xxviii. Mishra, Rajani 1989. Brahma-Worship, Tradition and Iconography. Delhi: Kanishka Publication House.

- xxix. Mishra, Ramnath 1981. Yaksha Cult and Iconography. New Delhi: Munshiram Manoharlal.
- xxx. Mukhopadhyay, Santi Priya1985. Amitabha and his Family. Delhi: Agam Kala Prakashan. Nagar, Shanti Lal 1988. Mahishasurmardini in Indian Art. New Delhi: Aditya Prakashan.
- xxxi. Panikkar, Shivaji. K.1997. Saptamatraka Worship and Scultures, An Iconological
- xxxii. Interpretations of Conflicts. New Delhi: D.K.Printworld.
- xxxiii. Parimoo, Ratan 1982. Life of Buddha in Indian Sculpture (Ashta-Maha-Pratiharyan): An Iconological Analysis. New Delhi: Kanak Publications.
- xxxiv. Pushpendra Kumar 1993. Tara: The Supreme Goddess. Delhi Bharatiya Vidya Prakashan.
- xxxv. Ramachandra Rao 1988-91. Pratima Kosa- Encyclopedia of Indian Iconography 6 vols. Bangalore: Kalpataru Research Academy.
- xxxvi. Reechard, J.Cohen 2003. Essays on Jaina Art. New Delhi: Manohar Publications.
- xxxvii. Sahai, Bhagwant 1975. Iconography of Minor Hindu and Buddhist Deities. New Delhi
- xxxviii. Sahai, Bhagwant 2006. Recent Researches in Indian Art and Iconography. Missouri: Kaveri Prakashan.
  - xxxix. Sarma, I.K.1982. The Development of Early Shaiva Art and Architecture. (With Special Reference to Andhradesha). Delhi: Abhinava Publications.
    - xl. Sinha, Kanchan 1979. Karttikeya in Indian Art and Literature. Delhi: Sundeep Prakashan.
    - xli. Shah, U.P. 1987. Jaina Rupmandana. New Delhi: Abhinav Publication.
    - xlii. Shastri, T. Ganpati. (Ed.) 1966. Samaranganasutradhara of Bhoja. Baroda: Oriental Institute. Shaw, Marinda 2008. Buddhist Goddesses of India. New Delhi: Munshiram Manoharlal Pvt. Ltd.
    - xliii. Sivrammurti, C.1961. Indian Sculpture. New Delhi: Allied Publishers Pvt. Ltd.
    - xliv. Sivaramamurty, C. 1963. South Indian Bronzes. New Delhi: Lalit Kala Academy.
    - xlv. Soundara Rajan, K. V.1982. India's Religious Art. New Delhi: Cosmo Publication.
    - xlvi. Sthapati V. Ganapati and Sthapati 2006. Indian Sculpture and Iconography. Ahmadabad: Mapin Publishing.
  - xlvii. Upadhyaya, Vasudev 1970. Prachin Bharatiya Murti Vijnana (Hindi). Varanasi: Chowkhamba Sanskrit Series.
  - xlviii. Vyas, R.T. 1995. Studies in Jaina Art and Iconography and allied Subjects in Honour of U.P.Shah. Vadodara: Oriental Institute.
    - xlix. Yadava, Nirmala 1997. Ganesha in Indian Art and Literature. Jaipur: Publications Scheme.
      - 1. Zimmer, Heinrich 2010. Myths and Symbols in Indian Art and Civilization, New Delhi: Motilal Banarassidas.

# ARC 303: ANCIENT INDIAN EPIGRAPHY AND PALAEOGRAPHY

# **Course Objectives:**

To learn Brahmi and Kharoshthi scripts.

To introduce prevalent language system.

To establish epigraphical records as one of the foremost sources in reconstruction of ancient Indian history.

## **Course Outcomes:**

Students will be successfully able to decipher and read scripts; and date inscriptions with the help of paleographic features of the script.

Students will also understand the different usages of language.

After the successful completion of the course student will be able to interpret the inscription in its socio-politico- religio and economical context.

# Unit 1: Introduction to Epigraphy and Paleography

(5 hrs)

- i. Epigraphy and Paleography: Terminology, Scope and Importance in Reconstruction of History
- ii. Historiography of Epigraphic Studies
- iii. Antiquity of Writing in Ancient India
- iv. Materials and Techniques of Writing
- v. Theories of Origin of Brahmi and Kharoshthi Scripts
- vi. Brahmi and Kharoshti Scripts: Orthography and Decipherment of letters and Numerals

#### Unit 2: Edicts of Ashoka

(10 hrs)

- i. Nature, Geographic Distribution, Categories and Language
- ii. Decipherment of Major Rock Edicts (Girnar Version) Nos. I, II, IV, VI, IX and XII

# **Unit 3: Calendrical Systems in Ancient India**

(8 hrs)

- i. Dates and Chronograms
- ii. Eras: Vikrama, Shaka, Kalchuri- Chedi and Gupta Eras

# Unit 4: Study of Inscriptions of Historical and Cultural Importance

(Need to be classify)

(20 hrs)

- i. Sohgaura Copperplate Inscription
- ii. Besnagar Garuda Pillar Inscription of Heliodorus
- iii. Hathigumpha Inscription of Kharavela
- iv. Naneghat Inscription of Naganika
- v. Nasik Cave Inscription of Nahapana
- vi. Nasik Cave Inscription of Vasithiputa Pulumavi, 19th Regnal Year
- vii. Junagarh Inscription of Rudradamana
- viii. Nagarjunikonda Inscription of Virapurisadatta, 6th Regnal Year
- ix. Chatrayashthi inscription of Kaniska I
- x. Mathura inscription of Huviska
- xi. Allahabad Prashasti of Samudragupta
- xii. Mathura Inscription during the Reign of Chandragupta II, GE 61
- xiii. Poona Plates of Prabhavatigupta
- xiv. Indore Plates of Pravarasena II, 23rd Regnal year
- xv. Aihole Inscription of Pulakesin II
- xvi. Bansakheda copper plate of Harshavardhana

# **Unit 5: Method of Inscription Decipherment:**

(2 hrs)

Practical Training of Estampage Technique

- i. Allchin, F.R. and K.R. Norman 1985. *Guide to the Ashokan Inscriptions*, South Asian Studies, I: 49-50.
- ii. Bhandarkar, D.R. 1935-36. A List of the Inscriptions of Northern India in Brahmi and its Derivative Scripts, from about 200 B.C. Appendix to Epigraphia Indica vols. 19-23.
- iii. Bhandarkar, D.R. 1981. Inscriptions of the Early Gupta Kings (Bahadurchand Chhabra and Govind Swamirao Gai eds.). Corpus Inscriptionum Indicarum vol. III. New Delhi: Archaeological Survey of India.
- iv. Bühler, George 1892. A New Variety of the Southern Maurya Alphabet, Winer Zeitschrift für die Kunde des Morgen Landes (Vienna Oriental Journal), vol. 6: 148-156.
- v. Bühler, George 1898. *On the Origin of Indian Brahma Alphabet*. Strassburg: Karl J. Trubner.
- vi. Bühler, George 1959. Indian Palaeography. Calcutta: Indian Studies.

- vii. Dani, Ahmad Hasan 1963. *Indian Palaeography*, Oxford: Clarendon Press. *Epigraphia Indica 1892-1940.Vol. 1- XXV*, Archaeological Survey of India.
- viii. Hultzch, D. 1969 (Reprint). *Corpus Inscriptionum Indiacarum. Vol.I.* Varanasi: Indological Book House.
  - ix. Gokhale, S. Purabhilekhavidya. Mumbai: Sahitya Sanskruti Mandal.
  - x. Goyal, S.R. 2005. Ancient Indian Inscriptions. Jodhpur: Kusumanjali Book World.
- xi. Khare, M.D. 1967. Discovery of a Vishnu Temple near the Heiodorus Pillar, Besnagar, District Vidisha (M.P.), Lalit Kala (13): 21-27.
- xii. Lüders, H. 1912. A List of Brahmi Inscriptions from the Earliest Times to About A.D. 400 with the Exception of those of Asoka. Appendix to Epigraphia Indica Vol. X.
- xiii. Mangalam, S.J. 1990. Kharoshti Script. Delhi: Eastern Book Linkers.
- xiv. Mehendale, M.A. 1948. *Historical Grammar of Inscriptional Prakrits*. Poona: Deccan College Post Graduate and Research Institute.
- xv. Mehendale, M.A. 1948. Asokan Inscriptions in India (Linguistic Study together with Exhaustive Bibliography). Bombay: University of Bombay.
- xvi. Mirashi, V.V. 1981. *The History and Inscriptions of the Satavahanas and the Western Kshatrapas*. Bombay: Maharashtra State Board of Literature and Culture.
- xvii. Pandey, R. 1957. Indian Palaeography. Delhi: Motilal Banarasidas.
- xviii. Raghunath, K. 1998. *Ikshvakus of Vijaya Puri: Study of the Nagarjunakonda Inscriptions*. Delhi: Eastern Book Linkers.
  - xix. Ramesh, K.V. 1984. *Indian Epigraphy*. Delhi: Sundeep Prakashan.
  - xx. Rea, Alexander 1997 (Reprint). *South Indian Buddhist Antiquities*. Archaeological Survey of India New Imperial Series Vol. XV. New Delhi: Director General, Archaeological Survey of India.
  - xxi. Salomon, Richard 1998. *Indian Epigraphy*. New Delhi: Munshiram Manoharlal Publishers Pvt. Ltd.
- xxii. Shastri, A.M. 1996-97. Some Observations on the Origin and Early History of the Vikrama Era, *Prachya Pratibha*, vol. XVIII: 1-51.
- xxiii. Shastri, A.M. 1966. The Saka Era, *Panchal*, vol. 9: 109-132. Sircar, D.C. 1965. *Indian Epigraphy*. Delhi: Motilal Banarasidas.
- xxiv. Sircar, D.C. 1986 (3<sup>rd</sup> edition). *Select Inscriptions*. Vol. I. Delhi: Asian Humanities Press.
- xxv. Srinivasan, P.R. And S. Sankaranarayanan 1979. *Inscriptions of the Ikshvaku Period*. Hyderabad: Andhra Pradesh Government.
- xxvi. Woolner, Alfred C. 1924. *Asoka Text and Glossary (parts I and II)*. Lahore: The University of the Panjab, Lahore.

# ARC 305: INTRODUCTION TO WORLD PREHISTORY

# **Course Objectives:**

The objective of this course is to provide an overview of the major developments in Prehistory in the different parts of the world.

# **Course Outcomes:**

Students gain a global perspective on Prehistoric studies and can better appreciate the role of India in the global context.

# Unit 1: Background to the study of World Prehistory

(4 hrs)

- i. World Prehistory: aims and scope of the paper
- ii. Introduction: chronological phases and terminologies adopted for the study of various cultural phases in different regions
- iii. Background to the fossil and genetic evidence
- iv. Introducing theories and debates related to hominine behavior
- v. Debates on the timing and nature of population dispersals

Unit 2: Africa (6 hrs)

- i. Background to the geography, palaeoenvironments, fossil and genetic record
- ii. The Earliest Palaeolithic assemblage of Africa: The Oldowan
- iii. The Acheulian
- iv. The Middle Stone Age
- v. The Later Stone Age

Unit 3: Europe (6 hrs)

i. Background to the geography, palaeoenvironments, fossil and genetic record

- ii. The Earliest Palaeolithic evidence
- iii. The Acheulian
- iv. The Middle Palaeolithic
- v. The Upper Palaeolithic
- vi. The Mesolithic

# **Unit 4: West and Central Asia**

(8 hrs)

- i. The Earliest Palaeolithic evidence
- ii. The Acheulian
- iii. The Middle Palaeolithic
- iv. The Upper Palaeolithic
- v. The Epipalaeolithic

Unit 5: East Asia (6 hrs)

- i. The Earliest Palaeolithic evidence
- ii. Acheulian/Acheulian-like assemblages and other Middle Pleistocene assemblages in China
- iii. The Middle Palaeolithic
- iv. Upper Palaeolithic and Microblade assemblages and Earliest Pottery

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(6 hrs)

# Unit 7: Recent theories and debates on human origins, dispersals and behavior

(3 hrs)

## **Unit 8: Origin and Spread of Modern Humans**

(4 hrs)

- i. Early evidence in Africa
- ii. Early Modern Humans in the Middle East
- iii. Archaic humans

# **Unit 9: Indian Palaeolithic in the Global context**

(2 hrs)

# **Recommended Readings:**

# **Books:**

- i. Akazawa T., K. Aoki, and O. Bar Yosef (Eds.) 1998. Neanderthals and Modern Humans in Western Asia.New York: Plenum Press.
- ii. Barham, Lawrence and Mitchell, PeterBarham 2008. The First Africans. Cambridge.Cambridge University Press.
- iii. Bellwood, P. 2007. Prehistory of the Indo-Malaysian Archipelago, Revised edition. Canberra: ANU Press.
- iv. Burdukiewicz, J. M., A. Ronen, and International Union of Prehistoric and Protohistoric Sciences. 2003. Lower Palaeolithic small tools in Europe and the Levant. BAR international series; Oxford: Archaeopress.
- v. Chazan, M. 2008. World Prehistory and Archaeology: Pathways through Time: Addison-Wesley
- vi. Debénath, A., and H. L. Dibble. 1994. Handbook of Paleolithic typology Vol. 1: Lower and middle paleolithic of Europe. Philadelphia: The University Museum.
- vii. Delson, Eric, Ian Tattersal, J. A. Van Couvering, and A. Brooks. 2000. Encyclopedia of Human Evolution and Prehistory. New York and London: Garland Publishing
- viii. Dennell, R. W.2009. Palaeolithic Settlement of Asia. Cambridge: Cambridge University Press.
  - ix. Gamble, C., and C. Gamble. 1999. The Palaeolithic societies of Europe. Cambridge world archaeology. Cambridge, U.K.; New York: Cambridge University Press.
  - x. Gamble, Clive 1986 The palaeolithic settlement of Europe. Cambridge:Cambridge world archaeology. Cambridge University Press.
  - xi. Meltzer, D. J. 2009. First peoples in a new world: colonizing ice age America Berkely and Los Angles: University of California Press.

- xii. Pearsall, Deborah M. 2007. Encyclopedia of Archaeology. New York: Academic Press. Schick K. D. and N. Toth (eds), 2006. The Oldowan: Case Studies into the earliest Stone Age. Gosport: Stone Age Institute.
- xiii. Sharon, G. 2007. Acheulian Large Flake Industries: Technology, Chronology, and Significance. BAR international series. Oxford: BAR.

# **Research Papers:**

- Bar Yosef, O. 1998. The Chronology of the Middle Palaeolithic of the Levant, in Neanderthals and Modern Humans in Western Asia. Edited by T. Akazawa, K. Aoki, and O. Bar Yosef, pp. 39-56. New York: Plenum Press.
- ii. Bar-Yosef, O. 2002. The Upper Paleolithic Revolution. Annual Review of Anthropology 31:363-393.
- iii. Bar-Yosef, O. and A. Belfer-Cohen 2013. Following Pleistocene road signs of human dispersals across Eurasia, Quaternary International doi:10.1016/j.quaint.2011.07.043
- iv. Bar-Yosef, O., and L. Meignen. 2001. The chronology of the levantine Midde Palaeolithic period in Retrospect. Bulletin et Mémoire de la Societee d'Anthropologie de Paris, 2, série 13:269-289.
- v. Bar-Yosef, O., and S. L. Kuhn. 1999. The Big Deal about Blades: Laminar Technologies and Human Evolution. American Anthropologist 101:322-338.
- vi. Braun, D. R., J. C. Tactikos, J. V. Ferraro, S. L. Arnow, and J. W. K. Harris. 2008b. Oldowan reduction sequences: methodological considerations. Journal of Archaeological Science 35:2153-2163.
- vii. Braun, D. R., T. W. Plummer, P. W. Ditchfield, J. V. Ferraro, D. N. Maina, L. C. Bishop, and R. Potts. 2008a. Oldowan behavior and raw material transport: perspectives from the Kanjera Formation. Journal of Archaeological Science 35 2329-2345.
- viii. Bridgland, D. R., P. Antoine, N. Limondin-Lozouet, J. I. Santisteban, R. Westaway, and M. J.
  - ix. White. 2006 The Palaeolithic occupation of Europe as revealed by evidence from the rivers: data from IGCP 449. Journal of Quaternary Science 21:437-455.
  - x. Diez-Martin, F. 2006. After the African Oldowan: The Earliest Technologies of Europe, in The Oldowan: Case Studies inot the Earliest Stone Age. Edited by N. Toth and K. Schick, pp. 129-151. Gosport: Stone Age Institute.
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# ARC 306: ENVIRONMENTAL ARCHAEOLOGY (BIOARCHAEOLOGY)

# **Course Objective:**

To understand what is environmental archaeology, and its sub-branches; role of domestication of plants, animals and its consequences on human life; Basis of Taxonomy and to understand the process of fossilization and their use in palaeo-environmental studies

#### **Course Outcome:**

On successful completion of this course students will have better understanding of the bioarchaeological approaches. They will understand the domestication process and how it can be used for archaeological interpretations. It will also help them to know the scope of palaeobotany, archaeozoology, fossil studies and histological studies.

Unit 1: i. Environmental Archaeology: Definition and scope (4 hrs)

ii. Changing nature of the discipline

ii. Branches related to Environmental Archaeology

Unit 2: i. Ecology: Definition; Environmental System (5 hrs)

ii. Positive and negative feedback

iii. Intra and inter-species relationships iv. Basic principles of population biology

v. Plant and animal responses to changing environment

Unit 3: i. Theories of Plant domestication and Origin of Agriculture (10 hrs)

ii. Early agriculture Old and New World

iii. Impact of agriculture on development of civilization

iv. Phytolith and coprolite analysis

Unit 4: i. Taxonomy of the animal kingdom (06 hrs)

ii. Classification of Vertebrates and Non-Vertebrates

ii. Fossils, process of fossilisation

iv. Significance of fossils: commercial and palaeobiological

v. Historical Developments in palaeontology

vi. Fossils and Folklores

vii. Animals as seen in rock art viii. Animals in art and iconography.

Unit 5: i. Palaeontology and past environmental interpretation (04 hrs)

ii. Microvertebrates: Taxonomy, palaeoenvironment and ancient subsistence

iii. Pleistocene vertebrate fauna of India: new evidence

iv. Taphonomy

**Unit 6:** i. Archaeozoology: definition and scope

(10 hrs)

- ii. Archaeozoological techniques
- iii. Quantification- NISP, MNI, weight, metrical studies
- iv. Ageing and sexing methods
- v. Animal domestication its theories, origins and aspects
- vi. Holocene faunal record from archaeological sites in India

**Unit 7:** a. Dental and Bone Histology

(6 hrs)

- b. Archaeomalacology and Archaeoichthiology
- c. Biomolecules in archaeology and palaeontology

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- iii. Badam, G.L. 1979. Pleistocene Fauna of India, Pune: Deccan College.
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- v. Behrensmeyer, A.K. and A. Hill (eds.) 1980. *Fossils in the Making: Taphonomy and Palaeoecology*, Chicago: University of Chicago Press.
- vi. Bhattacharyya, A., Lamarche, V.C. and F.W. Telewski. 1988. Dendrochronological Reconnaissance of the Conifers of Northwest India. *Tree-Ring Bulletin*, 48:21-30.
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- viii. Birks, H.J.B. and Hilary, H. Birks. 1980. *Quaternary Palaeoecology*, London: Edward Arnold.
- ix. Bokonyi, S. 1974. *History of Domestic Animals in Central and Eastern Europe*, Budapest: Academiai Kiado.
- x. Brothwell, D. ancd E. Higgs (eds.) 1969. *Science in Archaeology*, 2nd Edition. London: Thames and Hudson.
- xi. Brothwell, D.R. and A.M. Pollard. 2001. *Handbook of Archaeological Science*, New York: John Wiley and Sons Ltd.

- xii. Bruce Smith 2000. Origins of Agriculture, New York: Plenum publications.
- xiii. Bryant, V. Jr. and G.W. Dean 1975. The Coprolites of Man, *American Antiquity*, 32(1): 100-109.
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- xv. Child, A.M. and A.M. Pollard. 1992. A Review of the Applications of Immunochemistry to Archaeological Bone, *Journal of Archaeological Science* 19: 39-47
- xvi. Clason, A.T. 1975. Archaeozoological Studies, Amsterdam: Elsevier.
- xvii. Classen, C. 1998. Shells, Cambridge University Press: Cambridge
- xviii. Clutton-Brock, J. 1981. *Domesticated Animals from Early Times*, London: British Museum Natural History.
- xix. Clutton\_Brock, J. 1989. The Walking Larder: Patterns of Domestication, Pastoralism and Predation. London: Unwin Hyman.
- xx. Colbert, E.H. 1969. *Evolution of the Vertebrates*. 2nd Edition. New York: John Wiley & Sons.
- xxi. Dina F. Dinacauze. 2000. *Environmental Archaeology: Principles and Practice*, Cambridge: Cambridge University Press.
- xxii. Deotare, B.C., Kajale, M.D., Rajaguru, S.N., Kusumgar, S., Jull, A.J.T. and J.D. Donahue 2004 Palaeoenvironmental History of Bap-Malar and Kanod playas of Western Rajasthan, Thar Desert. *Proceedings of the Indian Academy of Sciences-Earth and Planetary Sciences*, 113 (3):403-425.
- xxiii. Deotare, B.C. 2006 Late Holocene climatic change: Archaeological evidence from Purna basin, Maharashtra. *Journal of the Geological Society of India*, 68: 517-526.

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- xxxiii. Joglekar, P.P. 1991. A Biometric Approach to Faunal Remains of Western India with Special Reference to Kaothe and Walki. Ph.D. Thesis. Pune: University of Pune.
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  - xlii. Meadow, R.H. and Ajita K. Patel. 2002. From Mehrgarh to Harappa and Dholavira: Prehistoric Pastoralism in North-Western South Asia Through the Harappan period In *Indian Archaeology in Retrospect, Vo.II, Protohistory, Archaeology of the Harappan Civilization* (S. Settar and Ravi Korisettar Eds.), pp. 391-408. New Delhi: ICHR, Manohar Publishers.
  - xliii. Meighan, C. 1969. Molluscs as Food Remains in Archaeological Sites, In *Science in Archaeology* (Brothwell, D. and Higgs E. Eds.), London: Thames and Hudson. Pp.415-422
  - xliv. Metcalfe, C.R. and L. Chalk. 1979. *Anatomy of the Dicotyledons*, Oxford: Clarendon Press.
  - xlv. Misra, V.N. and Peter Bellwood (eds.) 1985. *Recent Advances in Indo-Pacific Prehistory*. New Delhi: Oxford IBH.
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- lxii. Shipman, Pat 1981. *Life History of a Fossil: An Introduction to Taphonomy and Palaeoecology*. Harvard: Harvard University Press.
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- lxiv. Thomas, P.K. 1977. Archaeozoological Aspects of the Prehistoric Culture of Western India. Ph. D. Thesis. Pune: University of Pune.
- Ixv. Thomas, P.K. 1989. Utilization of Domestic Animals in Pre-and Protohistoric India, in *The Walking Larder: Patterns of Domestication, Pastoralism and Predation* (J. Clutton- Brock Ed.), pp. 108-112. London: Unwin Hyman.
- lxvi. Thomas, P.K. and P.P. Joglekar. 1994. Holocene Faunal Studies in India, *Man and Environment* Vol. 19 (1&2):179-204.
- lxvii. Thomas, P.K. and P.P. Joglekar. 1995. Faunal Studies in Archaeology, in *Quaternary Environments and Geoarchaeology of India* (Statira Wadia, Ravi Korisettar and Vishwas S. Kale Eds.), Memoir 32:496-514. Bangalore: Geological Society of India.
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- lxx. Thomas, K.D. 1993. Molecular Biology and Archaeology: a Prospectus for Interdisciplinary Research, *World Archaeology* 25(1): 1-17.
- lxxi. Van Der Geer, ALexandra 2007. Animals in Stone: Indian fauna depicted through time, a blend of zoology and art history in *Handbook of Oriental Studies*, Section 2 South Asia, 21.Leiden: Brill publishers (ISBN-13 978 90 04 16819 0, ISSN 0169-9377.
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- lxxiii. Wesley Cowan C. and Patty Jo Watson. 1992. *The Origins of Agriculture: An International Perspective*, Washington: Smithsonian Institutional press.
- lxxiv. Zeuner, F.E. 1963. A History of Domesticated Animals. London: Hutchinson.
- lxxv. Zittel, von K.A. 1925. Text Book of Palaeontology, 3 vols. London: Macmillan & Co.

# ARC 308: ADVANCED ARCHAEOLOGICAL THEORY AND RESEARCH METHODOLOGY

# **Course Objectives:**

The primary objective of this course is to introduce the major theories used in archaeology. The objectives are:

- (1) To provide a methodological foundation for archaeological interpretation, as well give an idea of global perspective on changes occurring in the discipline.
- (2) To introduce analytical processes developed by different schools of archaeological thought, and the range of approaches currently available in studying material culture.
- (3) To introduce the process of research in a formal way, techniques of report writing and presentation skills.

# **Course Outcomes:**

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

- (1) Understand basic features of various theories and thoughts used in archaeological interpretations
- (2) Formulate a research proposal and decide on appropriate materials and methods of analysis
- (3) Present the findings and the process of conducting research in written and verbal formats.

# **Unit 1: Introduction to Trends in Archaeological Theory**

(9 hrs)

- i. Importance of theory in archaeology
- ii. Changes in archaeological theory: from culture-historical perspective
- iii. New archaeology and related developments
- iv. Middle Range theory, Behavioral archaeology and ethno archaeology
- v. Beyond New archaeology: introduction to contemporary theories.

# **Unit 2:Epistemology and Philosophy of Science**

(8 hrs)

- i. Knowledge theories before emergence of science
- ii. Nature and types of knowledge:
- iii. Rationalism, positivism, empiricism and critical theory
- iv. Realism and relativism

# **Unit 3:Post-Processual Perspectives** (10 Hrs)i. Structuralism ii. Post-structuralism: Deconstructionism iii. Marxist archaeology iv. Gender archaeology: Feminism v. Post-modernism **Unit 4: Fundamentals of Logic** (5 hrs) i. Induction and Deduction ii. Hypothetico-Deductive Method iii. Inductive-Statistical Method iv. Analogy v. Fallacies **Unit 5: Research process** (7 hrs) i. Seven Stages of research process ii. Types of research designs iii. Variables and sampling iv. Virtues of a researcher v. Writing a Research proposal **Unit 6:Report Writing and Presentation** (6 hrs) i. Types of presentations ii. Structure of dissertation and thesis iii. Style of writing: what to do and what not to do iv. Poster Presentation

# **Recommended Reading:**

v. Public/Oral Presentation

- i. Beall, J.C. 2010. Logic: The Basics. Oxford: Routledge.
- ii. Binford, L.R. 1983. Working at Archaeology. New York Academic Press.
- iii. Binford, L.R. 1989. Debating Archaeology. New York Academic Press.
- iv. Chaudhary, C.M. 1991. Research Methodology, Jaipur: RBSA.

- v. Cohen, M.R. and E. Nagel 1976. *An Introduction to Logic and Scientific Method*. Mumbai: Allied Publishers.
- vi. De Groot, A.D. 1969. Methodology. Hague: Mouton.
- vii. Gellner, E. 1985. Relativism and Social Sciences. Cambridge Cambridge University Press.
- viii. Goode, W.J. and P.K. Hatt 1952. Methods in Social Research. Tokyo McGraw Hill.
- ix. Gupta, Anil 2006. Empiricism and Experience. Oxford: Oxford University Press.
- x. Hodder, I. 1992. Theory and Practice in Archaeology. London: Routledge.
- xi. Hodder, I. 1995. *Interpreting Archaeology Finding Meaning in the Past*. New York: Routledge.
- xii. Joglekar, P.P. 2014. Research Methodology for Archaeology Students. Pune: Gayatri Sahitya.
- xiii. Jones, Andrew 2004. *Archaeological Theory and Scientific Practice*. Cambridge: Cambridge Press.
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  - xx. Paddayya, K. 2016. Revitalizing Indian Archaeology. Two volumes. Delhi:
  - xxi. Phelan, J.W. 2005. *Philosophy. Themes and Thinkers*. Cambridge: Cambridge University Press.
- xxii. Preucel, R. (ed). 1991. Processual and Postprocessual Archaeologies Multiple Ways of Knowing the Past. Carbondale (Illinois): Southern Illinois University Press.

- xxiii. Rosenau, P.M. 1992. *Post modernism and the Social Sciences*. Princeton: University Press.
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- xxv. Schiffer, M.B. 1995. *Behavioral Archaeology: First Principles*. Salt Lake City University of Utah Press.
- xxvi. Shanks, M. and C. Tilley. 1987. Social Theory as Archaeology. Cambridge: Polity Press.
- xxvii. Sharma, K.R. 2002. Research Methodology. New Delhi: National Publishing House.
- xxviii. Thakur, D. 2003. Research Methodology in Social Sciences. New Delhi: Deep and Deep.

# ARC 310: HARAPPAN CIVILIZATION

# **Course Objectives:**

The objective of this course is to look at the detailed archaeological record of the Harappan civilization, the earliest in the Indian subcontinent

# **Course Outcome:**

Students gain familiarity with the rise and decline of the Harappan Civilization, its regional extent and variation and the nature of its cities and material remains.

Unit 1: Civilization (7 hrs)

- i. Definition and various characteristic features
- ii. Research on the Harappan Culture- Pre Independence and Post independence era a theoretical approach.

# Unit 2: Pre/Early Harappan cultures of

(15 hrs)

- i. Pakistan
- ii. India

# **Unit 3: Mature Harappan**

(20 hrs)

- i. Geographical Distribution and Settlement Pattern
- ii. Harappan Domains system
- iii. Public and Private Architecture
- iv. Trade Hinterland and overseas, trade mechanism, transport facility, craft specialization etc.
- v. Harappan script various theories about the decipherment, and the present status.
- vi. Social, Political, Religious and Economic organization
- vii. Subsistence of the Harappans plant and animal diet, agriculture and agriculture system, water management, exploitation of natural resources, etc.

# **Unit 4: Decline and the Late Harappan**

(5 hrs)

- i. Various factors and theories about the Harappan Decline and consequences
- ii. Late Harappan phase in Sindh, Cholistan, Haryana, Punjab, Gujarat and Western U.P.
- iii. Harappan legacy

- i. Anindya Sarkar, Arati Deshpande Mukherjee, Navin Juyal, P. Morthekai, M. K. Bera, R.D. Deshpande, V. S. Shinde and L. S. Rao 2016. Oxygen isotope in archaeological bioapatites from India: Implications to climate change and decline of Bronze Age Harappan civilization, *Nature Scientific reports* 6.
- ii. Asthana, Shashi 1985. *Pre Harappan Cultures of India and Borderlands*. New Delhi: Books and Books.
- iii. Agrawal D.P. and D. Chakrabarti (Eds.) *Essays in Indian Protohistory*. New Delhi: D.K. Publishers
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# ARC 311: INTRODUCTION TO MUSEOLOGY

# **Course Objectives:**

The objective of this course is to introduce students to the purpose and functioning of museums. The importance of museums in linking archaeology with public education is stressed.

## **Course Outcomes:**

Students learn the basic functions of museums and their activities. Conservation, education, exhibition collection, documentation and research and legislation relating to museum are the major topics students learn about.

# **Unit 1: Definition and Functions of Museum**

(4 hrs)

- i. Definition of Museum,
- ii. Aims and functions of Museum.
- iii. Museums in the age globalization
- iv. Types of Museums and their classification

# Unit 2: Collection, Documentation and Research

(6 hrs)

- i. Aims, methods and ethics of collection.
- ii. Documentation; identification, classification, accessing, cataloguing, indexing, data processing, information retrieval, computerization, insurance of museum objects, accessing photographic record of museum collection.
- iii. Principles of classification and methods of identification of museum materials, terminology for describing museum objects.
- iv. Research in museum, examples of museum contribution to research, research facilities.

# Unit 3: Museums in India; Their History, Collection and Other Activities (5 hrs)

- i. National Museum. New Delhi.
- ii. Indian Museum, Kolkata.
- Chhatrapati Shivaji Maharaj Vastu Sangrahalaya, formerly Prince of Wales Museum, Mumbai.
- iv. Salar Jung Museum, Hyderabad.
- v. Indira Gandhi Rashtriya Manav Sangrahalaya, Bhopal.

# Unit 4: Museum Architecture and Exhibition;

(6 hrs)

- i. Planning and maintenance of museum building, public and service area.
- ii. Lighting in relation to museum architecture and exhibition.
- iii. Storage of reserve collection and problems of security.
- iv. Kinds of exhibition, planning and programming of exhibition special, temporary, circulating and permanent, methods of grouping and installation, various stages of planning, role of designer.
- v. Display techniques.

#### **Unit 5: Museum Education**

(6 hrs)

- i. General theories and principles of museum communication.
- ii. Museum and the public, public facility, educational, scientific, and cultural responsibility of museum knowledge of the community and museum audience.
- iii. Extension programme, mobile museum, workshops, fieldtrips, radio and television.

# **Unit 6: Conservation and Preservation**

(6 hrs)

- i. Types of museum material.
- ii. Climatology, Deterioration factors their recognition and control, climate and environment; light, insects, microorganisms, atmospheric pollution, curatorial responsibilities in preservation and conservation.
- iii. Conservation of organic material such as manuscripts, wood, paper, ivory and bone objects.
- iv. Conservation of inorganic material such as stone, terracotta, glass and metal.
- v. Conservation of biological material, plants and animals.

# **Unit 7: Professional Organizations related to Museums**

(3 hrs)

- i. International Council of Museums (ICOM)
- ii. Museums Association of India (MAI)
- iii. Special bodies related with Museum.
- iv. Information about various Museology courses in India.

# **Unit 8: Museum Administration**

(6 hrs)

- i. Museum staff and their duties.
- ii. Museum finance and general maintenance
- iii. Museum and Public Relations, visitors facilities
- iv. Supervision and security.

- i. The Indian Treasure-Trove Act 1878.
- ii. The Ancient Monuments and Archaeological Sites and Remains Act 1958.
- iii. Antiquity and Art Treasure Act 1972.

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# ARC 312: CULTURAL HERITAGE MANAGEMENT

# **Course Objectives:**

The objective of this course is to introduce students to the key concepts of Heritage management, including the definition and scope of the subject and its implementation in the Indian context.

# **Course Outcomes:**

Students are prepared in this course with the issues related to Heritage management.

Unit 1	<ul><li>a. Heritage: Definition and scope</li><li>b. Types of Heritage cultural and Natural</li><li>c. Need for preservation and conservation of heritage</li></ul>	5 hrs
Unit 2	<ul><li>a. World Heritage Movement</li><li>b Role of International Organizations, e.g.</li><li>c. UNESCO World Heritage Monuments</li><li>d. World Heritage Monuments in India</li></ul>	10 hrs
Unit 3	<ul> <li>a. History of Cultural Heritage in India</li> <li>b. Role of Government bodies</li> <li>c. Indian Legislation about Cultural Heritage</li> <li>d. Role of Non-Government Organizations and Universities</li> </ul>	10 hrs
Unit 4	<ul><li>a. Heritage Management: Policy and Practice</li><li>b. Developmental issues and their impacts</li><li>c. Impact of natural factors, e.g. natural calamities</li><li>d. Illegal trade of art objects and smuggling</li></ul>	10 hrs
Unit 5	<ul><li>a. Public participation in preservation of cultural heritage</li><li>b. Enhancing public awareness: formal and non-formal</li><li>c. education Tourism and cultural heritage</li></ul>	10 hrs

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