SEMESTER- I

Introduction to Archaeology

Course code: ARC17101CR

Unit – 1 - Definition, Aims and Scope of Archaeology

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

Unit 2 Development of Archaeology

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

Unit3 Nature of the archaeological record

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

Unit 4. Cultural sequence and dating the past

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

Recommended Readings:

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

SEMESTER- I

World Archaeology: An Overwiew

Course code: ARC17102CR

Unit – 1 – Climate, Human Evolution and Distribution

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

Unit – 2 – World Palaeolithic Cultures

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

Unit – 3 – Prehistoric Art and Mesolithic Culture

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

Unit – 4 – Neolithic culture and early farming

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

Recommended Reading:

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

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

Daniel, G. J. Hundred years of Archaeology

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

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

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

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

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

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

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

Petrecia Philip, Prehistoric Europe

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

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

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

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

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

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

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

Wenke, R. J. 1987. Patterns in Prehistory

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

SEMESTER-I

Prehistory of South Asia

Course code: ARC17103CR

Unit – 1 – Prehistory: An Introduction

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

Unit – 2 – Prehistoric Cultures

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

Unit - 3 - Rock Art

a. Geographic distribution; Art manifestations; Important sites.

Unit – 4 – Origins of farming and Neolithic Culture

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

Recommended Readings:

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

Paddayya, K. 1984. "Stone Age India" in *Neue Forscheungen zur Altsteinseit*. (ed) H. Muller-Karpe. Munich: C. H. Beck Verlag. Paddayya, K. 2001. The Acheulian Culture Project of the Hunsgi and Baichbal Valleys, Peninsular India, in Lawrence Barnham and Kate Robson-Brown (ed.) *Human Roots: Africa and Asia in the Middle Pleistocene*, pp.235-258. Bristol: Western Academic and Specialist Press.

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

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

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

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

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

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

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

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

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

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

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

SEMESTER-I

Prehistoric Archaeology of Kashmir

Course code: ARC17104DCE

Unit – 1 – Introduction

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

Unit – 2 – Palaeolithic Cultures

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

Unit – 3 – Neolithic Culture

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

Unit – 4 – Life ways in Neolithic period

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

Bibliography:

Agrawal, D.P. 1982. Archaeology of India. Copenhagen: Scandinavian Institute of Asian Studies.

Agrawal, D.P. 2000. Ancient Metal Technology and Archaeology of South Asia (A Pan-Asian Perspective), Aryan Books International, New Delhi

Agrawal, D.P. and D.K. Chakrabarti (eds.). 1979. *Essays in Indian Protohistory*. New Delhi: D.K Publishers.

Allchin, F.R. and B. Allchin 1993. *The Birth of Civilization in India*. revised ed. New Delhi: Penguin Books.

Allchin, Bridget and Raymond Allchin 1982. *Rise of Civilization in India and Pakistan*. Cambridge: Cambridge University Press.

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

- Misra, V.N. 2001. Prehistoric Human Colonization of India, *Journal of Biosciences* 26 (4), 491-531.
- Pant, R.K., Gaillard, C., Nautiyal, V., Gaur, G.S., and Shali, S.L. 1982. Some new Lithic and Ceramic Industries from Kashmir, *Man and Environment* vol. VI, 37-40.
- Paddayya, K. 2008. Palaeolithic Cultures. In Deborah, M. Pearsall (ed.), *Encyclopaedia of Archaeology*: 768-791, Elsevier.
- Pande, B.M. 1969. Neolithic Hunting Scene on a Stone Slab from Burzahom, Kashmir, *Asian Perspectives*, XIV 1971, 134-138.
- Pande, B.M. 1970[1969]. The Neolithic in Kashmir new discoveries, *The Anthropologist*, Vol. XVII, No. 1-2, 25-41.
- Pant, R.K. 1979. Microwear Studies on Burzahom Neolithic Tools, *Man and Environment* vol. 3, 11-17.
- Spate M, Zhang G, Yatoo MA, Betts A, 2017. New evidence for early 4th Millennium BP agriculture in the Western Himalayas: Qasim Bagh, Kashmir, *Journal of Archaeological Science: Reports*, 2017 (11), 568-577.
- Saar, S.S. 1992. Archaeology: Ancestors of Kashmir, New Delhi, Lalit Art Publishers.
- Shah, M.A., 2012. Discovery of Rock Art in Northern Kashmir, A Prelimnary Investigation, in *Proceedings of The National Seminar on River Valley Civilzation of Chatisgarh and New Researches in Indian Archaeology*, 329-336.
- Shali, S.L. 1993. *Kashmir: History and Archaeology Through the Ages*, New Delhi, OM Publications.
- Shali, S.L. 2001. Settlement Pattern in Relation to Climatic changes in Kashmir, New Delhi, OM Publications.
- Sankalia, H.D. 1971. New Evidence for Early Man in Kashmir, *Current Anthropology* 12 (4 / 5), 558-562.
- Sankalia, H.D. 1974. *Prehistory and Protohistory of India and Pakistan*, Poona, Deccan College post graduate and research institute.
- Saar, S.S. 1992. Archaeology: Ancestors of Kashmir, New Delhi, Lalit Art Publishers.
- Kaw, R.N. 1979. The Neolithic culture of Kashmir. In D.P. Agrawal and D.K. Chakrabarti (eds.) Essays in Indian
- Yatoo, M.A., 2012. Characterising material culture to determine settlement patterns in north west Kashmir, online resource material at British Library, UK.
- Yatoo, MA, & Bandey, AA, 2014. Relations of Neolithic Kashmir with South and Central

Asia: Comparative Analysis of Material Culture from new sites in Kashmir, *Journal of Central Asian Studies*, Vol. 21 (XXI), 37-46.

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

Indian Archaeology – A Review, Archaeological Survey of India.

Man and Environment vol. VI

SEMESTER-I

Practical

Course code: ARC17105DCE

- 1. The students will be given practical demonstrations in the field based on taught lectures during three core and one discipline centric modules in the semester-I. In this practical module a student will be expected to write a short assignment assigned to him/her based on explorations, Material culture, Landscape, Site, Settlements and so forth taught during the Semester-I. The assignment should contain but will not be limited to:
 - a) Aims of proposed assignment;
 - b) Nature of data to be collected;
 - c) Presentation of data;
 - d) Conclusions.
- 2. The assignment shall be submitted to the Centre within the stipulated time before the commencement of Semester II, the dates will be communicated to the students separately.

SEMESTER-I

Generic Elective

Archaeology - an Introduction

Course code: ARC17106GE

Unit - 1 Archaeology, its Definition, Aims and Scope

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

Unit – 2 Development of Archaeology

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

SEMESTER- II

Field Archaeology – Theory

Course code: ARC17201CR

This course introduces students to the process of archaeological investigation from the discovery of sites to their excavation and analysis of the recovered archaeological evidence.

Unit – 1 – Methods of discovering Archaeological sites

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

Unit-2 – Methods of Data Collection

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

Unit - 3 – Excavation Methods in Archaeology

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

Unit-4 – Recording Methods and Analysis in Archaeology

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

Recommended Readings:

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

SEMESTER- II

Field Archaeology - Practical

Course code: ARC17202CR

Course Objectives:

This course aims at training the students in field methods

Unit 1: Explorations

Unit 2: Data Collections

Unit 3: Excavations

Unit 4: Data Recording

Recommended Readings:

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

Kempton W. (1981) *The Folk Classification of Ceramics: A Study of Cognitive Prototypes*. London: Academic Press.

Leute U. (1987) Archaeometry: An Introduction to Physical Methods in Archaeology and the History of Art. New York: VCH

Miller D. (1985) *Artifacts as Categories: A Study of Ceramic Variability in Central India*. Cambridge: Cambridge University Press.

Plenderleith H. Conservation of Antiquities and works of art. London: Oxford University Press.

Roy S. (1961) The story of Indian Archaeology (1784-1947). New Delhi.

Trigger B.G. (1968) *Beyond History: The Methods of Prehistory*. London: Holt, Rinehart & Winston.

Trigger B.G. (1989) Towards *A History of Archaeological Thought*. Cambridge: Cambridge University Press.

Wheeler R.E.M. (1954) Archaeology from Earth. Oxford: Clarendon Press.

SEMESTER- II

Protohistory of South Asia

Course code: ARC17203CR

Unit-1 - Pre/Early Harappan Cultures

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

Unit -2 - Harappan Culture

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

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

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

Unit-4 - Iron Age

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

Recommended Readings

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

SEMESTER-II

Course code: ARC17204CR

Archaeological Sources

Unit 1: Introduction

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

Unit 2: Archaeology and Literature

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

Unit 3: Material Culture

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

Unit 4: Occupational sites/Settlements

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

Recommended Readings:

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

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

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

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

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

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

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

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

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

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

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

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

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

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

Science in Archaeology

Course code: ARC17205DCE

Unit - 1 - Archaeobotany

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

Unit - 2 - Zooarchaeology

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

Unit – 3 - Archaeometalurgy and Geoarchaeology

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

Unit – 4 – Archaeological Dating Methods

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

Recommended Readings

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

Course code: ARC17206DCE

Archaeology of Kashmir (Ancient to Medieval)

Unit-1:

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

Unit-2:

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

Unit-3:

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

Unit-4:

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

Recommended Readings:

Agrawal, D.P. 1982. Archaeology of India. Copenhagen: Scandinavian Institute of Asian Studies.

Agrawal, D.P. 2000. Ancient Metal Technology and Archaeology of South Asia (A Pan-Asian Perspective), Aryan Books International, New Delhi

Agrawal, D.P. and D.K. Chakrabarti (eds.). 1979. *Essays in Indian Protohistory*. New Delhi: D.K Publishers.

Allchin, F.R. and B. Allchin 1993. *The Birth of Civilization in India*. revised ed. New Delhi: Penguin Books.

Allchin, Bridget and Raymond Allchin 1982. *Rise of Civilization in India and Pakistan*. Cambridge: Cambridge University Press.

- Agrawal, D.P. 1992. Man and environment in India through ages: an interdisciplinary study of the Indian quaternary with focus on north-west, New Delhi, Books & Books.
- Bandey A.A. 1997. Palaeolithic Habitational Site at Manasbal, Kashmir: Recent Archaeological Investigations, *Journal of Central Asian Studies*, University of Kashmir, 8 (1), 12-18.
- Bandey A.A. 2003a. Neolithic settlement found at Bomai, Kashmir, India, *Circle of Inner Asian Art*, Issue 18.
- Bandey A.A. 2003b. Preliminary Report: Archaeological explorations in Bomai village, Sopore, *Central Asian Digest*, Vol. XXIII, 10-12.
- Bandey A.A. 2009. Prehistoric *Kashmir Archaeological History of Palaeolithic & Neolithic Cultures*, New Delhi, Dilpreet Publishing House.
- De Terra, H. 1942. The Megaliths of Bursahom, Kashmir, a New Prehistoric Civilization from

India, American Philosophical society 85 (5), 483-504.

- De Terra, H. and Paterson, T.T. 2003 [1939]. The Ice Age in the Indian Subcontinent and Associated Human Cultures: With Special Reference to Jammu, Kashmir, Ladakh, Sind, Liddar & Central and Peninsular India, New Delhi, Aryan Books.
- Joshi, R.V., Rajguru, S.N., Pappu, R.S., and Bopardiker, B.P. 1974. Quaternary Glaciations and Palaeolithic Sites in the Lidder Valley, J&K, *World Archaeology*, 369-79.
- Mani, B.R. 2000. Excavations at Kanispur: 1998-99 (District Baramulla Kashmir). *Journal of Interdisciplinary Studies in History and Archaeology* 10, 1-21.
- Mani, B.R. 2008. Kashmir Neolithic and Early Harappan: A Linkage, *Pragdhara* 18, 229-247.

- Misra, V.N. 2001. Prehistoric Human Colonization of India, *Journal of Biosciences* 26 (4), 491-531.
- Pant, R.K., Gaillard, C., Nautiyal, V., Gaur, G.S., and Shali, S.L. 1982. Some new Lithic and Ceramic Industries from Kashmir, *Man and Environment* vol. VI, 37-40.
- Paddayya, K. 2008. Palaeolithic Cultures. In Deborah, M. Pearsall (ed.), *Encyclopaedia of Archaeology*: 768-791, Elsevier.
- Pande, B.M. 1969. Neolithic Hunting Scene on a Stone Slab from Burzahom, Kashmir, *Asian Perspectives*, XIV 1971, 134-138.
- Pande, B.M. 1970[1969]. The Neolithic in Kashmir new discoveries, *The Anthropologist*, Vol. XVII, No. 1-2, 25-41.
- Pant, R.K. 1979. Microwear Studies on Burzahom Neolithic Tools, *Man and Environment* vol. 3, 11-17.
- Spate M, Zhang G, Yatoo MA, Betts A, 2017. New evidence for early 4th Millennium BP agriculture in the Western Himalayas: Qasim Bagh, Kashmir, *Journal of Archaeological Science: Reports*, 2017 (11), 568-577.
- Saar, S.S. 1992. Archaeology: Ancestors of Kashmir, New Delhi, Lalit Art Publishers.
- Shah, M.A., 2012. Discovery of Rock Art in Northern Kashmir, A Prelimnary Investigation, in *Proceedings of The National Seminar on River Valley Civilzation of Chatisgarh and New Researches in Indian Archaeology*, 329-336.
- Shali, S.L. 1993. *Kashmir: History and Archaeology Through the Ages*, New Delhi, OM Publications.
- Shali, S.L. 2001. Settlement Pattern in Relation to Climatic changes in Kashmir, New Delhi, OM Publications.
- Sankalia, H.D. 1971. New Evidence for Early Man in Kashmir, *Current Anthropology* 12 (4 / 5), 558-562.
- Sankalia, H.D. 1974. *Prehistory and Protohistory of India and Pakistan*, Poona, Deccan College post graduate and research institute.
- Saar, S.S. 1992. Archaeology: Ancestors of Kashmir, New Delhi, Lalit Art Publishers.
- Kaw, R.N. 1979. The Neolithic culture of Kashmir. In D.P. Agrawal and D.K. Chakrabarti (eds.) Essays in Indian
- Yatoo, M.A., 2012. Characterising material culture to determine settlement patterns in north west Kashmir, online resource material at British Library, UK.
- Yatoo, MA, & Bandey, AA, 2014. Relations of Neolithic Kashmir with South and Central Asia: Comparative Analysis of Material Culture from new sites in Kashmir, *Journal of*

Central Asian Studies, Vol. 21 (XXI), 37-46.

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

Indian Archaeology – A Review, Archaeological Survey of India.

Man and Environment vol. VI

SEMESTER- II

Generic Elective

Science and Archaeology

Course code: ARC17207GE

Unit – 1 Archaeological Science an introduction

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

Unit – 2 Absolute Dating Methods

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

SEMESTER-III

Art, Architecture and Iconography

Course code: ARC17301CR

Unit – **1**

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

 (The students would be given a general idea about the evolutionary history of Art and Architecture in India in the context of endogenous developments and exogenous influences during the different phases of its history)
- ii. Structural features of ancient fortified settlements.

Unit - 2

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

Unit - 3

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

Unit – **4**

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

Recommended Readings

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

Publishing House.

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

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

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

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

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

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

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

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

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

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

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

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

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

SEMESTER- III

Epigraphy and Numismatics

Course code: ARC17302CR

Unit - 1 - (Epigraphy)

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

Unit – **2** - **Major Inscriptions**:

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

Unit -3 - Numismatic Study

a)

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

Unit – 4 – Numismatics – important features

a. Important coins and their features

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

Recommended Readings

Allchin, F.R. and K.R. Norman. 1985. "Guide to the Ashokan Inscriptions". *South Asian Studies* 1:43-50.

Hultzch.D. 1969. (Reprint) *Corpus Inscriptionum Indicarum* Vol.I, Varanasi: Indological Book House.

Gokhale, S. 1991. Kanheri Inscriptions. Pune: Deccan College.

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 Banarsidas.

Shastri, Ajay Mitra. 1996-97. "Some Observations on the Origin and Early History of the Vikrama Era". *Prachya Pratibha*, Vol.XVIII, pp.1-51.

Shastri, Ajay Mitra. 1966. "The Saka Era". Panchal. Vol.9, pp.109-132.

Sircar, D.C. 1965. Indian Epigraphy. Delhi: Motilal Banarsidas.

Sircar, D.C. 1986. (3rd edition) Select Inscriptions. Vol.I, Delhi: Asian Humanities Press.

Epigraphia Indica Vols. I-X.

Allan, J. 1935. Catalogue of Coins of Ancient India. London: British Musuem.

Altekar, A.S. 1957. Coinage of the Gupta Empire. Varanasi: Numismatic Society of India.

Bhandarkar, D.R. 1921. *Carmichael Lectures on Ancient India Numismatics*. Calcutta, Calcutta University.

Bharadwaj, H.C. 1979. Aspects of Ancient Indian Technology. Delhi: Motilal Banarsidas.

Chattopadhyaya, Bhaskar. 1967. *The Age of the Kushanas - A Numismatic Study*. Calcutta: Punthi Pustak.

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.

Dhavalikar, M.K. 1975. *Prachin Bharatiya Nanakshastra*. Pune: Maharashtra Vidyapeeth Granthanirmiti Mandal.(Text Book in Marathi)

Elliot, W. 1970. (Reprint) Coins of South India. Varanasi: Indological Book House.

Gardener, P. 1886. *The Coinage of the Greek and Scythic Kings of Bactria and India in British Museum.* London: British Museum.

Gokhale, Shobhana 1981. New Discoveries in the Satavahana Coinage, *Journal of the Numismatic Society of India* Volume XLIII,pp54-59.

Goyal, S.R. 1995. Dynastic Coins of Ancient India. Jodhapur: Kusumanjali Book World.

Gupta, P.L. 1979. (2nd Revised Edition) Coins. New Delhi: National Book Trust.

Gupta, P.L. 1981. Coins: Sourse of Indian History. Ahmedabad: B.J. Institute of Learning and Research.

Gupta, P.L. and Sarojini Kulashreshtha 1993. *Kushana Coins and History*. New Delhi: D.K.Publishers.

Gupta, P.L. and T.R. Hardarkar. 1985. *Ancient Indian Silver Punch- Marked Coins of the Magadha - Maurya Karshapana Series*. Nasik: Indian Institute of Research in Numismatics Studies.

Jha,A.K. 1998. Observations on the Principles of Typology: A Study of Ancient India Coinage, in *Ex Moneta:Essays on Numismatics in the Honour of Dr.David W. Macdowall*(A.K.Jha and Sanjay Garg Eds.), Volume 1,pp.33-42,Harman Publishing House, New Delhi.

Jha, Amiteshwar and Dilip Rajgor 1994. *Studies in the Coinage of Western Kshatrapas*. Anjaneri(Nasik): Indian Institute of Research in Numismatic Studies. Krishnamurti, R. 1997 *Sangam Age Tamil Coins*. Madras: Garnet Publishers.

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. 2001. *Shankar Tiwari Collection of Early Coins from Narmada Valley*. Bhopal: Directorate of Archaeology and Museums, Government of Madhya Pradesh.

Numismatic Digest: A Journal published by Indian Institute of Research in Numismatic Studies. Anjaneri(Nasik)

Rajgor, Dilip 2001. Punch-marked Coins of Early Historical India. California. Resha Books International.

Rapson. E.J. 1908. Catologue of Coins of Andhra Dynasty, Western Kshatrapas etc. London: British Museum.

Ray, S.C. 1977. The Stratigraphic Evidence of Coins in Indian Excavations and some Allied Issues. Varanasi: Numis. Soc. of India.

Sahni, Birbal 1973. *The Technoque of Casting Coins in Ancient India*. Varanasi: Bharatiya Publishing House.

Sarma, I.K. 1980. Coinage of the Satavahana Empire. Delhi: Agam Kala Prakasan.

Shastri, A.M. (Ed.)1999. Age of Satavahanas (two volumes). New Delhi: Aryan Prakashan.

Srivastava, A.K. 1969. Catalogue of Indo-Greek Coins in the State Museum, Lucknow: State Museum.

Srivastava, A.K. 1972. Catalogue of Saka Pahlava Coins of Northern India in the State Museum, Lucknow. Lucknow: State Museum.

Studies in South Indian Coins: A Journal published by South Indian Numismatic Society, Madras.(Annual)

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

Kak, R.C. 1933. Ancient Monuments of Kashmir, England, The Indian Society.

SEMESTER- III

Course code: ARC17303CR

Art and Architecture of Jammu & Kashmir

Unit 1: Introduction

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

Unit-2 - Early Historic art and Architecture

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

Unit-3 - Art and Architecture of Early Medieval Period

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

Unit-4 - Art and Architecture

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

References:

Bandey A.A. 2009. Prehistoric *Kashmir Archaeological History of Palaeolithic & Neolithic Cultures*, New Delhi, Dilpreet Publishing House.

Bandey A.A. 1992. *Early Terracotta Art of Kashmir*, Centre of Central Asian Studies, University of Kashmir.

De Terra, H. 1942. The Megaliths of Bursahom, Kashmir, a New Prehistoric Civilization from

India, American Philosophical society 85 (5), 483-504.

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

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

Pande, B.M. 1969. Neolithic Hunting Scene on a Stone Slab from Burzahom, Kashmir, *Asian Perspectives*, XIV 1971, 134-138.

Pande, B.M. 1970[1969]. The Neolithic in Kashmir - new discoveries, *The Anthropologist*, Vol. XVII, No. 1-2, 25-41.

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

Shah, M.A., 2012. Discovery of Rock Art in Northern Kashmir, A Prelimnary Investigation, in *Proceedings of The National Seminar on River Valley Civilzation of Chatisgarh and New Researches in Indian Archaeology*, 329-336.

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

Sankalia, H.D. 1971. New Evidence for Early Man in Kashmir, *Current Anthropology* 12 (4 / 5), 558-562.

Sankalia, H.D. 1974. *Prehistory and Protohistory of India and Pakistan*, Poona, Deccan College post graduate and research institute.

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

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

Agrawal, R.C. 1998. Kashmir and its Monumental Glory, New Delhi, Aryan Books International.

Bamzai P.N.K. 1973. A history of Kashmir political social cultural from the earliest times to the present day, New Delhi, Metropolitan Book Co.

Bamzai, PNK. 1994. Culture and Political History of Kashmir Vol. I and II, New Delhi, M D Publications Pvt Ltd.

Bruneau L. 2015. 'The Rock Art of Ladakh: A Historiographic and Thematic Study' *Rock Art: Recent Researchers and New Perspectives*, New Bharatiya Book Corporation, New Delhi 79-99.

Bruneau, L., Q. Devers and M. Vernier 2011. 'Rock Art Research in Murgi Topko, Nubra Valley in Ladakh', *Purakala* 20-21(91-98).

De Terra, H. 1942. The Megaliths of Bursahom, Kashmir, a New Prehistoric Civilization from India, American Philosophical society 85 (5), 483-504.

Ghai, V. K. (translation) 1994 [1973]. The Nilmatpurana, Srinagar, Jammu and Kashmir

Academy of Art, Culture and Languages.

Hasan, M. 1974. Kashmir under the Sultans, Kashmir, Ali Mohammad & Sons.

Indian Archaeology 2004. Indian Archaeology 1998-99 A Review: 30-49, New Delhi, Archaeological Survey of India.

Joshi, R.V., Rajguru, S.N., Pappu, R.S., and Bopardiker, B.P. 1974. Quaternary Glaciations and Palaeolithic Sites in the Lidder Valley, J&K, World Archaeology, 369-79.

Joshi, J.P. 1990 (ed.). Indian Archaeology 1985-86 A Review: 34-108, New Delhi, Archaeological Survey of India.

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

Kak, R.C. 1933. Ancient Monuments of Kashmir, England, The Indian Society.

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

Lahiri, N. 1992. The Archaeology of Indian Trade Routes Upto c. 200 BC: Resource use, Resource access and Lines of communication, New Delhi, Oxford University Press.

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

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

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

Mitra, D. (ed.) 1984. Indian Archaeology 1981-82 A Review: 16-25, Calcutta, Archaeological Survey of India.

N.V. Polosmak; Shah, M.A. & L.P. Kundo 2018. Petroglyphs of Zanskar India: findings of the 2016 season, *Journal of Archaeology, Ethnology and Anthropology of Eurasia*, 46(2), 60-77.

Saar, S.S. 1992. Archaeology: Ancestors of Kashmir, New Delhi, Lalit Art Publishers. Shali, S.L. 1993. Kashmir: History and Archaeology Through the Ages, New Delhi, OM Publications.

Shah, M.A. 2013. Kushan Terracotta Tiles in Kahsmir Valley: the Chronological Interpretation, *Puratattva*, 43(239-246).

Shah, M.A. 2013. Early Historic Archaeology in Kahsmir – an Apprisal of the Kushan Period. In Bulletin of Deccan College, 72-73(213-224).

Shah, M.A. 2014. Revisiting the Chronology of Early Scluptural Art of Kashmir, *Journal of Archaeology, Ethnology and Anthropology of Eurasia*, 42(3), 82-86.

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

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

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

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

Thapar, B.K. 1985. Recent Archaeological Discoveries in India, Tokyo, Centre for East Asian Cultural Studies.

Thapar, B.K. 1997. Archaeology of South Asia: A perspective in interrelationship. In J. P. Joshi (ed.), Facets of Indian Civilisation; Recent Perspectives 1: 69-74, New Delhi, Aryan Books International.

William, M. 1841. Travels in the Himalayan Provinces of Hindustan and the Panjab; in Ladakh and Kashmir; in Peshawar, Kabul, Kunduz, and Bokhara by William Moorcraft and George Trebeck, from 1819-1825, Calcutta, Asiatic Society of Calcutta.

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

SEMESTER-III

Research Methodology

Course code: ARC17304CR

Unit – 1 – Research Methodology in Archaeology

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

Unit – 2 – Processual Archaeology

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

Unit – 3 – Post-Processual Archaeology

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

Unit – 4 – Research design & Analytical Archaeology

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

Recommended Readings

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

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

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

Cohen, M.R. and E. Nagel. 1976. *An Introduction to Logic and Scientific Method*. Bombay: Allied Publishers.

Gellner, E. 1985. Relativism and Social Sciences. Cambridge: Cambridge University Press.

Goode, W.J. and P.K. Hatt. 1952. *Methods in Social Research*. Tokyo: Mcgraw-Hill Student Edition.

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

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

Hodder, I. 1995. Interpreting Archaeology: Finding Meaning in the Past. New York: Routledge.

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

Kelley, J.H. and M.P. Hanen 1990. *Archaeology and the Methodology of Science*. Albuquerque: University of New Mexico Press.

Paddayya, K. 1978. "New Research Designs and Field Techniques in the Palaeolithic Archaeology of India". *World Archaeology*. 10:94-110.

Paddayya, K. 1981. Piaget, Scientific Method and Archaeology. *Bulletin of the Deccan College Research Institute* 40: 235-264.

Paddayya, K. 1989. The Role of Hypothesis and Traditional Archaeology. *Bulletin of the Deccan College Research Institute* 47-48: 239-247.

Paddayya, K. 1990. New Archaeology and Aftermath: View from Outside the Anglo-American World. Pune: Ravish Publishers

Paddayya, K. 1990. Theoretical Perspectives in Indian Archaeology: An Historical Review, in P.J. Ucko (ed.) *Theory in Archaeology: A World Pespective*, pp.110-149. London: Routledge.

Paddayya, K. 2002. A Review of Theoretical Perspectives in Indian Archaeology, in S. Settar and R. Korisettar (ed.) *Indian Archaeology in Retrospect*, Vol. IV, pp.117-157. New Delhi: ICHR and Manohar.

Pinsky, V. and A. Wylie (ed). 1989. *Critical Traditions in Contemporary Archaeology*. Cambridge: Cambridge University Press.

Preucel, R. (ed). 1991. *Processual and Postprocessual Archaeologies: Multiple Ways of Knowing the Past*. Carbondale (Illinois): Southern Illinois University Press.

Preucel.R.W. and I. Hodder (eds.). 1996. *Contemporary Archaeology in Theory : A Reader*. Blackwell Publishers.

Rosenau, P.M. 1992. *Post-modernism and the Social Sciences*. Princeton: Princeton University Press.

Salmon, W.C. 1984. Scientific Explanation and Causal Structures of the World. Princeton: Princeton University Press.

Sankalia, H.D. 1969. "Problems in Indian Archaeology and Methods and Techniques Adopted to Tackle Them". *World Archaeology* 1: 29-40. Schiffer, M.B. 1976. *Behavioral Archaeology*. New York: Academic Press.

Schiffer, M.B. 1987. Formation Processes of the Archaeological Record. Albuquerque: University of New Mexico Press.

Schiffer, M.B. 1995. *Behavioral Archaeology: First Principles*. Salt Lake City: University of Utah Press.

Shanks, M. and C. Tilley. 1987. Sociol Theory as Archaeology. Cambridge: Polity Press.

Stoianovich, T. 1976. French Historical Method: The Annales Paradigm. Ithaca: Cornell University Press.

VanPool, C.S. and Todd L. VanPool. 1999. *The Scientific Nature of Postprocessualism*. *American Antiquity*. Vol.64: 33-53.

Yoffee, N. and A. Sherratt (ed.) 1993. *Archaeological Theory: Who sets the Agenda?* Cambridge University Press.

SEMESTER- III

Museum Management

Course code: ARC17305DCE

Unit – 1 – Museology: Basic Principles and Practice

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

Unit – 2 – Collection and Documentation of Artifacts

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

Unit – 3 – Museum Administration and Legislation

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

Unit – 4 – Museum Exhibition and Education

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

Recommended Reading

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

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

Bhatnagar, A. 1999. *Museum, Museology and New Museology*. New Delhi: Sandeep Prakashan.

Chaudhari, A.R. 1963. *Art museum documentation & practical handling*. Hyderabad: Chaudhary & Chaudhary.

Dwivedi, V.P. 1980. Museum and Museology New Horizons. Delhi: Agam Kala Prakashan.

Edson, G & Dean David. 1994. *Handbook for Museums*. London: Routledge.

Ghosh, D.P. 1968. Studies in Museum and Museology in India. Calcutta: Indian publication.

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

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

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

Punja, S. 1990. Illustrated Guide to Museum of India. Hong Kong: Guide Book Co. Ltd.

UNESCO Publication. 1960. *The Organization of Museums: Practical Advice*. Paris: UNESCO.

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

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

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

SEMESTER- III

Ancient Indian History - 1

Course code: ARC17306DCE

Unit-1 -Vedic Age:

Economy, Society and Culture – Early and later Vedic period

Unit-2 - Magadhan Empire:

- a. Janpadas, Mahajanapadas and the Emergence of Magadha as an empire; second urbanization; Important city sites.
- b. Persian and Greek invasions and their influences.

Unit-3-Mauryan Empire:

Sources; Empire building; Administrations; Economy and Culture.

Unit-4- Religious Traditions in Ancient India:

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

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

Recommended Readings

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

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

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

Banerjea, G. 1923. The Hindu Law of Marriage and Stridhana. Calcutta: Calcutta University.

Chopra, P.N., B.N. Puri, and M.N. Das 1974. *Social, Cultural and Economic History of India*. Delhi: Macmillian India.

Dutta, N.K. 1931. Origin and Growth of Caste in India (vol 1). London: Harper and Row.

Eliade, M. 1975. Rites and Symbols of Initiation. London: Harper and Row.

Ghosh, A. 1973. The City in Early Historical India. Simla: Indian Institute of Advanced Study.

Gonda, J. 1980. Vedic Rituals-the Non-Solemn Rites. Leiden. E.J. Brill.

Horner, D.B. 1930. Women under Primitive Buddhism. London: George Routledge and sons ltd.

Hutton, J.H. 1963. Caste in India. Oxford: Oxford University Press.

Kane, P.V. 1941. *History of Dharmashstra* (Vol II, Pt 1). Pune: Bhandarkar Oriental Research Institute.

Karandikar, S.V. 1928. *Hindu Exogamy*. Bombay: Advocate of India Press.

Kunhen Raja, C. 1950. Some Aspects of Education in Ancient India. Adyar: Adyar Library.

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

SEMESTER-III

Environmental Archaeology

Course code: ARC17307DCE

Unit - 1 - Introduction

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

Unit – 2 – Distinctive Features of Quaternary Period

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

Unit – 3 – Palaeo-environmental Reconstruction

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

Unit – 4 – Quaternary Stratigraphy

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

Recommended Reading:

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

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

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

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

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

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

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

Bettis III, E. A., A. K. Milius, S. J. Carpenter, R. Larick, Y. Zaim, Y. Rizal, R. L. Ciochon, S. A. Tassier-Surine, D. Murray, Suminto, and S. Bronto. 2009. Way out of Africa: Early Pleistocene paleoenvironments inhabited by Homo erectus in Sangiran, Java. Journal of Human Evolution 56:11-24.

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

SEMESTER- III

General Elective

Archaeological Sites of Kashmir

Course code: ARC17308GE

Unit – 1 – Prehistoric Sites

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

Unit – 2 – Early Historic Sites

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

SEMESTER-IV

Dissertation

Course code: ARC17401CR

*DISSERTATION

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

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

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

CERTIFICATE

CERTIFIED that the work incorporated in this thesis (entitled) submitted by (Name of the student) was carried out by the student under my supervision. Such material as has been obtained from other sources has been duly acknowledged in the dissertation.

(Sign. of the student)

(Sign. of research guide)

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

SEMESTER- IV

Conservation of Cultural Property

Course code: ARC17402DCE

Unit-1: Ancient Stuructures

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

Unit-2: Conservation of Structures

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

Unit-3: Inorganic Archaeological Materials

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

Unit-4: Organic Materials

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

Recommended Reading:

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

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

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

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

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

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

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

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

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

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

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

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

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

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

SEMESTER- IV

Cultural Heritage Management

Course code: ARC17403DCE

Unit-1:

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

Unit-2:

- a. Cultural Heritage Management in India: Role of Government bodies
- b. Legislation
- c. Role of Non-Government organizations

Unit-3:

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

Unit-4:

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

Recommended Reading:

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

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

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

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

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

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

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

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

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

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

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

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

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

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

SEMESTER- IV

Ancient Indian History – 2

Course code: ARC17404DCE

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

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

Unit-2- Satvahanas:

Political History, Economy, Society and Culture.

Unit-3- Gupta Empire:

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

Unit-4- Post Gupta Period:

Political, Economic and Cultural history.

Recommended Readings

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

SEMESTER-IV

ETHNO-ARCHAEOLOGY

Course code: ARC17405DCE

Unit – 1: Concepts in Ethnoarchaeology

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

Unit – 2: Ethnoarchaeological studies in Indian settings

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

Unit – 3: Ethnoarchaeological studies outside India:

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

Unit – 4: Ethnoarchaeological applications for Sciences in Archaeology:

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

Recommended Readings:

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

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

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

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

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

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

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

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

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

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

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

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

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

Grigg, D.B. 1980. The Agricultural Systems of the World. Cambridge: Cambridge University Press.

Jain, S.K. 1991. Contributions to Indian Ethnobotany. Jodhpur: Scientific Publishers. Jayaswal, V and K. Krishna 1986. An Ethnoarchaeological View of India Terracotta. New

Delhi: Agam Kala.

Jochim, M.A. 1976. Hunter Gatherer Subsistence and Settlement: A Predictive Model. New York: Academic Press.

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.

Kanungo, A.K. 2004. Glass Beads in Indian Archaeology: An Ethnoarchaeological Approach. Oxford: BAR International Series 1242.

Kenoyer, J.M. 1983. Shell working Industries of the Indus Civilization: An Archaeological and Ethnographic Perspective. Ph.D Dissertation. Berkeley: University of California.

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.

Kramer David N. 2001 . Ethnoarchaeology in Action . Cambridge: Cambridge University Press.

Kramer, C. 1980. Ethnoarchaeology. Guildford Survey: Columbia Survey: Columbia University Press.

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.

Lee, R.B. and I. Devore 1975. Man the Hunter. Chicago: Aldine Publishing Co.

Leshnik, L.S. and G. Sontheimer. 1975. Pastoralists and Nomads. Wiesbaden: Otto Harrassowitz.

Maheshwari, J.K. 1996. Ethnobotany in South Asia. Jodhpur: Scientific Publishers.

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.

Meehan, B. and R. Jones 1988. Archaeology with Ethnography: An Australian Perspective. Canberra: Department of Prehistory, Research School of Pacific Studies, Australian National University.

Michael, J. Balick and Paul Alan Cox 1996. Plant, People and the Science of Ethnobotany, Museum of Anthropology, University of Michigan, Ann Arbor.

Miller, D. 1985. Artefacts as Categories: A Study of Ceramic Variability in Central India. Cambridge: Cambridge University Press.

Misra, V.N. 1974. Archaeological and Ethnographic Evidence for the Hafting and Use of Microliths and Related Tools, Puratattva 7: 3-12.

Misra, V.N. 1984. The Van Vagris- Lost Hunters of Thar Desert, Rajasthan, Man and Environment 15 (2) 89-108.

Mohanty, P. and J. Mishra 2002. Fifty Years of Ethnoarchaeological research in India: A Review, in Archaeology and Interactive disciplines (S.

Settar and R. Korisettar Eds.), pp 169-207. Delhi: Indian Council of Historical Research

Morris, B. 1982. Forest Traders: A Socio-Economic Study of the Hill Pandaram. London School of Economics Monograph, Social Anthropology 55. London: Athlone Press.

Morrison Kathleen D. and Laura L. Junker. 2002. Forager-Traders in South and Southeast Asia: Long Term Histories. Cambridge: Cambridge University Press.

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.

Murty, M.L.K. 1985. Ethnoarchaeology of Kurnool Cave Area, World Archaeology 17 (2): 192-205.

Murthy M.L.K. 2007. Social Ecology of Village Goddesses and Agro-pastoral Communities in Eastern Ghats (Andhra Presesh), in Anthropology for Archaeology Proceedings of the Prof. Irawati Karve Birth Centenary Seminar (Walimbe, S.R. P.P. Joglekar and K.K. Basa Eds.), pp. 95-103. Pune: Deccan College.

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.

Nagar, M. 1975. Role of Ethnographic Evidence in the Reconstruction of Archaeological Data, Eastern Anthropologist 28 (1): 13-22.

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.

Nagaraja Rao, M.S. 1965. Survival of Certain Neolithic Elements Among the Boyas of Tekkalkota, Athropos 60: 180-6.

Paddayya, K. 1998. Evidence of Neolithic Cattle Penning at Budhihal, Gulburga District, Karnataka, South Asian Studies 13: 141-54.

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.

Pal J. N. 2007. Review of the Ethnoarchaeological Research in the Gangetic Basin, and Future Directions, in Anthropology for Archaeology Proceedings of the Prof. Irawati Karve Birth Centenary Seminar (Walimbe, S.R. P.P. Joglekar and K.K. Basa Eds.), pp. 77-94.

Pune: Deccan College.

Panja, S. 1996. Mobility Strategies, Site Structure and Subsistence- Settlement Organizations: An Actualistic Perspective, Man and Environment 21 (1): 58-73.

Raju, D.R. 1988. Stone Age Hunter-Gatherers: An Ethno- Archaeology of Cuddapah Region, South-East India. Pune: Ravish Publishers.

Ray, H.P. 1996. Maritime Archaeology: The Ethnographic Evidence, Man and Environment 21 (1): 74-85.

Richard B. Lee and Richard Daly 1999. Hunters and Gatherers. Cambridge: Cambridge University Press.

Rivers.W. H. R. 1967. The Todas. London.

Roy, S.K. 1981. Aspects of Neolithic Agriculture and Shifting Cultivation, Garo Hills, Meghalaya, Asian Perspective 24: 193-221.

Satapathy, K.K. and B.K. Sarma 2002. Shifting Cultivation in India: An Overview, Asian Agri-History, 6 (2): 121-139.

Schiffer, M. 1978. Methodological Issues in Ethnoarchaeology, in Exploration in Ethnoarchaeology (R. Gould Ed.), pp 229-47. Albuquerque: University of New Mexico Press.

Sengupta, G. Suchira Roychoudhury and Sujit Som 2006. Past and Present Ethnoarchaeology in India. New Delhi: Pragati Publications and Centre for Archaeological Studies and Training Eastern India (Kolkata).

Sinopali, C.M. 1991. Seeking the Past through the Present: Recent Ethnoarchaeological Research in South Asia, Asian Perspectives 28 (2): 145-161.

Smiley, F.E. et al. 1980. The Archaeological Correlates of the Hunter-Gatherer Societies: Studies from the Ethnographic Record. Ann Arbor: Michigan University Pree.

Stiles, D. 1977. Ethnoarchaeology: ADiscussion of Method and Application, Man 12: 87-103. Tripathi, V. and Arun K. Mishra 1997. Understanding Iron Technology: An Ethnographic Model, Man and Environment 22 (1): 59-68.

SEMESTER- IV

General Elective

Terracotta Art

Course code: ARC17406GE

Unit – 1 Introduction

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

Unit – 2 Terracotta Art Pre Kushan and Kushan Era

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