

New COURSE

CENTRE OF ADVANCED STUDY
Department of AIHC & Archaeology
Faculty of Arts
Banaras Hindu University

SYLLABUS OF M.A. SEMESTER COURSE

General Guidelines

1. M.A. in Ancient Indian History, Culture & Archaeology is a 4 Semester Course.
2. A student is required to earn at least 80 credits to complete the course.
3. A Student is required to earn about 20 credits in each semester.
4. There shall be two following categories of Courses:
 - A. The Departmental Core Course (DCC); and
 - B. Specialization Courses (Sp C)
5. All the courses of the first category, The Departmental Core Course (DCC), shall be compulsory.
6. A student may select any one of the groups consisting of Three of the Specializations to be notified at the time of admission.
7. Each course shall be covered in accordance with the respective credit value of the course. 1 credit shall be of one hour of formal meeting. Approximately 2:3 parts of the course shall be covered in the form of class lectures, and 1:3 as student performance in the form of tutorials, seminars, group discussions etc.
8. Each course shall be of 100 marks.
9. 30 % marks shall be allotted to internal assessments — over all performance of the student in tutorials, seminars etc.
10. 70 % marks shall be allotted for the semester end examinations.
11. The two categories of the courses proposed by the department are the following:

Departmental Core Courses

Credits

I	1. Historical Geography & Geographical Background of Ancient Indian Culture.	04
II	2. Literature: As source of Ancient Indian History and Culture	04
III	3. Material Remains: As source of Ancient Indian History and Culture	04
IV	4. History and Culture of Indian People (upto the Mauryan Period)	04
	5. Historiography, Concepts & Methods	04
	6. Political History of North India (From 2 nd century B.C. to 12 th century A.D.)	04
	7. Historical Writings & Contribution of Individual scholars	04
	8. Political History of Deccan and South India upto 13 th century A.D.	04
	Total	32

All the Departmental Core Courses shall be compulsory and will be covered in Semesters I to IV.

Specialization Course	Credits
A. Archaeology (4 courses)	16
1. World Prehistory	
2. Protohistoric and Early Historic Archaeology of the Indian subcontinent	
3. Principles & Methods of Archaeology	
4. Environmental Archaeology & West Asian Archaeology	16
B. Art & Architecture (4 courses)	
1. Historical Account of Early Indian Architecture	
2. Historical Account of Indian Sculpture and Painting upto Gupta period	
3. Sculptural Styles & Iconography of Early Medieval India	
4. Origin & Development of Ancient Indian Temples	16
C. Epigraphy & Palaeography (4 courses)	
1. Beginnings of Indian Scripts and Epigraphs	
2. Scripts and Epigraphs from Maurya to Kuṣāna period	
3. Scripts and Epigraphs of Guptas and Vākātakas	
4. Scripts and Epigraphs of Post Gupta and Early medieval Period	16
D. Numismatics (4 courses)	
1. Numismatography and Beginning of Coinage	
2. Coinage of Rulers of Foreign Origin	
3. Sātavāhana and Gupta Coins	
4. Post Gupta and Early Medieval Coinage	16
E. Religions of Ancient India (4 courses)	
1. Vaidika Religion	
2. Vaiṣṇavism, Saivism & Minor Religions Systems	
3. Buddhism	
4. Jainism	16
F. State & Society in Ancient India (4 courses)	
1. Social Life in Ancient India	
2. Ancient Indian Economy	
3. Ancient Indian Political Ideas and Administrative Systems	
4. Law and Legal Institutions in Ancient India	16
G. Indian Cultural Contacts in Asia (4 courses)	
1. India's Cultural Contacts with Sri Lanka, Myanmar and Thailand	
2. India's Cultural contacts with Vietnam, Kampuchia, Indonesia and Malaysia	
3. India's Cultural Contacts with Central Asia and Afghanistan	
4. India's Cultural Contacts with China, Tibet and Nepal	16
H. History of Science and Technology in India (4 courses)	
1. Science & Technology in Pre & Protohistoric Period	
2. Science & Technology in Chalcolithic Cultures and Vaidika Period	
3. A Survey of Science & Technology from 6 th Century B.C. to 1 st Century B.C.	
4. Science & Technology from 1 st Century A.D. to 7 th Century A.D.	16
Total	48

- Any three of the Specialization Courses is to be offered, each consisting of a package of 4 Courses of 16 credits
- The Department by notification at the time of admission may run Specialization Courses in proposed bunches, each consisting of 3 courses

- The Department by notification at the time of admission may run different number of Specialization Courses — keeping in abeyance one or more courses — or adding others, as per the expertise available from time to time.

System of Evaluation

- I. 30 marks shall be for the internal assessment in each of the courses, which shall be evaluated over all performance of the student in the formal meeting with the teacher, who is offering the course. These marks will be assigned on the tutorials, seminars, class tests etc.
- II. In case of courses prescribing practical examination the marks for evaluation will be 20 and the marks for tutorials seminars, class tests etc. will be 30.
- III. The total marks for semester end examination of the course involving practicals shall be 50 and in case of other courses shall be 70 as usual. Students shall be required to write in examination for each of the courses under study as under :

Courses without Practical:

1. Duration of semester end examination		03 hour
2. Pattern of questions:	No. Marks	Total Mark
i. Long essay type question	03 X 15 =	45 mark
ii. Short answers	02 X 10 =	20 mark
iii. Objective type questions (briefest form)	05 X 01 =	5 mark
	Total	70 mark

Courses with Practical:

1. Duration of semester end examination		03 hour
2. Pattern of questions:	No. Marks	Total Mark
i. Long essay type question	03 X 12 =	36 mark
ii. Short answers (250 words)	02 X 05 =	10 mark
iii. Objective type questions (briefest form)	04 X 01 =	04 mark
	Total	50 mark

CORE COURSE

Course I

Historical Geography & Geographical Background of Ancient Indian Culture

- Unit-I. Introduction
1. Nature and Scope
2. Sources : Ancient and modern
3. Relevance to Indian history and culture
- Unit-II. Geological Composition of Indian Sub-Continent
4. A brief survey of major physical divisions: Himalayas, Indo-Gangetic plains & Peninsula
5. A brief survey of major morphological divisions : Deserts- Rajasthan & Kutch; Hill ranges- Aravali, Vindhya, Kaimur and Sahyadri; Plateau - Malwa and Chhotanagpur; Laterite formation - Kerala
6. Passes: North and North-East
- Unit-III. Geographical Background
7. A brief survey of major river systems-Indus, Ganga, Krishna, Narmada, Brahmaputra and Cauvery
8. A brief survey of climatic zones & their flora and fauna
9. Indian population- racial features and main classifications
- Unit-IV. Indian Concepts (Brahmical, Jaina & Buddhist)
10. Universe : Origin, solar system and place of earth
11. Jambūdāvīpa & Bharat Varsh
12. Trade routes & ports : Silk route, Utrapath, Dakshinapathā, Sea route & pattans
13. Capitals & Cities : Concept, location and identification of important sites
- Unit-V. Impact of Geography on Ancient Indian Culture
14. Geomorphology : Settlements and migrations
15. Climate : Shelter, Subsistence & Dress
16. Material Resources : Technology, Art and Architecture

* The Students are expected to practice Map reading and plotting of important regions and sites.

Recommended Reading

- Ali, Sin, *Geography of the Puranas*, New Delhi, 1966.
Sankalia, H.D., *Studies in the Historical and Cultural Geography and Ethnography of Gujrat*, Poona, 1919.
Dubey, Bechan, *Geographical concepts in Ancient India*, Varanasi, 1967.
Panikkar, K.M., *Geographical Factors In Indian History*, Bharatiya Vidya Bhavan, Bombay, 1955.
Tripathi, M.P., *Development of Geographical knowledge in Ancient India*, Bharatiya Vidya Prakashan, Varanasi.
Kaniska., *Bhārata kā Prāchīn Bhugola (Ancient Geography of India)*, Indological Book House, Varanasi, 1989.
Upadhyay, Bharat Singh, *Buddha kālīna Bhāratiya Bhugola*, Hindi Sahitya Sammelan Prakashan, 1961, Allahabad.
Wadia, D.N., *Geology of India*, Tata Megraw Hill, New Delhi, 1975.
Singh, R.L., *India. A regional Geography*, Varanasi; *The History & Culture of India People - Vedic Age*, Vol I., Bharatiya Vidya Bhavan series, Bombay, Chapter, III, IV, V and VI, 1971.

- Subbarao, B. *Personliti of India*, Baroda, 1958.
 Law, B.C., *Historical Geography of Ancient India*, reprinted, New Delhi, 1984.
 Bharadwaj, O.P., *Studies in the Historical Geography of Ancient India*, Delhi, 1986.
 C.C., davies, *Historical Atlas of the Indian Peninsula*, London, 1956.
 O.H.K. Spate and ATH. Learmonth., *India and Pakistan : A General and Regional Geography*, London, 1967.
 Bhattacharya, N.N., *The Geographical Dictionary : Ancient and Early Medieval India*, Delhi, 1991.
 Chattopadhyay, B.D., *A Survey of Historical Geography of Ancient India*, Delhi, 1984.
 Cunningham, A., *The Ancient Geography of India*, London, 1871.
 Schwartzberg, J.E., *A Historical Atlas of South Asia*, Chicago, 1971.
 Chakrabarti, D.K., *The Geopolitical Orbits of Ancient India*, OUP, New Delhi, 2010.

Course II

Literature As Source of Ancient Indian History and Culture

Unit-I. Introduction

1. Problem of historical reconstruction, Classification of sources and Problem of dating of literary sources
2. Comparison with medieval and modern literary sources

Unit-II. Vaidika literature and Epics

3. Nature and Classification of Vaidika literature
4. Politico-Cultural importance of Vaidika literature
5. Nature and Historical importance of Epic literature

Unit-III. Dharmasāstra and Purāṇas

6. Nature & Classification of Dharmasāstra Literature and their Historical significance
7. Nature and Classification of Purāṇa literature
8. Historical Evaluation of Purāṇas

Unit-IV. Buddhist, Jaina and Sangama literature

9. Nature and Classification of Buddhist literature
10. Pāli Tripiṭaka and Sanskrit literature with special reference to Divyāvadāna and Mañjuśrīmūlakalpa
11. Nature and Classification of Jaina literature: Jaina Āgamas and Paurāṇic Literature with special reference to Harivaṃśapurāṇa
12. Historical Value of Sangam literature

Unit-V. Dramas, Biographies and others

13. Nature of Historical Drama literature, Historical values of Mudrārākshasa and Mālavikāgnimitram
14. Nature and Historical importance of Charitkāvya with special reference to Navasāhasāṅkcharita and Kumārpālacharita
15. Historical values of the accounts of foreign travellers

Recommended Reading

- Ghoshal, U.N., *Studies in Indian History and Culture*, Bombay, 1965.
 Majumdar, R.C. & Pusalkar, A.D. (eds.), *The History and Culture of the Indian People* Bharatiya Vidya Bhawan Series. *The Vedic Age*, Vol. I (Portions on Language and Literature), Bombay, 1988.

- Pargiter, F.E., *Ancient Indian Historical Traditions*, Delhi, 1972.
 Pargiter, F.E., *The Purāna Text of the Dynasties of the Kali Age*, Oxford, 1913.
 Rapson, E.J., *The Cambridge History of India*, Vol. I, Cambridge, 1922.
 Winternitz, M., *History of Indian Literature* (Also in Hindi), Vols. I & II, Delhi, 1987.

Course III

Material Remains as Source of Ancient Indian History and Culture

Unit-I.(A) Introduction

Nature, Retrieval and Classification of data.

(B) Prehistoric to Early Historic Excavated remains

Reconstruction of Socio-Economic and religious life on the basis of followings:

1. Tools
2. Pottery
3. Beads, seals-sealings and metal objects
4. Non-artifactual remains: Botanical and Zoological

Unit-II. Coins, Seals and Sealings of the Historical period

5. Nature and Classifications
6. Historical importance of coins, seals and sealings

Unit-III. Epigraphs

7. Nature and classification of Inscriptions
8. Reconstruction of Political and Cultural History from Inscriptions
9. Significance of Palaeography in dating

Unit-IV. Sculptures and Paintings

10. Reconstruction of history on the basis of followings: Stone, Terracotta and Metal sculptures
11. Pre-historic Rock paintings and Murals of Ajanta

Unit-V. Structure and Monuments

Historical importance of

A. Non-religious structure

12. Forts, Palaces, Tanks and wells

B. Religious Structures & Monuments

13. Stūpa : with special reference to Sanchi and Amaravati
14. Temples : with special Reference to Pallava Rathas and Kandariyā Mahādeva temple of Khajurāho

Recommended Reading

- Allchin B & F.R., *Rise of Civilization in India & Pakistan*, Delhi, 1983.
 Agrawala, V.S., *Bhāratīya Kalā* (Hindi), Varanasi, 1965.
 Bhattacharya, D.K., *Old Stone Age tools*, Calcutta, 1979.
 Bhandarkar, D.R., *Carmichael Lectures on Ancient Indian Numismatics*, Calcutta, 1917.
 Brown, P., *Indian Architecture*, Vol. I, Bombay, 1985.
The Cultural Heritage of India, Vols. I & II (Relevant portions), Calcutta, 1982.
 Majumdar, R.C. & Pusalkar, A.D. (eds.), *The History and Culture of the Indian People*.
 Bharatiya Vidya Bhawan Series, Vols. I-V (Portions on Art and Architecture), Bombay,
 1988, 1980, 1988, 1984 & 1989.
 Pandey, R.B., *Indian Palaeography*, Varanasi, 1965.
 Sankalia, H.D., *Stone Tools, their Techniques & Functions*, Poona, 1972.
 Sinha, B. P., *Potteries in Ancient India*, Patna, 1968.
 Pant, P.C. & V. Jayaswal, *Ancient Ceramics : Historic Enquiries and scientific Approaches*.
 Delhi, 1997.

Course IV

History & Culture of Indian People (upto the Maurya Period)

Unit-I. Introduction

1. Sources: Literary and Archaeological
2. Survey of Literature
3. Objective

Unit-II. Nomadism to Sedentism

4. Nomadic Communities and Hunting -Gathering economy
5. Early farming communities and beginning of settled life
6. Village communities and early use of metals
7. Emergence of first cities: Indus -Saraswati basin : Agrarian base, Trade & Commerce and Decline

Unit-III. Aryans : Archaeological & Literary Correlations

8. Early Vaidika Culture: Homeland, Material remains, Economy, Political Structure
9. Later Vaidika Culture: Movements and Migrations, Settlements and rise of Political System, Material remains, Technology and Economy
10. A brief survey of Paurāṇika Geneology

Unit-IV. The Age of Janapadas

11. Emergence of States: Monarchichal and Gaṇarājyas
12. Urbanization : Process. Factors Settlement and hierarchy
13. Religious movements

Unit-V. The Age of Imperialism up to the Mauryas

14. Nanda dynasty
15. A brief survey of foreign invasions & impact
16. Mauryan dynasty
17. Material culture during Mauryan Period

Recommended Reading

- Agrawal, D.P. & J.S. Kharkwal., *Bronze and Iron Ages in South Asia*, New Delhi, 2003.
- Allchin, B. & F.R., *The Rise of Civilization in India and Pakistan*, Delhi, 1983.
- Allchin, B & R., *Archaeology of South Asia*, New Delhi, 1997.
- Allchin, F.R., *The Archaeology of Early Historic South Asia: Emergence of City and States*, Cambridge, 1985.
- Chakrabarti, D.K., *India – An Archaeological History: Palaeolithic Beginnings to Early Historical Foundation*, Oxford, 2000.
- Ghosh, A., *The City in Early Historical India*, Shimla, 1973.
- Kuipea, F.B.J., *Aryans in the Rig veda*, Atlanta, 1991.
- Lal, B.B. & S.P. Gupta (eds.), *Frontiers of the Indus Civilization*, Delhi, 1994.
- Majumdar, R.C. & Pusalkar, A.D. (eds.), *The History and Culture of the Indian People* Bharatiya Vidya Bhawan Series. Vol. I, *The Vedic Age*; Vol. II, *The Age of Imperial Unity*, Bombay, 1988.
- Mishra, V.D. and Pal J.N. (eds.), *Mesolithic India*, Allahabad, 2002.
- Pandey, G. C., *Foundation of Indian Culture*, 1984.
- Rapson, E.J., *Cambridge History of India*, Vol. I, Cambridge, 1922.
- Ratnagar, Shereen., *The End of the Great-Harappan Tradition*, New Delhi, 2000.
- Raychaudhary, H.C., *Political History of Ancient India*, Calcutta, 1953; Raychaudhary, H.C., *Prāchīn. Bhārat*. (Hindi Trans.).
- ✓Sharma, R.S., *Material Culture and Social Formations in Ancient India*, Delhi, 1983.
- Sharma, R.S., *Looking for the Aryans*, Madras, 1995.
- Sharma, R.S., *Advent of the Aryans in India*, New Delhi 1999.

- Thapar, Romila. *From Lineage to State: Social Formations in the Mid-first Millennium B.C. in the Ganga Valley*. Delhi, 1990.
- Thapar, Romila. *Early India from the Origins to A.D. 1300*, New Delhi, 2000.
- Thapar, B.K., *Recent Archaeological discoveries in India*. UNESCO, 1985.
- Chakrabarti, Dilip K., *The Oxford Companion to Indian Archaeology (The Archaeological Foundations of Ancient India)*, Oxford, 2006.
- Tripathi, Vibha., *The Age of Iron in South Asia Legacy & Tradition*, New Delhi, 2001.
- Mookerjee, R.K., *Chandragupta Maurya and His times*, Banaras, 1960.

Course V

Historiography, Concepts & Methods

Unit-I. Meaning & Scope of History

1. Definition of History and its scope
2. Objectivity; Subject matter; Historical Explanation
3. Causation in History

Unit-II. Tradition of History Writings -A

4. Greeco-Roman
5. Jewish
6. Christian

Unit-III. Tradition of Historical Writings -B

7. Islamic
8. Chinese

Unit-IV. Ancient Indian Historical Writings

9. Vaidika, Epic & Paurāṇika Traditions
10. Buddhist Tradition
11. Jaina Tradition

Unit-V. Historical Biographies and Chronicles

12. Charit-Kāvya : Harśacharita and Vikramāṅkadevacharita
13. Historical Chronicle : Rājataranṅinī

Recommended Reading

- Buddha Prakash, *Itihāsa Darśana* (Hindi), Hindi Samiti Granthmala 56, Lucknow, 1962.
- Carr, E.H., *What is History*, London, 1962, (Also in Hindi).
- Chaubey, Jharkhand, *Itihāsa Darśana*, (Hindi), Varanasi, 1999.
- Collingwood, R.G., *The Idea of History*, Oxford, 1961.
- Ghoshal, U.N., *Studies in Indian History and Culture*. Bombay, 1965.
- Habib, Irfan. *Essays in Indian History, Towards a Marxist Perception*, Delhi, 1995.
- Pande, G.C. (ed.), *Itihās : Svarūpa evam Siddhānta*, Jaipur, 1913.
- Pande, G.C. (ed.), *Itihāsa. Darśana*, Jaipur, 1991.
- Pargiter, F.E., *Ancient Indian Historical Tradition*, Delhi, 1972.
- Shaikh Ali, B., *History : Theory and Method*, Macmillan, Madras, 1978.
- Singh, Shivaji, *Models, Paradigm and the New Archaeology*. Varanasi, 1985.
- Thapar, Romila, *The Past and Prejudice*, Delhi, 1975.
- Walsh, W.H., *An Introduction to the Philosophy of History*.
- Warder, A.K., *An Introduction to Indian Historiography*, Bombay, 1972.

Course VI

Political History of North India (From 2nd Century B.C. to 12th Century A.D)

Unit-I. Political History : From Indo-Greeks to Kuṣāṇas

1. Indo-Greeks
2. Sakas with special Reference to Mathurā & Ujjayini; Pahlavas
3. The Kuṣāṇas : Kanīṣka I and Huviṣka

Unit-II. Imperial Dynasties : from Gupta to Puṣyabhūti

4. Dynastic History of the Guptas : Chandragupta I, Samudragupta & Chandra gupta II
5. Successors of Guptas – Aualikar, Maukharī and Later Gupta with special reference Yaśodharman, Išānavarman & Kumāragupta respectively
6. Hūṇa Invasion
7. Formation of Empire Under Harṣa

Unit-III. Dynasties of the Central & Eastern India

8. Historical Background
9. Pratīhāras : Vatsarāja, Nāgabhaṭṭa II & Mihirabhoja
10. Pālas : Dharmapāla & Devpāla
11. Chandellas : Dhaṅga & Vidyādharma
12. Kalachuriṣ : Gāṅgeyadeva & Lakṣmīkarṇa

Unit-IV. Dynasties of Western India

13. Chālukyas : Kumārapāla I
14. Paramāras : Muñja & Bhoja
15. Gāhaḍvālas : Govindachandra & Jaichandra
16. Chāhamānas : Prithvīrāja III

Unit-V. Dynasties of North West

17. History of Sind and Punjab
18. Sāhīs of Kabul
19. Karkoṭa and Utpal dynasty of Kashmir
20. India on the eve of Muslim Invasion

Recommended Reading

- Altekar. A.S. *The Rashtrakutas and Their Times*, Poona, 1934.
Bhatia. P., *The Paramāras*, New Delhi, 1970.
Bose. N.S., *History of the Chandellas*, Calcutta, 1956.
Devahuti, A., *Harsha a Political Study*, Delhi, 1970.
Dwivedi. H.N., *Dilli Ke Tomar* (Hindi), Gwalior, 1973.
Goyal. S., *Harsha, A multidisciplinary Political Study*, Jodhpur, 2005.
Majumdar. A.K., *Chaulukyas of Gujrat*, Bombay, 1956.
Gopal. L., *Economic life in Northern India (700-1200 A.D.)* Varanasi, 1965.
Niyogi. R., *History of the Gāhaḍavala Dynasty*, Calcutta, 1959.
Pathak. V., *Uttara Bharata Kā Rājanitika Itihāsa*, (Hindi), Lucknow, 1973.
Puri. B.N., *The History of the Gurjara Pratiharas*, Bombay, 1957.
Ray. H.C., *Dynastic History of Northern India*, Vols. I & II, Calcutta, 1931 & 1936.
Singh. P.N., *Harṣakālīna Samāja*, Varanasi,
Singh. P.N., *Prithvīrāja Chauhāna aur Unakā Kāla*, (Hindi), Varanasi.
Tripathi. R.S., *History of Kanauj*, Delhi, 1959.
Sastri. K.A.N. (ed), *A Comprehensive History of India*, Vol. II : *The Mauryas and Satavahanas*, Calcutta, Orient Longman, 1957.
Narain. A.K., *From Alexander to Kanishka*, Varanasi, 1967.
Mukherjee. B.N., *The Rise and Fall of the Kushan Empire*, Calcutta, 1988.

Course VII

Historical Writings & Contribution of Individual Scholars

Unit-I. Modern Historical Writings -A

1. Positivist: with special reference to August Comte and Ranke
2. Idealist: with special reference to Hegel and Collingwood

Unit-II. Modern Historical Writings -B

3. Marxist : Nature and stages of History
4. Post Marxist Historiography: with special reference to Spengler and Toynbee

Unit-III. Modern Historical Writings in Indian Context

5. Imperialist : with special reference to James Mill and V.A. Smith
6. Nationalist : with special reference to K.P. Jayaswal and R.C. Majumdar
7. Marxist tradition: Ideas and notions of D.D. Kosambi and R.S. Sharma

Unit-IV. A Survey of Post Modern Historiography

8. The idea of Post modernism and its impact upon history writing: A brief survey
9. Subaltern Historiography : Its nature and significance

Unit-V. Select Modern Historians

10. A.K. Warder
11. U. N. Ghoshal
12. A.L. Basham
13. V.S. Pathak

Recommended Reading

- Buddha Prakash . *Itihāsa Darśana*, 1962, Hindi Samiti Granthmala 56, Lucknow. 1962
- Choubey . Jharkhande. *Itihāsa Darśana*, (Hindi), Varanasi. 1999
- Collingwood. R.G. *The idea of History*, Oxford, 1961.
- Dubey. S.R.(ed.) . *Contemporary Historiography : Methodology & Trends* (English & Hindi). Ujjain. 2001.
- Pandey G.C. *Itihāsa Svarūpa Evam Siddhānta*, Jaipur, 1993.
- Pathak. V.S. *Ancient Historians of India*, Gorakhpur, 1984.
- Philips. C.H. (ed.) . *Historians of India, Pakistan and Ceylon*, London, 1961.
- Shaikh Ali. B., *History, Its theory and Method*. Macmillan. Madras. 1978.
- Walsh. W.H. *An Introduction to the Philosophy of History*, London, 1951.
- Gardiner, P., *Theories of History*, Illinois, 1959.
- Gooch. G.P., *History and Historians in the Nineteenth Century*, London. 1951
- Warder. A.K., *An introduction to Indian historiography*, Bombay, 1972

Course VIII

Political History of Deccan and South India upto 13th Century A:D.

Unit-I. Early kingdoms

1. A brief survey of Chola ,Chera & Pāṇḍya dynasty
2. A brief introduction to Sātavāhanas (Gautamīputra Sātakarṇi and Vāsiṣṭhīputra Pulumāvi) and their successors

Unit-II. Vākāṭaka, Pallava and Early Chālukyas

3. The dynastic history of Vākāṭaka: Pravarasena I, Rudrasena II and Prabhāvatī Guptā
4. The Pallavas of Kāñchī : Mahendravarman I & Narasiṃhavarman I
5. The Chālukyas of Bādāmi : upto Pulakeṣin II and Vikramāditya II

Unit-III: Rāṣṭrakūṭas and later Chālukyas

6. History of Rāṣṭrakūṭas upto Kriṣṇa III
7. Chālukyas of Vengi : Viṣṇuvardhan IV and Vijayāditya III
8. Chālukyas of Kalyāṇī –Someśvara I and Vikramāditya VI

Unit-IV. Chola and Pāṇḍya Dynasty

9. History of Chola : Rājarāja I. Rajendra I and Kulotuṅga I
10. A brief history of Pāṇḍya dynasty : Jaṭil Parāntaka Māravarman, Rājsimha II. Sundar Pāṇḍya & Māravarman

Unit-V. A brief history of other political powers

11. Yādavas of Devagiri upto Rāmachandra
12. A brief History of Hoysāla dynasty
13. A Brief History of Kākatīya

Recommended Reading

- Altekar. A.S., *The Rashtrakutas and their Times*, 1934.
Yopalau, R., *The History of the Pallavas of Kanchi*, 1928.
Majmdar R.C. and Pusalkar, A.D. (eds.) *History and culture of Indian people*, relevant Volumes, 1988.
Mishra. S.M., *Dakṣhiṇa Bhārata Kā Rajanītika Itihāsa* (Hindi), Vishwa Prakashan. 1995.
Shastri. A.M., *The Age of Satavahanas*, 2 vols., Delhi, 1999.
Shastri. K.A.N., *A History of South India* (Also in Hindi), New Delhi, 2000.
Shastri. K.A.N., *The Cholas* (Also in Hindi), Madras, 1955.
Shrivastva. B., *Dakshina Bhārata* (Hindi), Varanasi, 1992.
Yazdani. G., *The Early History of Deccan*. Vols. I and II (Hindi and English), 1982.

ELECTIVE COURSES : SPECIALIZATION

**Group- A
ARCHAEOLOGY**

Course I : World Prehistory

Unit-I. Prehistory : Scope & Methods of Study

1. Methods of Study of Prehistoric Remains: Typology; Micro-wear study; Geo-Chronological Principles
2. Stone Age technologies: Important methods of flaking
3. Main tool types of the Palaeolithic, Mesolithic and Neolithic periods

Unit-II. Hunting-gathering Stage of the Pleistocene Period

4. Origin and evolution of man : archaeological, biological and geological evidence
5. Development and expansion of Lower Palaeolithic technologies: Pebble tools and Acheulian cultures of Africa, Europe and South-east Asia
6. Mousterian Cultures : Middle Palaeolithic remains of Europe and Africa.
7. Culmination of Palaeolithic technology: the Upper Palaeolithic cultures of Europe
8. Palaeolithic cultures of India : Pebble tools and Acheulian traditions; Middle Palaeolithic cultures; Upper Palaeolithic cultures
9. Habitation tendencies of the Acheulians and the late Palaeolithic communities: rock-shelter and open air sites: Bhimbetka, Hunsgi and Paisra

Unit-III. Early Holocene hunting-gathering Stage

10. Mesolithic : Climatic changes and technological adaptation concepts; Mesolithic cultures of Europe and West Asia
11. Microlithic succession: Geo-chronology and cultural sequence of microliths in India
12. Ecological zones & Patterns of Mesolithic cultures of India : Alluvial plain-Baghor, Chopani-mando, Birbhanpur, Horse-shoe-lake sites, Sarāi-nāhar-rāi, Damdama, Mahdaha and Plateau occupation-Paisra.
13. Continuity & late survival: Sand-dune landscape adaptation-Langhnaj, Baghor; Rock-shelter sites : Adamgarh, Bhimbetka and Lahariadih

Unit-IV. Beginnings of food production: A world perspective

14. Interpretative models for the origin of food production economy
15. Origin and expansion of Neolithism: Archaeological remains of Neolithic in West Asia and Baluchistan

Unit-V. Early Farming communities of India

16. Kashmir. Gaṅgā plain, Vindhya, Kaimur foot-hills, Orissa and Assam
17. Pastoral communities of Deccan : Ash mound and village sites of Karnataka and Tamil Nadu

Recommended Reading

- Agrawal, D.P. and J. Kharakwal, *South Asian Prehistory*, Delhi, 2002.
- Allchin B. & Allchin F.R., *The Rise of Civilization in India & Pakistan*, New Delhi, 1983.
- Bhattacharya, D.K., *Emergence of Cultures in Europe*, Delhi, 1978.
- Bhattacharya, D.K., *Old Stone Age Tools*, Calcutta, 1979.
- Bordes, F., *The Old Stone Age*, London, 1968.
- Clark, J.D., *The Prehistory of Africa, Cambridge History of Africa*, Volume 1, London, 1970.
- Gamble, C., *Palaeolithic Settlement of Europe*, Cambridge, 1986.
- Ghosh, A. (Ed.), *An Encyclopaedia of Indian Archaeology*, Vols. I & II, (Relevant Portions), New Delhi, 1989.
- Jarrige, Catherine *et al.* [ed.]. *Mehargarh : Field Reports 1974-1985 From Neolithic Times to the Indus civilization*, Karachi, Pakistan, 1995.
- Jayaswal, V., "Stone Age Technologies in India". *History of Technology in India*, Vol. 1, New Delhi, 1997.
- Leakey, L.S.B., *Olduvai Gorge 1959 - 1961*, Volumes 1, Cambridge, 1965.
- Leakey, M.D., *Olduvai Gorge, Excavations in Beds I & II. 1960 - 1963*, Cambridge, 1971.
- Paddaya, K., *The Acheulian Culture of The Hunsgi Valley (Peninsular India) - A Settlement System Perspective*, Poona, 1982.
- Pant, P.C., *Prehistoric Uttar Pradesh*, Delhi, 1982.
- Pappu, Shanti, *Prehistoric Antiquities and personal Lives : the untold story of Robert Bruce Foote*, *Man and Environment*, 33 (1) : 30-50, 2008.
- Pant, P.C. & Vidula Jayaswal., *Paisra : A Stone Age Settlement in Bihar*, New Delhi, 1999.
- Relevant articles of Purattatva, Pragdhara, *Man & Environment*, Ancient India.
- Rendell, Dennell & Halim, *Pleistocene & Palaeolithic Investigations in the Soan Valley*, North Pakistan, Oxford.
- Sankalia, H.D., *Stone Tools, Their Technique & Functions*, Poona, 1982.
- Sharma, G.R. & J.D. Clark (eds.), *Palaeo-environments and Prehistory in the Middle Son Valley*, Allahabad, 1983.
- Sharma, G.R. *et al.*, *From Hunting and Food Gathering to Domestication of Plants and Animals, Beginnings of Agriculture*, Allahabad, 1980.
- Singh., Birendra Pratap, *Early Farming Communities of the Kaimur (Excavations at Senuwar 1986-87, 89-90)*, Jaipur, 2004.

- Terra H. De & T.T. Peterson. *The Studies on the Ice-Age in India & Associated Human Cultures*. Washington, 1939.
- Thapar, B.K.. *Recent Archaeological Discoveries in India*, Unesco, 1985.
- Wymer, J.J., *The Palaeolithic Age*, London, 1982, UNESCO, 1985.
- Petruglia, M.. C. Shiplon and K. Paddayya., *Life and mind in the Acheulian: a case study from India*. London.
- Pappu, R.S. and S.G. Deo., *Man-Land Relationship during Palaeolithic times in the Kaladgi Basin*. Karnatak. Pune., 1994

Course II

Protoshistoric and Early Historic Archaeology of the Indian Subcontinent

- Unit-I. Beginning & Early phase of Copper-Bronze Age**
1. Village communities of North, North-West : Pre- and Early Harappan Cultures of Baluchistan, Afghanistan and Sindh
 2. Pre-early Harappan Cultures of Haryana-Punjab and Rajasthan
- Unit-II. Urban trends in Bronze Age**
3. Bronze Age Urbanization: Concept and theories
 4. Indus-Saraswati Valley Civilization: Origin, extent, chronology, main characteristics, Settlement and town planning, Technologies, Trade & commerce, Script, Religion and State
 5. Decline: Theories of urban decline, Harappan culture in Gujarat and Saurashtra. Late Harappan Cultures in Punjab and Haryana
- Unit-III. Non-Urban Copper using Cultures**
6. Chalcolithic Cultures of Rajasthan
 7. Chalcolithic Cultures of Madhya Pradesh
 8. Chalcolithic Cultures of Maharashtra
 9. Chalcolithic Cultures of U.P., Bihar and Bengal
 10. The Copper using itinerant communities of the Gangetic Plains: Copper hoards and Ochre Colour Pottery
- Unit-IV. Early Iron Age Culture**
11. Early Iron Age Cultures of North India: Painted Grey Ware Cultures, Extent, Chronology, settlement pattern and authorship
 12. Megalithic Culture : Types and Material remains
- Unit-V. Concept and Theories of Iron Age Urbanization**
13. Northern Black Polished Ware Culture, extent, chronology and characteristic traits
 14. Rise of cities in the Gangetic plain

Recommended Reading

- Agrawal, D. P. & Chakrabarti, D. K. (eds.), *Essays in Indian Protohistory*, Delhi, 1979.
- Agrawal, D. P., *Archaeology of India*, New Delhi, 1982.
- Agrawal, D.P. & J.S. Kharkwal., *Bronze Age and Iron Age in South Asia*, New Delhi, 2003.
- Allchin, B. & Allchin F. R., *The Rise of Civilisation in India and Pakistan*, London, 1982.
- Allchin, F.R., *The Archaeology of Early Historic South Asia : Emergence of City and States*, Cambridge, 1995.
- Also Relevant articles/communications in *Purātattva, Man and Environment, Pragadhara, Ancient India and Indian Archaeology-A Review*.
- Asthana, Shashi, *Pre-Harappan Cultures of India and the Borderlands*, New Delhi, 1985.
- Chakrabarti, D. K., *The Early use of Iron in India*, Oxford University Press, 1992.
- Dhavalikar, M. K. , H. D. Sankalia and Z. D. Ansari, *Excavations at Inamgaon*, Pune, 1988.

- Dhavalikar, M.K., *Indian Proto-history*, New Delhi, 1997.
- Gaur, R. C., (ed.), *Painted Grey Ware*, Jaipur, 1994.
- Gaur, R.C., *Excavations at Atranjikhhera*, Delhi, 1983.
- Ghosh, A. (eds), *An Encyclopedia of Indian Archaeology*, Vols. 1 & 2, New Delhi, 1989.
- Ghosh, A. *The City in Early Historical India*. Shimla, 1973.
- Jarrige, Catherine *et al.* (eds.), *Mehrgarh, Field Reports 1974-1985. From Neolithic Times to the Indus civilization*, Karachi, 1995.
- Joshi, Jagat Pati. *Harappan Architecture and Civil Engineering*, Rupa and Co. New Delhi, 2008.
- Lal, B.B., *Excavation at Sringverapura, 1977-86*. Archaeological Survey of India. New Delhi, 1993.
- Chakrabarti, D.K., *Oxford Companion to Indian Archaeology*. OUP, New Delhi, 2007
- Lal, B. B. and S. P. Gupta (eds.), *Frontiers of Indus Civilisation*, New Delhi, 1984.
- Lal, B.B., *The Earliest Civilization of South Asia*, New Delhi, 1997.
- Lal, B.B., *How Deep are the Roots of Indian Civilization ? Archaeology Answers*, Aryan Books International, New Delhi, 2009.
- Marshall, J., *Mohenjo-daro and the Indus Civilisation*, Delhi-Varanasi, 1983.
- Narain, A. K. *et al.* *Excavations at Rajghat*, B. H. U. , 1976 & 1977.
- Possehl, Gregory (ed.), *Ancient Cities of the Indus*, Delhi, 1979.
- Possehl, Gregory (ed.), *Harappan Civilization*, Delhi, 1982.
- Rao, S. R., *Lothal. A Harappan Port Town-1955-62*, A. S. I., New Delhi, 1985.
- Sali, S. R., *Daimabad, 1976-79*, A.S.I., New Delhi, 1986.
- Sankalia, H.D. *et al.*, *Chalcolithic Navdatoli*, Pune, 1971.
- Sharma, G.R., *The Excavations at Kausambi (1949-50)*, Delhi, 1969.
- Singh, B.P., *Early Forming Communities of the Kaimur (Excavations at Senuwar 1986-87, 89-90)*, Jaipur, 2004.
- Singh, Birendra Pratap, *Life in Ancient Varanasi : An account based on Archaeological Evidence*. Delhi, 1985.
- Sinha, B.P. & S.R. Roy, *Vaisali Excavations 1958-62*, Patna, 1969.
- Sinha, K.K., *Excavations at Sravasti, 1959*, Varanasi.
- Tripathi, Vibha., *The Age of Iron in South Asia : Legacy and Tradition*. Delhi, 2001.
- Tripathi, Vibha., *The Painted Grey Ware and Iron Age Culture of Northern India*. Delhi, 1976.
- Chakrabarti, D.K., *India An Archaeological History*, Oxford University Press New Delhi, 2010.
- McIntosi, Jane R., *The Ancient Indus Valley, New Perspectives* : California, 2008.
- Ratnagar, Shereen. R., *Understanding Harappa, Civilization in the Greater Indus Valley*. Tulika. New Delhi, 2001.
- Kenoyer, Jonathan Mark., *Ancient Cities of the Indus Valley Civilization*. Karachi . Oxford University Press and American Institute of Pakistan Studies, 1998.
- Singh, Upinder, *A History of Ancient and Early Medieval India*, Delhi, 2009.
- Lal, B.B., *The Saraswati Flows on : The continuity of Indian Culture*. Aryan Books International, New Delhi, 2002.
- Agrawal, D.P., *Ancient Metal Technology and Archaeology of South Asia : A pan-Asian Perspective*, Aryan Books International, New Delhi, 2000.
- Tripathi, Vibha and Ajeet K. Srivastava, *The Indus Terracottas*, Sharada Publishing House, New Delhi, 1994.
- Singh, Purushottam, *Archaeology of Middle Ganga Plain*, New Delhi, 2010.

Course ~~IV~~

Principles & Methods of Archaeology

Unit-I. History & Growth of Archaeology

1. History of archaeology from 19th century till the present: Development of field techniques; growth of archaeology as scientific discipline
2. History of Indian archaeology: From A. Cunningham to M. Wheeler
3. Archaeology of Post Independence India: contribution of institutions and individuals

Unit-II. Methods of data retrieval

4. Field discoveries: Aims and methods of Explorations, Chance discoveries. Map and satellite image studies; Village to village survey
5. Unearthing the sites: Planning excavations, Layout, Techniques of Excavations— Vertical and Horizontal
6. Excavation of sites : rock-shelter, burial, city and others
7. Retrieval of botanical & other non-artifactual remains : Floatation technique. Nitrogen analysis, soil analysis and Phosphate chemical tests
8. Under water archaeology: Indian studies

Unit-III. Chronology & dating methods

9. Stratigraphy: Principles of stratification; Factors and process of formation of layers; Identification & recording of strata; Reconstruction of culture sequence
10. Methods of Relative chronology: Typology; Statistical studies
11. Absolute methods of dating : Radiocarbon, Potassium-argon, Thermoluminescence, Pollen analysis, Fluorine test, Obsidian hydration and Dendro Chronology

Unit-IV. Documentation & Reconstruction of the past

12. Recording of the excavated remains : Antiquities, Coding of sites. Marking of findings. Preparation of sections and Three dimensional recording
13. Classification of artifacts and other methods of recording details of studied sites
14. Models and approaches: Site formation process ; Site catchment
15. Analysis; Settlement studies; Ethno-archaeology
16. New Archaeology: Main trends and it's application in India
17. Preparation of the reports of the archaeological discoveries
18. Principles of Conservation and Preservation of archaeological. structures & artifacts

Unit-V. Practical

19. Methods of recording the contexts of excavated remains
20. Determining the chronology and periods of the excavated remains
21. Drawing and photography of artifacts, architectural remains and other excavated contexts

Recommended Reading

- Atkinson, R.J.C., *Field Archaeology*, London, 1952.
Binford, L. R. , *An Archaeological Perspective*, London, 1972.
Brill, Robert H. (ed.), *Science and Archaeology*, Cambridge, 1971.
Brothwell, D. R. & S. E. Higgs (eds.), *Science in Archaeology*, London, 1969.
Chang, K. C., *Settlement Archaeology*, Palo Alto, Caligo, 1968.
Clark, D. L., *Models in Archaeology*, London, 1972.
Clark, David, *Analytical Archaeology*, London, 1968.
Daniel, G. A., *Hundred Years of Archaeology*, London, 1950.
Daniel, G., *The Origin and Growth of Archaeology*, London, 1967.

- Green Kevin B.T., *Archaeology An Introduction*, London, 1983.
 Piggott, S., *Approach to Archaeology*, New-York, 1965.
 Rajan K., *Archaeology Principles and Methods*, Manoo Pathippakam, Thanjavur, 2002.
 Sankalia, H. D., *New Archaeology, Its Scope and Application in India*, Lucknow, 1977.
 Srivastava, K. M., *New Era of Indian Archaeology*, New Delhi, 1982.
 Tripathi, Sila, *Maritime Archaeology for Beginners*, Kaveri Books, New Delhi, 2009.
 Wheeler, M., *Archaeology from Earth*
 Yellen, John., *Archaeological Approaches to the Present*, New York, 1977.

Course **VI**

Environmental Archaeology & West Asian Archaeology

Unit-I. Introduction

1. A brief account of history of evolution of earth
2. The Human Era-Quaternary : Pliocene – Pleistocene boundary and divisions
3. Main climatic features of Pleistocene and Holocene

Unit-II. Principles of Quaternary Stratigraphy

4. Formations : Morains, River terraces, Loess, Frost Soil and Sand dune
5. Soils : definition, building process and types
6. Palaeo - Zoology and Pleistocene climate
7. Palaeo - Botany and Pleistocene climate

Unit-III. Climatic reconstruction of Stone Age

8. Pleistocene climate of Europe : Ice Age cycles
9. Pleistocene & early Holocene climate of Africa : Pluvial cycles
10. Quaternary evidence of India : Belan Valley, Sohan Valley, Son Valley, Narmada Valley and Didwana

Unit-IV. West Asian Archaeology

11. Earliest Settlements (9th -5th millennium B.C.) : A brief outline of the Early Village Farming Communities
12. Important sites : Jericho, Jarmo, Catal Hüyük, Cayonu, Tepe Guran, Hacilar and Gyan

Unit -V. Chalcolithic Cultures of West Asia

13. Chalco Cultures of Iraq : Hassuna, Samarra, Halaf, Ubaid & Jamdet Nasr Cultures; Uruk
14. Chalcolithic Cultures of Iran: Type Yahya, Shahar-I-Sokhta, Sialk and Hissar
15. Pre-Dynastic Archaeology of Mesopotamia : Sumerian Origins, Rise of Early-states and Trade contacts with Indus Valley

Recommended Reading

- Butzer, K.w., *Environment and Archaeology*, Chicago, 1964.
 Burroughs, William J., *Climate Change in Prehistory*, Cambridge, 2005.
 Edwards, Gadd and Hammond (eds.), *The Cambridge Ancient History*, Vol. I, Part-I, Chapters VII, VIII and IXB, Cambridge University Press, 1970.
 Ehrlich, R.W. (ed.), *Chronologies in the Old World Archaeology*, Chicago & London, 1965.
 Mallowan, M.E.L., *Early Mesopotamia and Iran*, London, Thames & Hudson, 1965.
 Mc Cown, D.F., *The Comparative Stratigraphy of Early Iran*, SAOC No. 23, Chicago University Press, 1968.
 Mellaart, James., *The Neolithic of the Near East*, London, Thames & Hudson, 1975.
 Pant, P.C., *Prehistoric Uttar Pradesh*, Delhi, 1982.

- Pant. P.C. and V. Jayaswal, *Paisra : The Stone Age Settlement in Bihar*, Delhi, 1991
- Perkins, A.L., *The Comparative Archaeology of Mesopotamia*, SOAC No. 25 Chicago University Press, 1968.
- Relevant articles of *Puratattva*, *Pragdhara*, *Man & Environment* and *Ancient India*
- Rendell. Dennell, & Halim., *Pleistocene and Palaeolithic Investigations in Soan Valley: North Pakistan*. Oxford, 1989.
- Sharma. G.R. & J.D Clark (eds.), *Palaeo-environments and Prehistory in the Middle Son Valley*. Allahabad, 1983.
- Singh, P., *Neolithic Culture of Western Asia*, 1974 Seminar Papers, London. New York Terra H. De & T.T. Paterson.. *The Studies in the Ice-Age in India and Associated Human Cultures*, Washington. 1939.
- Zeuner, F.E., *The Pleistocene Period, its Climate, chronology and faunal successions*. London, 1959.
- Sankhayan, A.R., *New fossils of early stone Age from central Narmada valley*, current, 88 (5) : 7047. 2005.
- Ganjoo. R.K., "The Plio-Pleistocene Boundary in India : A Re-appraisal". *Man and Environment*, 15 : 29-34, 1990.
- Kajale, M.D., *Some Initial Observations on Palaeobotanical Evidence for Mesolithic plant Economy from excavation at Damdama, Pratapgarh, Uttar Pradesh, Santiniketan*. 1990.

Group- B

ART & ARCHITECTURE

Course I

Historical Account of Early Indian Architecture

- Unit-I. Terminologies and methods of study**
1. Understanding architecture : Plan, Elevation and Section, Arches, Vaults, Domes, Pillars and Capitals
 2. Types of Architecture : Secular and Religious
- Unit-II. Proto-historic to Mauryan Period**
3. Town-Planning and Architecture of Harappa, Mohenjodaro, Kalibangan and Lothal
 4. Glimpses of Architecture as depicted in Vaidika Literature
 5. Town-planning as depicted in Sanskrit Literature with special reference to Kautilya's *Arthashastra*
 6. Mauryan town - planning & architecture : Pataliputra & Rajagrh
- Unit-III. Origin and Evolution of Stupa architecture**
7. Characteristic features of North Indian Stupa architecture
 8. Bharhut
 9. Sanchi
 10. Mathura and Sarnath
- Unit-IV. Stupa of Deccan and South India**
11. Amaravati
 12. Nagarjunakonda
 13. Sannati
- Unit-V. Origin and Development of Rock-Cut Architecture**
14. Barabar - Nagarjun Caves

15. Hīnayāna Vihāra and Chaityagr̥ha
16. Mahāyāna Vihāra and Chaityagr̥ha
17. Brahmanical Caves—Ellora and Elephanta
18. Jaina Caves— Orisa (Udayagiri and Khandāgiri) and Ellora

Recommended Reading

- Agrawala, P. K., *Prāchīna Bhāratīya Kalā evam Vāstu*, Varanasi, 2002.
- Agrawala, V. S., *Heritage of Indian Art*, New Delhi, 1964.
- Agrawala, V. S., *Studies in Indian Art*, Varanasi, 1965.
- Brown, P., *Indian Architecture (Buddhist and Hindu Period)*, Vol. I. (Relevant portions), Bombay, 1971.
- Fergusson, J., *History of Indian and Eastern Architecture*, Delhi, 1994.
- Harle, J. C., *Art & Architecture of the Indian Subcontinent*, London, 1986.
- Majumdar, R.C. (ed.), *History and Culture of Indian People*, (Relevant Volumes and Chapters), Bharatiya Vidya Bhavan Series, Bombay, 1984, 1988, 1989.
- Rowland, B., *Art & Architecture of India*, Harmondsworth, 1970.

Course III

Historical Account of Indian Sculpture and Painting upto Gupta

Unit-I. Understanding Art

- ✓ 1. Types, medium, factors contributing to art activities and principles of appreciation
2. Introduction to rock-paintings, Symbols & Symbolism in Indian art

Unit-II. Proto-historic to Mauryan Period.

3. Indus Valley Sculpture : Stone, Terracotta and Metal figures
4. Seals and Sealings
5. Terracotta Art of Early Historic period
6. Mauryan Pillar-Capital Figures
7. Early Yaksha Statues

Unit-III. Suṅga & Sātavāhana Art

8. Sculptures of Bharhut, Bodhgayā and Sanchi
9. Suṅga Terracotta
10. Sculpture of Amaravati, Jaggayapeta and Nāgārjuna

Unit-IV. Art of Kuṣāṇa Period

11. Mathurā school of Kuṣāṇa Sculpture
12. Gāndhāra school of Kuṣāṇa Sculpture
13. A brief survey of Kuṣāṇa Terracottas

Unit-V. Gupta Period

14. Stone Sculpture : Styles of Mathurā, Sarnath and Udayagiri ✓
15. Terracotta— A brief survey
16. Metal figures
17. Cave Paintings of Ajanta and Bagh

Recommended Reading

- Agrawala, P. K., *Prāchīna Bhāratīya Kalā evam Vāstu*, Varanasi, 2002.
- Agrawala, P.K., *Gupta-kālīna Kalā evam Vāstu*, Varanasi, 1994.
- Agrawala, V. S., *Heritage of Indian Art*, New Delhi, 1964.
- Agrawala, V. S., *Indian Art (Also in Hindi)*, Varanasi, 1965, (Reprint edns.)
- Agrawala, V. S., *Studies in Indian Art*, Varanasi, 1965.
- Coomarswamy, A.K., *History of Indian and Indonesian Art*, London, 1927
- Grunwedel, *Buddhist Art of India*, New Delhi, 1972.

- Harle, J. C., *Art and Architecture of the Indian Subcontinent* (Pelican Art History Series), London, 1986.
- Kramrisch, S., *Indian Sculpture*, Calcutta, 1933 (Reprint edn.)
- Majumdar, R. C. & A.D. Pusalkar (eds.), *History and Culture of Indian People*, Bharatiya Vidya Bhavan Series, Vols.I to IV (Relevant portions), Bombay, 1980-1989.
- Rowland, Benjamin, *The Art & Architecture of India*, London, 1970.
- Ray, N.R., *Maurya & Sunga Art*, Calcutta, also Hindi version.
- Saraswati, S.K., *A Survey of Indian Sculpture*, Calcutta 1956, (Reprint edn.),
- Sivaramamurti, C., *Indian Painting*, Delhi, 1970, 2nd edn. 1996.
- Sivaramamurti, C., *Indian Sculpture*, Delhi, 1961.

Course ~~IV~~

Sculptural Styles & Iconography of Early Medieval India

- Unit-I. North Indian Styles**
1. Pāla (including bronzes)
 2. Chandella
 3. Orissa
- Unit-II. South Indian Styles**
4. Chālukya
 5. Pallava (including Bronzes)
 6. Rāṣṭrakūṭa
 7. Chola (including bronzes)
- Unit-III. Iconography of Major Hindu Deities**
8. Śiva
 9. Viṣṇu
- Unit-IV. Iconography of Minor Deities**
10. Devī
 11. Sūrya
 12. Gaṇeśa
 13. Kārttikeya
- Unit-V. Iconography of Buddhist & Jaina Deities**
14. Dhyānī Buddhas
 15. Avalokiteśvara
 16. Prajñāpāramitā
 17. Tārā
 18. Main features of the Tīrthānkara Images

Recommended Reading

- Agrawala, V. S., *Heritage of Indian Art*, New Delhi, 1964.
- Agrawala, V. S., *Studies in Indian Art*, Varanasi, 1965.
- Agrawala, P. K., *Prāchīna Bhāratīya Kalā evaṃ Vāstu* (Hindi), Varanasi, 2002.
- Banerjea, J. N., *Development of Hindu Iconography*, Calcutta, 1956.
- Bhattacharya, B., *The Indian-Buddhist Iconography*, New Delhi, 1990.
- Bhattacharya, B.C., *Jain Iconography*, Delhi, 1974.
- Coomarswamy, A. K., *History of Indian and Indonesian Art*, London, 1927.
- Gopinath Rao, T.A., *Elements of Hindu Iconography*, New Delhi, 1985.
- Harle, J. C., *Art and Architecture of the Indian Subcontinent* Pelican Art History Series, London, 1986.
- Joshi, N. P., *Prāchīna Bhāratīya Mūrti Vijñāna*. (Hindi), Patna, 1977.

- Kramersch, S., *Indian Sculpture*. Calcutta, 1933.
 Majumdar, R. C. & A.D. Pusalkar (eds.), *History and Culture of Indian People*. Bharatiya Vidya Bhavan Series, Vols. I to IV (Relevant portions, 1980-1989.
 Rowland, Benjamin, *The Art & Architecture of India*, London, 1970.
 Sivaramamurti, C., *Indian Sculpture*, Delhi, 1961.

Course II

Origin & Development of Ancient Indian Temples

Unit-I. Origin & Development of early temples

1. Introduction: Terminologies, architectural components, medium and techniques of construction
2. Main styles of temples : Nāgara, Vesara and Drāviḍa
3. Gupta Temples

Unit -II. Temples of North India

4. Temples of Khajurāho
5. Temples of Orissa

Unit -III. Temples of Western -India

6. Temples of Osian
7. Vimalavasahī and Lūṇavasahī of Abu
8. Sun Temple of Modhera
9. Ajitanātha Temple of Taranga

Unit -IV. Temples of South-India

10. Early Chalukyan Temples of Aihole, Badami and Pattadakal
11. Rāṣṭrakūṭa Temples—Kailāsa Temple of Ellora
12. Pallava Rathas and Structural Temples
13. Chola Temples

Unit-V. Practical-Preparation of Plan and Elevation of Architecture, iconographical and stylistic Identification of the Terracotta and Sculpture

Recommended Reading

- Agrawal, P. K., *Gupta Temple Architecture*, Varanasi, 1981.
 Agrawal, P. K., *Guptakālīna kalā evam Vāstu* (Hindi.), Varanasi, 1994.
 Cousens, H., *The Chalukyan Architecture of the Kanarese Districts*, Calcutta, 1926.
 Krishna Deva, *The Temples of North India*, New Delhi, 1969.
 Krishna Deva, *Temples of India*, 2 vols., Delhi, 1994.
 Dhaky, M.A., "Choronology of the Solanki Temples of Gujarat", *Journal of the Madhya Pradesh Itihas Parishad*, No. 3.
 Harle, J.C., *Art & Architecture of the Indian subcontinent.*, Pelicon Art History Series, London, 1986.
 Kramersch, S., *Hindu Temple*, Vols. I & II, Calcutta, 1946.
 Meister, M. W. et al., *Encyclopaedia of Indian Temple Architecture*. Relevant Volumes and Chapters. New Delhi, 1983 to 1988.
 Singh, H., *Jaina Temples of Western India*, Varanasi, 1982.
 Srinivasan, K. R., *Temples of South India*, New Delhi, 1972.

Group – C

EPIGRAPHY & PALAEOGRAPHY

Course I

Beginnings of Indian Script and Epigraphs

Unit-I. Introduction

1. Meaning and scope of Palaeography & Epigraphy
2. Epigraphy as a source of History
3. Types of Records
4. A comparative assessment with other sources
5. Historiography

Unit -II. Origin and antiquity of writing

6. Origin of script and antiquity of writing
7. Literary evidence regarding writing in Ancient India.

Unit-III. Origin of Indian scripts and seals

8. The Indus script: concept and problems of decipherment and the possible linkage with the Brāhmī script
9. Nature of the Brāhmī script and theories regarding its origin
10. Origin and development of the Kharoṣṭhī script

Unit-IV. Materials, Types and Techniques of making records

11. Materials of writing : medium and tools of writing
12. Types of Records
13. Techniques and preservation of records

Unit -V. Decipherment of Early Brāhmī Inscription and their significance

14. Rarli inscription
15. Sohagaurā copper plate inscription, Sircar, SI, Book 1, No. 47
16. Mahāsthāna Fragmentary inscription, Sircar, SI, Book 1, Nō. 45
17. Piprahavā Buddhist Vase inscription, Sircar, SI, Book 1, No. 46

* Students are required to decipher & transcribe the prescribed inscriptions.

Recommended Reading

- Bajpai, K.D. et al., *Aitihāsika Bhāratīya Abhilekha* (Hindi), Jaipur, 1992.
Buhler, G., *Indian Palaeography*, Calcutta, 1959.
Dani, A.N., *Indian Palaeography*, London, 1963.
Dasgupta, C.C., *The development of Kharosthi Script*, Calcutta, 1958.
Diringer, David., *The Alphabet*, London, 1947.
Goyal, S.R., *Prāchīna Bhāratīya Abhilekh Saṅgraha* (Hindi), Jaipur, 1982.
Gupta, P.L., *Prāchīna Bhārata Ke Pramukh Abhilekha*, Khand I (Hindi), Varanasi, 1982.
Narain, A.K. and Verma, T.P., *Prāchīna Bharatiya Lipiśāstra aurā Abhilekhikī* (Hindi), Varanasi, 1972.
Ojha, G.H., *Bhāratīya Prāchīna Lipimālā* (Hindi), New Delhi, 1971.
Sircar, R.B., *Indian Palaeography*, Varanasi, 1969.
Sircar, D.C., *Select Inscriptions*, Vol. I, Calcutta, 1965.
Sircar, D.C., *Indian Epigraphy*, Varanasi, 1965.
Verma, T.P., *The Palaeography of Brāhmī Script in Northern India*, Varanasi, 1971.

Course II

Scripts and Epigraphs from Maurya to Kuṣāṇa Period

Unit-I. Introduction

1. Geographical background
2. General features of Maurya to Kuṣāṇa Epigraphs
3. Development of Scripts : Maurya to Kuṣāṇa

Unit II. Eras and Dating System

4. Vikram Samvat
5. Śaka Samvat

Unit III. Decipherment and Historical significance of Aśokan Epigraphs

6. Bairāt Edict, Sircar, SI, Book 1, No. 37
7. Twelfth Rock edict, Sircar, SI, Book 1, No. 17
8. Thirteenth Rock edict, Sircar, SI, Book 1, No. 18 .
9. First separate Rock edict (Dhauri Version). Sircar, SI, Book 1, No. 20

Unit IV. Decipherment and Historical Significance of Chedi, Sātavāhana and Ikṣvāku Epigraphs

10. Hāthigūphā inscription of Khāravēla, Sircar, SI, Book II, No. 31
11. Nāsik inscription of Vāsiṣṭhīputra Pulumāvi, Sircar, SI, Book II, No. 86
12. Nāgārajunikoṇḍa inscription of Vīrapuruṣadatta, Sircar, SI, Book II, No. 100

Unit V. Decipherment and Historical Significance of Śaka and Kuṣāṇa Inscriptions

13. Taxila Plate of Patika, Sircar, SI, Book II, No. 27
14. Shinkota steatite casket inscription, Sircar, SI, Book II, No. 14
15. Nasik cave inscription of the time of Nahapāna, Sircar, SI, Book II, No. 59
16. Junagarh inscription of Rudradāman, Sircar, SI, Book II, No. 67
17. Rābtaka inscription of Kaniṣka year Ist, Indian Museum Bulletin, Kolkata, 1995
18. Mathura inscription of Hūviṣka -Year 28, Sircar, SI, Book II, No. 49

* Students are required to decipher & transcribe the prescribed Brāhmī inscriptions only.

Recommended Reading

- Buhler, G., *Indian Palaeography*, Calcutta, 1959.
Dani, A.H., *Indian Palaeography*, London, 1963.
Dasgupta, C.C., *The Development of Kharosthi Script*, Calcutta, 1958.
Goyal, S.R., *Prāchīna Bhāratīya Abhilekha Sangraha* (Hīndī), Jaipur, 1982.
Gupta, P.L., *Prāchīna Bharata Ke Pramukha Abhilekh*, Khand-I (Hīndī), Varanasi, 1982.
Ojha, G.H., *Bhāratīya Prāchīna Lipimālā* (Hīndī), New Delhi, 1971.
Pandey, R.B., *Indian Palaeography*, Varanasi, 1969,
Sircar, D.C., *Select Inscriptions*, Vol. I, Calcutta, 1965.
Verma, T.P., *The Palaeography of Brahmi Script in Northern India*, Varanasi, 1971.

Course III

Scripts and Epigraphs of Guptas and Vākātakas

Unit-I. Introduction

1. Geographical Background
2. General features of Gupta and Vākāṭaka Epigraphs

Unit-II. Development of Scripts

3. Gupta Brāhmī
4. Vākāṭaka Brāhmī

Unit-III. Eras and Dating system

5. Dating Methods
6. Eras used in inscriptions: Gupta and Kalchuri Samvat

Unit-IV. Decipherment and Historical Significance of Gupta and Vākāṭaka inscriptions

8. Allahabad Pillar Inscription of Samudragupta, Sircar, SI, Vol. I. Book-III No. 2
9. Udaigiri Cave Inscriptions of the time of Chandragupta II., SI, Vol. I., Book-III, No. 10-11
10. Mandsaur stone inscription of the time of Kumāragupta and Bandhuvarman, Sircar, SI., Vol. I, Book-III, No 24
11. Junagarha Stone Inscription of Skandagupta, Sircar, SI, Vol. I, Book-III, No. 25
12. Kahaum Stone Pillar Inscription of the time of Skandagupta, Sircar. SI, Vol. I. Book III, No.26
13. Poona Copper Plates of Prabhāvatīguptā, Sircar, SI, Vol. I, Book III, No. 60
14. Siwani Copper Plates of Pravarsena II, CII, Vol. III, No. 56.

Unit-V. Practical

* Students are required to decipher and transcribe the prescribed inscriptions and the epigraphs of different periods and also take *Stam page* of inscriptions.

Recommended Reading

- Agrawala, P.K., *Imperial Gupta Epigraphs*, Varanasi, 1983.
Bajpai, K.D. et al., *Aitihāsika Bhāratīya Abhilekh*, Jaipur, 1992.
Buhler, C., *Indian Palaeography*, Calcutta, 1959.
Dani, A.H., *Indian Palaeography*, London, 1963.
Fleet J.F., *Inscriptions of the Early Gupta Kings and their successors. Corpus Inscriptionum Indicarum*, Vol. III, 1881.
Goyal S.R., *Guptakālīna Abhilekh* (Hindi), Jodhpur, 1984.
Gupta, P.L., *Prāchīna Bharata Ke Pramukha Abhilekha*, Part II, Gupta Period, Varanasi, 1983.
Ojha, G.H., *Bhāratīya Prāchīna Lipimālā* (Hindi), New Delhi, 1971. (Reprint).
Sircar D.C., *Studies in Indian Epigraphy*, Varanasi, 1965.
Sircar, D.C., *Select Inscriptions*, Vol. I, Calcutta, 1965

Course IV

Scripts and Epigraphs of Post Gupta and Early Medieval Period

Unit I. Introduction

1. Geographical background
2. General features of Post Gupta and early medieval Epigraphs

Unit II. Development of Scripts

3. Kuṭīla Script
4. Proto-Nāgarī and Nāgarī Script

Unit III. Historical significance of Inscriptions of Later Gupta, Maukhari and Aulikara

5. Harahā Inscription of Īsānavarman, E.I. XIV, No. 5
 6. Aphaṣṭ Inscription of Ādityasena, CII, Vol. III, No. 42
 7. Mandsaur stone Pillar Inscription of Yāsodharmana, C11, Vol. III, No. 33
 - Unit IV. Inscriptions of Puṣyabhūti, Chālukyas of Badāmi**
 8. Bānskhera Plates of Harṣa, EI, IV, No. 1
 9. Aihole Inscription of Pulakeśin II, EI, VI, No. 1
 - Unit V. Inscriptions of Early Medieval Period**
 10. Gwalior Inscription of Mihirabhoja, EI, XVIII, No. 13
 11. Khajurāho inscription of Dhangdeo, EI
 12. Udaipur Praśasti of Udayāditya, EI, I
 13. Khālimpur Inscription of Dharmapāla, EI, IV
 14. Sanjan copper plates of Amoghavarṣa, EI, XVIII
- * Students are required to decipher & transcribe the prescribed inscriptions of Unit Nos. III & IV.

Recommended Reading

- Buhler G., *Indian Palaeography*, Calcutta, 1959.
- ✓ Dani A.H., *Indian Palaeography*, London, 1963.
- Ojha, G.H., *Bhāratīya Prāchīna Lipimālā* (Hindi), New Delhi, 1971 (Reprint).
- Sircar, D.C., *Indian Epigraphy*, Varanasi, 1965:
- Sircar D.C., *Select Inscriptions*, Vol. II, Calcutta, 1983.
- Epigraphia Indica*, Relevant Volumes.
- Goyal S.R., *Maukharī-Puṣyabhūti-Chālukya Yugīna Abhilekha* (Hindi), Jodhpur, 1993.
- Bajpai, K.D. et al., *Aitihāsika Bhāratīya Abhilekha*, Jaipur, 1992.
- Terivedi, H.C.V., *Inscriptions of the Paramāras, Chandellas Kachhhapaghūtas and Two Minor Dynasties* (In Three parts).

Group-D

NUMISMATICS

Course I

Numismatography and Beginning of Coinage

Unit-I: Introduction

1. Definition of Numismatic and scope
2. Origin and evolution of coinage in India
3. Coins as source of History
4. The role of Monetisation

Unit-II: Nomenclature, Minting Right and Techniques of Coin making

5. Terminology used in Numismatic studies
6. Types and classification of hoards and stray finds
7. Right of Minting coins
8. Techniques of coin-making

Unit-III: Early Indian Coins

8. Punchmarked coins
9. Distribution
10. Chronology & Dating
11. Symbols

12. Classification
13. Cast Coins and Die struck coins
- Unit-IV: Local Coins
14. Taxilā Coins
15. Kauśāmbī coins
16. Ayodhyā coins
17. Pāñchāla Coins
- Unit-V. Coins of tribals and other Local Rulers

18. Audumbara Coins
19. Yaudheya Coins
20. Mālava Coins
21. Kuṇinda Coins
22. Ārjunāyana Coins
23. Coins of Maghas
24. Coins of Nāgas

* Students are required to identify coins prescribed above.

Recommended Reading

- "A Comparative Study of the Patraha (Purnea) Hoard of Silver Punch-marked Coins", *JNSI*, IV.
- "Punch-marked Coins from Taxila", *MASI*, 59.
- Allan, J., *Catalogue of the Indian Coins in the British Museum*. London, 1914.
- ✓ Altekar, A. S., "Origin and Early History of Coinage in Ancient India", *JNSI*, XV. pp. 1-26.
- Bela Lahiri., *Indigenous States of Northern India*, 1974.
- Bhandarkar. D. R., *Carmichael Lectures on Ancient Indian Numismatics*, Calcutta, 1921.
- Bhattacharya, P. N., "A Hoard of Silver Punch-marked coins from Purnea", *MASI*, 62, Delhi, 1940.
- ✓ Chakraborty, S. K., *A Study of Ancient Indian Numismatics*, Calcutta, 1973.
- ✓ Chattopadhyay, B., *The Age of the Kushanas : A Numismatic Study*, Calcutta, 1977.
- Cunningham, A., *Coins of Ancient India*, Varanasi, 1974.
- Dasgupta, K. K., *A Tribal History of Ancient India , A Numismatic Approach*..Calcutta. 1974.
- Durga Prasad., "Silver punch marked coins of Ancient India" *NS*, 45 & 45.
- ✓ Goel, S.R., *Coinage of Ancient Indian*, Jodhapur, 1995..
- Gopal, L., "The right of minting coins in ancient India", *JNSI*, XXII.
- Gupta, P. L. and Hardaker, T.R., *Ancient Indian Silver Punch-marked Coins of the Magadh – Maurya Karshapana Series*, Nasik, 1985.
- Gupta, P. L., *The Amaravati Hoard of Silver Punch-marked coins*, Hyderabad, 1963.
- Gupta, P.L., *Coins – The Source of Indian History*. Delhi. 1969.
- Gupta, P.L., *Bhārata ke pūrvakālik Sikke*, 1996.
- Kosambi, D D., *Indian Numismatics*, Delhi, Orient Longman, 1981.
- Narain A. K. & Gopal, L. (eds.), *Seminar papers on the Chronology of Punch-marked Coins*. Varanasi. 1966.
- Narain, A. K. Seminar Papers on the Local Coins of Northern India, Varanasi, 1968.
- Prasad, D. "Classification and Significance of the symbols on the silver Punch-marked coins of Ancient India", *JNSI*, XIV and XLVII.
- Shastri. A.M. *Kausambi Hoard of Magha Coins*, Nagpur, 1979.
- Shastri., A.M., *Catalogue of the coins of the Maghas*, 1979.
- Singh, J. P. and N. Ahmad, *Seminar Papers on the Tribal Coins of Ancient India*, Varanasi, 1977.
- Thaplayal K.K., *Studies in Ancient Seals*, Lucknow, 1972.
- Trivedi, H.V., *Catalogue of the Coins of the Naga Kings of Padmavati*, Gwalior, 1957.

Walsh, E. H. C. "Punch-marked Silver Coins, Their Standard of Weight. Age and Minting".
JRAS, 1937.

Walsh, E. H. C. "Paila Hoard of Punch-marked coins", *JNSI*, II.

Course II

Coinage of Rulers of Foreign Origin

Unit-I. Introduction

1. History of Numismatic studies
2. Chief characteristics of coins
3. Importance of coins for reconstruction of History
4. A brief survey and significance of Seals and Sealings

Unit-II. Indo-Greek and Roman Coins

5. Coins of Indo-Greek Rulers : Euthydemus, Demetrius, Eucratides, Diodotus, Menander, Agathacles and Strato; Commemorative and joint issues
6. Roman Coins

Unit-III. Coinage of Śakas, Pahlavas and Western Kṣatrapas

7. Mathura
8. Ujjaini
9. Maharashtra
10. Taxila
11. Coins of Pahlavas

Unit-IV. Kuṣāṇa Coins -A

12. Kujul Kadphises
13. Vim Kadphises
14. Problem of Sotar Megas
15. Kanishka I

Unit V. Kuṣāṇa Coins- B

16. Huviṣka
17. Vāsudeva
18. Kidāra Kuṣāṇa

* Students are required to identify coins prescribed above and may be taken for study tour to visit various museums

Recommended Reading

Gardner P., *Cat of the Coins in British Museum, Greek & Suthik Kinsof Bectria & India*, 1886.

Bopearachchi, O., *Indo-Greek, Indo-Scythian and Indo-Parthian Coins in the Smithsonian Institution*, Delhi, 1993.

Dani, A. H., *Bactrians and Indo Greeks- A Romantic Story from their coins*, Lahore, 1990.

Elliot, *Coins of Southern India*, Varanasi, 1973.

Gupta, P. L., *The Roman Coins from Andhra Pradesh Govt. Museum*, Hyderabad, 1965.

Gupta, P.L., *Bharata Ke Pūrva Kālīka Sikke*, Varanasi, 1996.

Smith, *Cat. of the Coins in the Indian Museum, Calcutta*, 1906.

Kosambi, D. D., *Indian Numismatics*, Delhi, Orient Longman, 1981.

Dobbins, "Saka Pahlava" *JNSI*, 1973. Coinage.

Gupta P.L. and Kulshreshtha, S., *Kushan Coins & History*, 1994.

Chattopadhyay. B., *The Age of Kushanas - A Numismatics study*, 1967.

Satasrava, *The Kushana Numismatic*, 1985.

- Lahiri, A. N., *Indo-Greek Coins* (Section on Metrology only), Calcutta, 1995.
 Lahiri, A. N., *The Corpus of Indo-Greek Coins*, Calcutta, 1956.
 Narain, A. K., *Greek-Bhārtīya athavā Yavana*, Varanasi, 1996.
 Narain, A. K., *Indo-Greeks*, Oxford, 1957.
 Whitehead R.B., *Cat. of the Coins in the Punjab Museum*, Part. 2nd, 1914.
 Rapson, E. J., *A Catalogue of The Indian Coins in The British Museum - Coins of the Andhra Western Kshatrapas Dynasty*, London, 1968.
 Sharma, I. K., *Coinage of the Satavahana Empire*. Delhi. 1980.
 Shastri, A. M., (ed.), *Coinage of the Satavahanas and coins from Excavation*, Nagpur, 1972.
 Thapalyal, K.K., *Studies in Ancient Indian Seals*, Lucknow, 1972.
 Cunningham, A., "Second notice of some Forged Coins of Bactrian and Indo-Scythian", *JASB*, IX.
 Mitterwalness, G.V., *Kushana coins and Sculptures*, Mathura, 1986.
 Sahani. Birbal, *The Technique of Casting Coins in Ancient India*, Varanasi, 1945.

Course -III

Sātavāhana and Gupta Coins

- Unit I. Introduction**
1. Survey of Literature; Coins as a source of History
 2. Salient features of Sātavāhana and Gupta Coins
 3. A Survey and Significance of Seals and Sealings
- Unit-II. Coins of Sātavāhana**
4. Sātkaṛṇī I & II
 5. Goutmīputra Sātakaṛṇī
 6. Vāsiṣṭhīputra Pulumāvī
 7. Vāsiṣṭhīputra Sātakaṛṇī
 8. Yagña Śrī Sātakaṛṇī
- Unit III. Gupta Gold Coins**
9. Chandragupta I and Kumāra Devī type
 10. Samudragupta
 11. Kācha
 12. Chandragupta II
 13. Kumāragupta I
 14. Skandagupta
 15. Successors of Skandagupta
- Unit IV. Gupta Silver and Copper coins**
16. Chandragupta II
 17. Rāmagupta
 18. Kumāragupta
 19. Skandagupta
 20. Budhgupta
- Unit V. Practical**
21. Measuring
 22. Weighing
 23. Plaster-Cast Making
 24. Conservation & Preservation
 25. Specific Gravity
 26. Cataloguing

Recommended Reading

- Allan, *Catalogue of the British Museum, Gupta Dynasty*, 1936.
Altekar, A.S., *Coinage of the Gupta Empire*, Varanasi, 1957.
Altekar, A.S., *Gupta kālīn Mudrāyen*, Patna, 1914.
Catalogue of the Gupta gold Coins in the Beyana Hoard, Bombay, 1954.
Ellen M. Raven, *Gupta Gold Coins with a Garuda Banner*, 1994.
Gupta, P.L., *Bharata Ke Pūrva Kālīka Sikke*, 1996.
H.de S., "The Detection of coins Forgeries in N.W. India", *JNSI*, XXVI, pp. 145-74.
Lal, B.B., "Chemical Preservation of Ancient Objects", *Ancient India*, 18-19.
P.L. Gupta & S. Srivastava., *Catalogue of Gupta gold Coins in the Bharat Kala Bhavan*, B.H.U., Varanasi, 1951.
Smith, *Catalogue of the coins in the Indian Museum*, Part Ist, 1906.
Thakur. U., *Mints and Minting in India*, Varanasi, 1972.

Course IV

Post Gupta and Early Medieval Coinage

Unit-I. Introduction

1. Currencies of Early medieval Period: Position, Sources and Historiography
2. A Survey and Significance of Seals and Sealing

Unit-II. Maukharīs, Vardhan and Bengal Coins

3. Gupta Imitations
4. Coins of Maukharīs
5. Coins of Vardhan dynasty
6. Coins of Bengal: Samāchāradeva, Śaśānka and others

Unit III. Coins of Kashmir and North West India

7. Coins of Kashmir
8. Coins of Śāhīs of Punjab and Afghanistan and their Imitation
9. Indo-Sāssānian Coins (Gadahiya Coins)
10. Coins of Hūnas

Unit IV. Coins of Central and Northern India

11. Coins of Kalachurīs of Tripurī
12. Coins of Kalachurīs of Ratanpur
13. Coins of Chandellas and Paramāras
14. Coins of Chālukyas and Chāhamānas

Unit V. Coins of South India

15. Coins of Pallavas
16. Coins of Chālukyas
17. Coins of Cholas
18. Coins of Pāṇḍyas
19. Coins of Cheras

* Students are required to identify coins prescribed above.

Recommended Reading

- Cunningham. A., *Coins of Medieval India*, Varanasi, 1967.
A.V. Narasimha Murthy, *The Coins of Karnataka*.
Biddulph, C.H., *Coins of Pāṇḍyas; Coins of Cholas*, *JNSI*, No 11. B.H.U.
Paruck, D.J., *Sassanian Coins*.

Gopal. L., Weight standards of the coins of Early Medieval India, *JNSI.*, XXV, II, pp. 145-53.

Elliot. Wi; *Coins of south in India*, 2005.

J.P. Singh., *Monetary Development in Early Assam*, 1989.

Johnscott Deyell., *Living without silver*, 1982.

Rhodes, N.G. & S.K. Bose, *The Coinage of Assam*, Vol. I, Calcutta, 2003.

Roy, P.C., *The Coinage of Northern India*, 1980.

Singh O.N., *Gupptotara kālīna Uttara Bhāratīya Mudrāy*, Varanasi, 1997.

Singh O.N., *Gupptotarkālīna Dakshina Bhāratīya Mudrayne*, 2010.

Smith. V. A., *Catalogue of the Coins in the Indian Museum*, Calcutta, 1906.

T., Desikachari and Thakur, U., "The Huna Coinage", *JNSI*, XXIX, Part I A.

Vidyaprakash, *Coinage of South India- An Introductory source*, Varanasi, 1968.

Desikachan, D., *South India coins*, 1991.

Group – E

Religions of Ancient India

Course I

Vaidika Religion

Unit-I. Introduction

1. An approach to the study of religion and an introduction to Indian religious history
2. Early forms of religion and Indus Valley religion

Unit-II. Early Vaidika Religion

3. R̥gvaidika gods and goddesses, myths and rituals
4. Ethical ideas
5. Ideas of life after death
6. Monotheistic and Monistic trends

Unit-III. Later Vaidika Developments

7. Gods
8. Yajña : Types and Significance
9. Atharvaidika Religion

Unit-IV. Spiritual Vision of Upaniṣads

10. Problems of interpretation
11. Spiritual life: Non-attachment (vairāgya), Knowledge (jñāna), modifications in yajña-karma; theistic ideas

Unit-V. Upaniṣadic Philosophy

12. Main doctrines : concept of Brahman and Ātmana; ideas of Samsāra and Mokṣa
13. Place of Upaniṣadic teachings in Indian religious history

Recommended Reading

Barth, A., *The Religions of India*, Varanasi, 1985.

Belvalkar, S. K. and Ranade, R. D., *History of Indian Philosophy*, Vol. II (Creative Period), Poona. 1927.

Bhattacharya, H.D. (ed.), *Cultural Heritage of India*, Vol. I, Calcutta, 1958.

Chakrabarti, Uma, *Social Dimentions of Early Budhism*, Delhi, 1987.

Chattopadhyaya, S., *Evolution of Theistic Sects in Ancient India*, Calcutta, 1962.

Gonda, J., *Change and Continuity in Indian Religions*, De Hague, 1965.

Goyal. S. R., *Religious History of India*, Vols. I & II, Meerut.

- Hiriyanna, M.H., *Bhāratīya Dharma Ke Mūla Tattva* (Hindi), Allahabad, 1954.
 Hiriyanna, M.H., *Outlines of Indian Philosophy*, London, 1932.
 Hopkins, E. W., *Religions of India*, New Delhi, 1977.
 Hopkins, Thomas J., *The Hindu Religious Tradition*, California, 1971.
 Kane, P.V., *History of Dharmasāstra*, Vols.II, IV & V (Relevant chapters), Poona, 1972-1974, Also Hindi Version, Lucknow.
 Karmarkar, A. P., *The Religion of India*, Lonavala, 1950.
 Keith, A. B., *The Religion and Philosophy of the Veda and Upanishads* (Also in Hindi). Cambridge, 1925.
 Majumdar, R. C. and Pusalkar, A. D. (eds.), *The History and Culture of the Indian People*, Vol. I (Relevant chapters), Bombay, 1980.
 McDonnell, A. A., *Vedic Mythology* (Also in Hindi), New York, 1974.
 Pandey, G.C., *Vaidika Samskriti*, Allahabad, 2001.
 Pathak, V. S., *Smārta Religious Tradition*, Meerut, 1987.
 Ranade, H.G., *Vedic Rituals*, New Delhi, 2006.
 Ranade, R.D., *A Constructive Survey of Upanishadic Philosophy*, Bombay, 1968.
 Renou, Louis, *Vedic India*, Classical India Vol. 3 Delhi, Varanasi, 1971.
 Tripathi, G. C., *Vaidika Devamaṇḍala*, (Hindi), Allahabad, 1992.
 Upadhyaya, B., *Vaidika Sāhitya aurā Sāmskriti*, (Hindi), Varanasi, 1978.
 Zeemer, R.C., *Hinduism*, Oxford, 1962.

Course II

Vaiṣṇavism, Śaivism & Minor Religious Systems

Unit-I. Introduction

1. Survey of Literatures; Sources
2. Main features of Theistic Religion

Unit-II. Vaiṣṇavism

3. Evolution of the cult of Viṣṇu in North and South.
4. Vaiṣṇava sects—their history and doctrines
5. Bhagavat Gītā : Main Teachings

Unit-III. Śaivism & Śākta Sect

6. Evolution of the cult of Śiva in north and south
7. Śaiva sects—their history & characteristics
8. Origin, Development and Main features of Śākta Sect

Unit-IV. Minor Cult & Folk Religion

9. Brahmā
10. Sūrya
11. Skanda-Kārttikeya
12. Gaṇeśa
13. Devī
14. Yakṣas & Nāgas

Unit-V. Smārta – Paurāṇika religion

15. Pañcādevopāsana
16. Tīrtha
17. Vrata and dāna

Recommended Reading

- Acharya, Kala, *Purāṇic Concept of Dāna*, Delhi, 1993.
 Agrawala, P K., *Skanda Kārttikeya*, Varanasi, 1967.

- Agrawala, P. K., *Bhāratīya Samskriti Kī Rūparekhā* (Hindi), (Relevant portions), Varanasi, 2002.
- Agrawala, V. S., *Prāchīna Bhāratīya Lokadharmā* (Hindi & English), Varanasi, 1964.
- Banerjea, J. N., *Development of Hindu Iconography*, New Delhi, 1985.
- Banerjea, J. N., *Religion in Art and Archaeology (Vaishnavism and Saivism)*, Lucknow 1968.
- Barth, A., *The Religions of India*, Varanasi, 1985.
- Belvalkar, S. K. and Ranade, R. D., *History of Indian Philosophy*, Vol. II (Creative Period), Poona, 1927.
- Bhandarkar, R.G., *Vaiṣṇavism, Śaivism and Minor Religious Systems* (Also in Hindi), Varanasi, 1965.
- Bhattacharya, H.D. (ed.), *Cultural Heritage of India*, Vol. IV, Calcutta, 1963.
- Bhattacharya, N.N., *History of Śākta Religion*, New Delhi, 1974.
- Chaturvedi, P., *Vaiṣṇava Dharma*, (Hindi), Varanasi, 1977.
- Gonda, J., *Change and Continuity in Indian Religions*, De Hague, 1965.
- Goyal, S. R., *Religious History of India*, Vols. I & II, Meerut.
- Hiriyanna, M.H., *Bhāratīya Dharma Ke Mūla Tattva* (Hindi), Allahabad, 1954.
- Hiriyanna, M.H., *Outlines of Indian Philosophy*, London, 1932.
- Hopkins, E. W., *Religions of India*, New Delhi, 1977.
- Hopkins, Thomas J., *The Hindu Religious Traditions*, California, 1971.
- Jaiswal, Suvira, *The Origin and Development of Vaishnavism*, New Delhi, Reprint 1981.
- Karmarkar, A. P., *The Religion of India*, Lonavala, 1950.
- Majumdar, R. C. and Pusalkar, A. D. (eds.), *The History and Culture of the Indian People*, Vols. I-V (Relevant chapters), Bombay, 1980-1989.
- Pande, Susmita, *Birth of Bhakti in Indian Religion and Art*, New Delhi, 1982.
- Pande, L.P., *Sun Worship in Ancient India*, Varanasi, 1971.
- Pathak, V.S., *Śaiva Cults in North India*, Varanasi, 1960.
- Pathak, V.S., *Smārta Religious Tradition*, Meerut 1987.
- Srinivasachari, S.M., *Vaishnavism: Its Philosophy, Theology and Religious Discipline*, Delhi, 1994.
- Srivastava, V.C., *Sun Worship in Ancient India*, Allahabad, 1971.
- Sircar, D. C., *Studies in the Religious Life of Ancient and Medieval India*, Varanasi, 1987.
- Tripathi, Devi Prakash, *Brāhmaṇ Dharma ke Purātātvik Ādhār*, Varanasi, 2007.
- Zeemer, R.C., *Hinduism*, Oxford, 1962.

Course III

Buddhism

Unit-I. Introduction

1. Survey of Literatures, Sources
2. Antiquity of Śramaṇa tradition and its characteristics
3. Proliferation of Śramaṇas in the age of Buddha and Mahāvīra

Unit-II. Life and Teachings of Gautama Buddha

4. Sources of Buddha's teachings and problem of origin of Buddhism
5. Principal events of Buddha's life
6. Noble Truths—concept of Dukkha, Pratītya-samutpāda, Nirvāṇa and Anātma and Spiritual discipline (mārga)

Unit-III. Early History and growth of Buddhism

7. Buddhist Councils
8. Development of early sects : Theravāda, Sarvāstivāda, Mahāsāṅghika and Vātsīputrīya; doctrinal evolution of the Buddhist thoughts

9. Growth of Buddhism, legend and cult; distinction of Arhat, Pratyeka-Buddha and Samyak-Sambuddha
10. Buddhist saṅgha : Historical development and socio-economic implications

Unit-IV. Mahāyāna Buddhism

11. Evolution of Mahāyāna; composition of Mahāyāna canon
12. Principal features : Bodhisattva as a spiritual ideal and practice of Pārainitā discipline; Cult of Buddha and Bodhisattva
13. Philosophical developments : Mādhyamika – Śūnyavāda and Yogācāra-Vijñānavāda; development of Trikāya doctrine

Unit-V. Tāntric Buddhism and Decline of Buddhism

14. Tāntric Buddhism — evolution and characteristics
15. Decline of Buddhism
16. Survey of spread of Buddhism outside India

Recommended Reading

- Bapat, P.V., *2500 Years of Buddhism*, Delhi, reprint, 1987.
- Chakravarty, Uma, *The Social Dimensions of Early Buddhism*, Delhi, 1987.
- Chaturvedi, Banarasi Das, *Buddha Dharma Ke 2500 Varṣa*, (Hindī, also in English), New Delhi, 1956.
- Conze, E., *Buddhism—Its Essence and Development*, Oxford, 1951.
- Conze, E., *Buddhist Thought in India*, London, 1962.
- Conze, E., *A Short History of Buddhism*, Bombay, 1960.
- Coomaraswamy, A.K., *Hinduism and Buddhism*, New Delhi, 1996.
- Dev. Narendra, *Baudha Dharma Darśan*, Patna, reprint, 1994.
- Dubey, Sitaram, *Baudha Saṅgha Kā Prārambhika Vikās*, Gorakhpur, 1988.
- Dutta, N., *Mahāyāna Buddhism*, Calcutta, 1976.
- Dutta, N., *Early Monastic Buddhism*, Calcutta, 1960.
- Dutta, N., *Buddhist Sects in India*, Calcutta, 1977.
- Kern, H., *Manual of Indian Buddhism*, Strassburg, 1896.
- Majumdar, R. C. and Pusalkar, A. D. (eds.)-*The History and Culture of the Indian People*, Vols. I -V (Relevant chapters), Bombay, 1980-1989.
- Pande, G. C., *Studies in the Origins of Buddhism*, Delhi, 1983.
- Pande, G. C., *Buddha Dharma Ke Vikāsa Kā Itihāsa* (Hindī), Lucknow, 1987.
- Pande, G. C., *Mahāyāna*, Sarnath, 1995.
- Pande, G. C., *Śramaṇa Tradition : Its History and contribution to Indian Culture*, Ahmedabad, 1977.
- Ray, Himanshu Prabha, *Monastery and Guild: commerce Under Sātavāhanas*, Delhi, 1986.
- Rhys Davids, T. W., *History of Indian Buddhism*, London, 1897.
- Thomas, E. J., *Life of Buddha as Legend and History*, London, 1957.
- Thomas, E. J., *History of Buddhist Thought*, London, 1923.
- Upadhyaya, B., *Buddha Dharma-Darśana* (Hindī), Varanasi, 1978.
- Warder, A. K., *Indian Buddhism*, Varanasi, 1970.
- Conze, E., *A Short History of Buddhism*, Bombay, 1960.
- Robinson, Richard R., *The Buddhist Religion*, Calcutta, 1970.
- Murti, T.R.V., *The Central Philosophy of Buddhism – the Mādhyamika System*, London, 1955.
- Pathak, V.S. "Antiquity of Śramaṇa Tradition" Foreword to S.R. Goyal, *History of Indian Buddhism*, Meerut, 1987.
- Sankrityayana, Rahula, *Buddha-caryā*, (Hindī), Varanasi, 1952.
- Winternitz, M., *History of Indian Literature*, Vol. II, Delhi, 1983.

Course IV

Jainism

Unit-I. Introduction

1. Survey of Literature; Sources
2. Antiquity of Jainism

Unit-II. Pārśvanātha and Mahāvīra

3. Life and teachings of Pārśvanātha
4. Mahāvīra and Makkhali Gosāla
5. Teachings of Mahāvīra
6. Jaina Saṅgha

Unit-III. Jaina Saṅgha after Mahāvīra

6. Division of Jaina Saṅgha into Śvetāmbara and Digambara, their further history and main differences
7. Formation of Jaina canon

Unit-IV. Spread of Jainism

8. Early phase of Jainism
9. Jainism in Gujarat and Rajasthan
10. Jainism in the Deccan and South

Unit-V. Jaina Doctrines

11. Jaina Metaphysics of Jīva and Ajīva
12. Jaina Epistemology : Pramāṇa , Naya, Anekāntavāda & Syādvāda
13. Spiritual discipline : Ideas of karma, bondage & liberation, Jaina spiritual discipline
14. Cult of Tīrthaṅkaras

Recommended Reading

- Basham, A.L., *The History and Doctrines of the Ajivikas*, London, 1951.
Basham, A.L., *A Vanished Religion*, reprint, 2003.
Buhler, G., *On The Indian Sect of the Jainas, With an outline of the Jaina Mythology*,
Chatterjee, Asim Kumar, *A Comprehensive History of Jainism*, Vol.I., New Delhi, 2000.
London, 1903.
Deo, S.B., *The History of Jain Monastism*, Poona, 1956.
Jain, H. L., *Bhāratīya Saṃskṛiti men Jaina Dharma kā Yogadāna* (Hindi), Bhopal, 1962.
Jaini, J. L., *An Outline of Jainism*, Cambridge, 1916.
Jain, K.C., *Jain Dharma kā Itihāsa*, 3 Vols., Delhi, 2005.
Majumdar, R. C. and Pusalkar, A. D. (eds.) *The History and Culture of the Indian People*,
Vols. I -V (Relevant chapters), Bombay, 1980-1989.
Schubring, W., *The Doctrines of the Jainas*, Delhi, 1962.
Sen, A. C., *School and Sects in Jain Literature*, Calcutta, 1931.
Stevenson, S., *The Heart of Jainism*, New Delhi, 1984.
Premi, Nathuram, *Jaina Sāhitya kā Itihāsa* (Hindi), Bombay, 1956.
Mehta, Mohan Lal, *Jaina Dharma Aura Darśan*, Bangalore, 1999.
Winternitz, M., *A History of Indian Literature*, Vol. II, Calcutta, 1933.

Group-F
State and Society
Course I
Social Life in Ancient India

- Unit-I. Introduction**
1. Significance of the study of social life in ancient India
 2. Survey of Literature and Sources
- Unit-II. Origin and Early Stages of Social Formation**
3. Concept of society : Stages of Formation and growth
 4. Stratification of society: Historical growth, Division of labour, Traditional concepts
 5. Concept of Family in primitive societies
- Unit-III. Social Organizations**
6. Dharma : Concept, Impact on Individuals and Society
 7. Varṇa : Concept, Origin and Historical growth; Socio-religious study
 8. Jāti : Concept, Origin, Historical growth and its Impact on Society
 9. Āśramas : Concept, Significance on individual and social make-up
 10. Position and status of women
 11. Asceticism: Concept and prevalence in ancient India
- Unit-IV. Origin and Historical Survey of Institutions**
12. Samsakāras : Aims, Objectives and Types
 13. Marriage : Origin, Development, Types and Significance in society
 14. Family : Composition, structure and rights of members
- Unit-V. Origin and Development of Education**
16. Origin, aims and objectives of Education
 17. Teacher-taught relationship and the subject matter of Education
 18. Important centres of Education : Takṣaśilā, Nālandā, and Vikramśilā

Recommended Reading

- Altekar, A. S., *Education in Ancient India* (Also in Hindi), Varanasi, 1948.
- Altekar, A. S., *Position of Women in Hindu Civilisation*, Varanasi, 1956.
- Dutt, N. K., *Origin and Growth of Caste in India*, Calcutta, 1931.
- Dumont, Louis, *Homo Hierarchicus : The Caste system and its implications*, Delhi, 1970, Revd. Edn., Chicago, 1980.
- Engels, F., *The Origin of the Family, Private Property and the State*, with Introduction and notes by Eleanor B. Leacock, London, 1972, rpt. 1977.
- Ghurye, G. S. *Caste and Class in India*, Bombay, 1961.
- Jaiswal, Suvira, *Caste, origin, function and dimensions of change*, Manohar Publishers, Delhi, 2005.
- Jauhari, M., *Prāchīna Bhārata Men Varṇāśrama* (Hindi), Varanasi, 1985.
- Jha, D.N., ed., *Feudal social formation in Early India*, Delhi, 1987.
- Kane, P. V., *History of Dharmaśāstra*, Vol. II (Also in Hindi), Poona, 1974..
- Kapadia, K. M., *Marriage and Family in India* (Also in Hindi), Oxford, 1958.
- Kosambi, D.D., *The culture and civilization of ancient India in Historical outline*, London, 1965.
- Mees, G. H., *Dharma and Society*, Hague, 1935.
- Misra, J.S., *Prāchīna Bhārata kā Sāmājika Itihāsa* (Hindi), Patna, 1982.
- Mookherji, R. K., *Education in Ancient India*, London, 1926.
- Motichand, Sārthavāha (Hindi), Patna, 1953.

- Ojha, A.P., *Prāchīna Bhārata men Sāmajika Starīkaraṇ* (approx. 200-600 A.D.), Allahabad, 1992.
- Pandey, G.C., *Dimensions of Ancient Indian Social History*, New Delhi, 1984.
- Pandey, R. B., *Hindu Samsakāra* (English & Hindi).
- Prabhu, P. N., *Hindu Social Organisation*, Bombay, 1963.
- Saran, K.M., *Labour in Ancient India*, Bombay, 1957.
- Sharma, R. S., *Light on Early Indian Society and Economy*, Bombay, 1966.
- Sharma, R.S., *Material Culture and Social Formations in Ancient India*, Delhi, 1983.
- Singh, D.P., *Hindū Samāja men Parivartan Kī Prakriyā* (700-1200 A.D.), Gorakhpur, 1984.
- Thapar, Romila, *Ancient Indian Social History : Some Interpretations*, Delhi, 1970.
- Vedalankar, H. D., *Hindū Parivāra Mimāṅsā*, (Hindi), S Delhi, 1973.
- Vedalankar, H. D., *Hindū Vivāha kā Samkṣipta Itihāsa* (Hindi), Varanasi, 1970.
- Yadav, B. N. S., *Society and Culture in Northern India in the Twelfth Century A. D.*, Allahabad, 1973.

Course II

Ancient Indian Economy

Unit-I. Introduction

1. Significance of the study of economic Life in Ancient India
2. Sources for the reconstruction of economic life
3. Meaning and significance of *Vārttā*
4. Historiography

Unit-II. Early Ancient Indian Economy

5. Primitive Systems
6. Harappan Systems
7. Vaidika agriculture
8. Urban economy in the 6th century B.C. : Crafts, Trades, Trade Routes and Agriculture

Unit-III. Development of Economic Systems and Institutions

A : Money Economy and Trade

9. Exchange and Currency
10. Indo-Roman trade from c. 2nd B.C. – 3rd Century A.D
11. Maritime trade and trade routes: East and West

B : Institutionalisation of Peasants, artisans and merchants

12. Artisanal and mercantile guilds
13. Labour and slavery
14. Land Ownership
15. Taxation and Revenue system

Unit-IV. A Survey of Economy During:

16. Mauryas
17. Gupta and
18. Chola Periods

Unit-V. Early Medieval Economy

19. Main Characteristics and the notion of urban decay
20. Feudalism: Origin, development and its control over economy
21. Temple Economy : Nature and significance

Recommended Reading

- Achchhe, Lal, *Prāchīna Bhārat Men Kriṣi*. (Hindi), 1980.
Adhya, G. L., *Early Indian Economics*, Bombay, 1966.
Aiyanger, C. V. R., *Ancient Indian Economic Thought*, Varanasi, 1965.
Bajpeyi, K. D., *Bhāratīya Vyāpāra Kā Itihāsa* (Hindi), Mathura, 1951.
Bandopadhyaya, N. C., *Economic Life and Progress in Ancient India*, Calcutta, 1945.
Bose, A. N., *Social & Rural Economics of Northern India*, Vol. I, Calcutta, 1966.
Das, Dipakranjan. : *Economic History of Deccan from 1st Cen. A.D., to 6th cen. A.D.*, Delhi, 1971.
Ghoshal, U. N., *Contribution to the History of Hindu Revenue System*, Calcutta, 1929.
Gopal, L., *Aspects of History of Agriculture in Ancient India*, Varanasi, 1980.
Gopal, L., *Economic Life of Northern India (700-1200 A. D.)*, Delhi, 1965.
Jain, Beena, *Guilds in Ancient India*, Delhi, 1990.
Jha, D.N., *Revenue System in Post-Mauryan and Gupta times*, Calcutta, 1967.
Maity, S. K., *Economic Life in Northern India in the Gupta Period*, Varanasi, 1970.
Motichand, *Trade and Trade Routes in Ancient India*, New Delhi, 1977.
Om Prakash., *Early Land Grants and State Economy*. Allahabad, 1988.
Pandey, B. K., *Temple Economy Under the Cholas*, New Delhi, 1984.
Pran Nath, *Economic Life in Ancient India*.
Rai, J.. *The Rural-Urban Economy and Social Change in Ancient India (300 B. C.-600 A.D.)*, Varanasi, 1974.
Sharma, R.S., *Indian feudalism*, University of Calcutta, 1965.
Sharma, R.S., *Urban Decay In India (c 300-c 1000)*, Munshiram Manoharlal, Delhi, 1987.
Singh. A. K., *Indo-Roman Trade*, Patna, 1988.
Srivastava, Balram., *Trade & Commerce in Ancient India*, Varanasi 1968.

Course III

Ancient Indian Political Ideas and Administrative Systems

Unit-I. Introduction

1. Historiography and Significance of ancient Indian Polity
2. Sources of ancient Indian Polity
3. A brief survey of the development of political ideas

Unit-II. Origin and Nature of State

4. Concept and origin: comparative study of different theories including that of segmentary state
5. Nature and scope
6. Aims and functions
7. State and individual
8. State authority and religion

Unit-III. Principles and Institutions of ancient Indian Polity

9. Kingship : Role, functions , concept of divinity and absolutism
10. Republics : Nature and significance
11. Democratic Institutions : Sabhā-Samiti, Vidatha, Paura-Janapada
12. Mantri Pariṣad

Unit-IV. Administration

13. Principles and functionaries
14. Military administration and ethics of war
15. Inter-State Relation : Maṇḍala theory

16. Four fold theory of Upāya; Diplomacy and Espionage

Unit-V. A Survey of Administration During

17. Mauryan

18. Gupta

19. Rāṣṭrakūṭa and

20. Chola Periods

Recommended Reading

Altekar, A. S., *State and Government in Ancient India* (Also in Hindi), Delhi, 1958.

Bhandarkar, D. R., *Aspects of Ancient Hindu Polity*, Varanasi, 1929.

Bhattacharya, S.C., *Secular and Pluralistic Elements in the idea of state in Early India*, Shimla, 2002.

Derrett, J.D.M., *Religion, Law and State in India*, London, 1968.

Ghoshal, U. N., *History of Indian Political Ideas*, Bombay, 1959.

Gonda, J., *Ancient Indian Kingship from religious point of view*, Leiden, 1969.

Gopal, L., *Śukranīti, A Nineteenth Century Text*, Varanasi, 1978.

Jauhari, M., *Prāchīna Bhārata men Rājya Aura Śāsana Vyavasthā* (Hindi), Varanasi, 1972.

Jayaswal, K. P., *Hindu Polity* (Also in Hindi), Bangalore, 1978.

Kangle, R.P., *Kauṭīliya Arthaśāstra*, Part III, Bombay, 1965

Kulke, Herman, *Kings and Cults : State Formation and Legitimation in India and South East Asia*, Delhi, 1993.

Mahalingam, T. V., *South Indian Polity*, Madras, 1967.

Majumdar, R. C., *Corporate Life in Ancient India* (Also in Hindi), Calcutta, 1922,

Mukerjee, S., *The Republican Trends in Ancient India*, Delhi, 1969.

Ojha, D.K., *Interpretations of ancient Indian Polity : A Historiographical Study*, Varanasi, 2006.

Prasad, Beni, *Theories of government in ancient India*, Allahabad, 1968.

Sharma, R. S., *Political Ideas and Institutions in Ancient India* (Also in Hindi), Delhi, 1996.

Shastri, S., *Arthaśāstra of Kauṭilya*, Mysore, 1958.

Shukla, D. D., *Prāchīna Bhārata men Janatantra* (Hindi), Lucknow, 1966.

Spellman, J.W., *Political theory of Ancient India*, Clarendon Press, London, 1964.

Tripathi, H. N., *Prāchīna Bhārata men Rājya Aura Nyāyapālika*, Varanasi, 1965.

Vidyalankar, S., *Prāchīn Bhāratiya Śāsan-Vyavasthā aur Rājya Śāstra* (Hindi), Mussoorie, 1968.

Viswanath, S.V., *International Law in ancient India*, London, 1925.

Course-IV

Law and Legal Institutions in Ancient India

Unit-I. Introduction

1. Significance
2. Sources of Hindu law
3. Origin and development of Hindu law
4. Historiography of legal institutions

Unit-II. Property related laws

5. Mitākṣarā and Dāyabhāga schools on the notion of property in ancient India
6. Law of Succession and Inheritance
7. Law of ownership

Unit-III. Marital Laws

8. Marriage: Its meaning, nature, types and significance.
9. Strīdhana
10. Law of Sonship

Unit-IV. Legal institutions in ancient India (Judiciary)

11. Judiciary : Nature, type and function
12. Law of evidence and nature of offence
13. Judicial Procedure
14. Law-enforcing agencies

Unit-V. Crime and Punishment

15. Law of Torts
16. Law of Crimes
17. Punishment : Aims, objectives, types & implementation
18. Law of Slavery

Recommended Reading

- Derrett, J.D.M., *Dharmaśāstra and Juridical Literature*, Wiesbaden, 1973.
Achchhe Lal., *Prāchīna Hindū Vidhi*, Varanasi, 1981.
Aiyer, N. R. S., *The History of the Hindū Law in the Vaidika Age and in the Post Vaidika times down to the institute of Manu*, Madras, 1925.
Banerjee, G. D., *Hindu Law of Marriage & Strīdhana*. Calcutta. 1923.
Derrett, J. D. M., *Hindū Law, Past and Present*, Calcutta. 1957.
Deshpandey, V. V., *Hindū Vidhi Ke Siddhānta*, New Delhi, 1987.
Dutta, B. N., *Crime and Punishment in Ancient India*, Calcutta, 1930.
Jolly, J., *Hindū Law and Customs*, Varanasi, 1982.
Kane, P. V., *History of Dharmaśāstra*, Vols. II & Vol. III, Poona, 1973 & 1974.
Lingat, Robert., *The classical Law of India*, (trans by J.D.M. Derrett), New Delhi, 1973.
Majumdar, R. C., *Corporate Life in Ancient India* (Also in Hindi), Calcutta, 1922.
Menski, W.F., *Hindu Law, Beyond tradition and Modernity*, New Delhi, 2003.
Mulla. D. F., *Hindu Law*. Bombay, 1960.
Nath, Birendra., *Judicial Administration in Ancient India*, Patna, 1976.
Shastri, S., *Arthaśāstra of Kauṭilya*, Mysore, 1958.
Singh, S., *Evolution of Smṛiti Law* Varanasi, 1972.
Sternbach, L., *Judicial Studies in Ancient Indian Law*. Parts I & II, Delhi, 1965.
Tripathi, H. N., *Prāchīna Bhārata men Rājya Aura Nyāyapālikā*, Varanasi, 1965.
Varadachariar, S., *The Hindū Judicial System*, Lucknow, 1946.

Group – G

India's Cultural Contacts in Asia

Course I

India's Cultural Contacts with Sri Lanka, Myanmar and Thailand

Unit-I. : General Introduction of South-East Asia

1. Geographical features
2. Sources
3. Causes of Indianization

Unit-II. Socio-Economic Impact on Sri Lanka, Myanmar & Thailand

4. India's Social impact
5. Land and Sea Routes
6. Trade & Commerce

- Unit –III. Cultural Interaction with Sri Lanka (SiñhaladvIpa)**
7. Indian Cultural contact
 8. Introduction and Expansion of Buddhism
 9. Art and Architecture : Sigiria Murals and Ruvanveli Pagoda
 10. Language and Literature: Pāli, Sañskrit & Siñhalī
- Unit –IV. Cultural Interaction with Myanmar (Burma)**
11. Introduction and Expansion of Buddhism
 12. Art and Architecture with special reference to Ānanda Temple
 13. Language and Literature
- Unit –V. Cultural Interaction with Thailand (Siam)**
14. Antiquity of India's cultural contact
 15. Introduction and Expansion of Buddhism
 16. Art and Architecture : Sukhothai Region
 17. Life, Culture and Society

Recommended Readings

- Hall, D G E., *History of South-East Asia*, London, 1961.
- Lama, G.K., *Cultural heritage of South-East Asia*, Varanasi, 2009.
- Majumdar, R.C., *Hindū Colonies in the Far East*, Calcutta, 1963.
- Mishra, Sheonandan and Damodar Dixit, *Prāchīna Srī Lanā Kā Itihāsa* (Hindi), Lucknow, (Hindi), 1974.
- Puri, B.N., *Sudūra Pūrva men Bhāratīya Sañskriti Aura Usakā Itihāsa* (Hindi).
- Sarkar, H.B., *India's cultural relation with South-East Asia*.
- Vidyalankara, Satyaketu., *Dakṣiṇa Evam Dakṣiṇa Pūrvī Asia Kā Sāskritika Itihāsa*, 1984, Masoorī.

Course II

India's Cultural Contacts with Vietnam, Kampuchia, Indonesia and Malaysia

- Unit-I. Vietnam (Champa)**
1. Antiquity of India's Cultural contact
 2. Elements of Indian Culture
 3. Introduction and expansion of Buddhism
 4. Art and Architecture
- Unit-II. Kampuchia (Kambuja)**
5. India's cultural relation with Kambuja
 6. Elements of Indian Religions : Brahmanism and Buddhism
 7. Art and Architecture with special reference to Angkor-Vat
 8. Literature; Edicts and Epigraphs
- Unit-III. Indonesia (Java, Sumatra, Bali, Borneo and Malaysia)**
9. Introduction and expansion of Buddhism
 10. Art and Architecture with special reference to Borobudur Stūpa (Java)
 11. Indo-Javanese Literature
 12. Religion and Art of Bali and Borneo
 13. Antiquity of Indian Culture in Malaya
- Unit-IV. Socio-Economic Impact on Vietnam and Kampuchia**
14. Social Impact
 15. Land and Sea Routes
 16. Trade & Commerce
- Unit-V: Socio-Economic Impact on Indonesia and Malaysia**
17. Social Impact

18. Land and Sea Routes
19. Trade & Commerce

Recommended Readings

- Hall, D G E., *History of South-East Asia*, London, 1961.
 Lama, G.K., *Cultural Heritage of South-East Asia*, Varanasi, 2009.
 Majumdar, R.C., *Hindu Colonies in the Far East*, Calcutta, 1963.
 Mishra, Sheonandan and Damodar Dixita *Prāchīn Srī Lankā Kā Itihāsa* (Hindi), Lucknow, 1974.
 Puri, B.N., *Sudūra Pūrva men Bhāratīya Samskriti Aura Usakā Itihāsa* (Hindi).
 Sarkar, H.B., *Cultural Relations Between India and South-East Asian Countries*, Delhi, 1985.
 Vidyalkara, Satyaketu., *Dakshīṇa Evam Daṣṇa Pūrvī Asia Kā Sāmskritika Itihāsa*, Masoorī, 1984.

Course III

India's Cultural Contacts with Central Asia and Afghanistan

- Unit-I. Introduction**
1. Sources
 2. Geographical features
 3. Background of cultural interaction
- Unit-II. Central Asia**
4. Elements of Indian Religions
 5. Art and Architecture
 6. Language and literature
- Unit-III. Afghanistan**
7. India's Cultural contact with Afghanistan
 8. Introduction and expansion of Buddhism
 9. Art and Architecture
 10. Language and Literature
- Unit-IV. Socio-Economic Impact on Central Asia**
11. Routes
 12. Economic Impact
 13. Social Impact
- Unit-V. Socio-Economic Impact on Afghanistan**
14. Routes
 15. Economic Impact
 16. Social Impact

Recommended Reading

- Bell, Sir Charles, *Tibet : Past and Present*, 1992.
 Chopra, P.N., *Social, Cultural and Political History of Tibet*, 1987.
 Gaulier, S., *Buddhism in Afghanistan and Central Asia*, London, 1976.
 Ghoshal, U.N., *Ancient Indian Culture in Afghanistan*, Calcutta, 1928.
 Hopkins, Jeffrey and Lati Rimpoche (Tr.), *The Buddhism of Tibet*, Delhi, 1987.
 Lama, G.K., *Tibet Men Baudha Dharma Kā Itihāsa*, New Delhi, 2004.
 Rowland, B., *Ancient Art from Afghanistan*, New York, 1966.
 Sankrityayan, Rahul, *History of Central Asia*, New Delhi, 1964.
 Thondup, Tulku, *Buddhist Civilization in Tibet*, 1982.
 Upasak, C.S., *History of Buddhism in Afghanistan*, 1990.

Course IV

India's Cultural Contacts with China, Tibet and Nepal

- Unit-I Introduction
1. Sources
 2. Geographical features
 3. Background of cultural interaction
- Unit-II. China
4. Antiquity of India's Cultural contact with China
 5. Introduction and development of Buddhism
 6. Art and architecture
- Unit-III. Tibet
7. Antiquity of India's cultural relation
 8. A brief introduction to Pre-Buddhist Tibet
 9. Introduction and Expansion of Buddhism
 10. Language and Literature
 11. Art
- Unit-IV. Nepal
12. Antiquity of India's cultural contact with Nepal
 13. Origin and Development of Buddhism
 14. Hinduism in Nepal
 15. Art
 16. Language and literature
- Unit-V. Socio-Economic Impact on China, Tibet and Nepal
17. Life and Society
 18. Routes
 19. Trade and Commerce

Recommended Reading

- Bangdel, L.S., *The Early Sculptures of Nepal*, New Delhi, 1982; Bagehi, P.C., *India and China*. Bombay, 1950.
- Chen, Kenneth K.S., *Buddhism in China*, 1964.
- Kaung, Chou Siang., *Chīnī Bauddha Dharma Kā Itihāsa*, Allahabad (Hindi), 1926.
- Regmi, D.R., *Ancient Nepal*, Calcutta, 1969.
- Regmi, D.R., *Inscriptions of Ancient Nepal*, New Delhi, 1983.
- Singh, Harish Chandra Lal, *Buddhism in Nepal*, 1999.
- Vidyalankara, S., *Madhya Asia Evam Chīna Men Bhārtīya Saṁskṛiti* (Hindi), 1980.
- Xinru Liu, *Ancient India and Ancient China*, Delhi, 1994.

GROUP – II

History of Science And Technology in Ancient India Course I Science & Technology in Pre & Protohistoric Period

Unit-I Introduction

1. Science and technology, meaning, and scope
2. Sources
3. Interaction of science; technology and society; Universality of science

Unit-II Primitive Technology and Beginning of Science

4. Knowledge of Science
5. Prehistoric Technology
6. Ancient quarrying, mining and pyrotechnology

Unit-III Early Food Producing Sciences

7. Early History and Development of Agricultural Sciences
8. Animal Husbandry
9. Impact and Development of other related sciences

Unit-IV Science in Indus Civilization

10. Quantitative Sciences: Weights, Measures & Mathematics
11. Flora & Fauna: Knowledge of Exploitation
12. Agriculture: Crops and Crop Rotation

Unit-V Technology in Indus Civilization

13. Metal Technology
14. Building Materials and Technology: Structures, Masonry and Hydraulics
15. Ceramics: Pottery, Seals-sealings and Figurative forms
16. Lapidary

Recommended Reading

- Bose, D. M. et. al., *Concise History of Science in India* (New Delhi, INSA, 1971)
Chattopadhyaya, D., *Studies in the History of Science in India*, Vol. I & New Delhi, 2000
Hegde, K.T.M., *An Introduction to Ancient Indian Metallurgy*, Bangalore, 1991.
Porter, R. et. al., *The Cambridge History of Science*, Vol. I, Cambridge, 2003.
Seal, B.N., *Positive Sciences of Ancient India*, New Delhi, 1958.
Sen, S.N., *Vigyāna Kā Itihāsa*, Two Volumes. Patna, 1972.
Singer, C. et. al. *A History of Technology* Vol. Oxford, 1958.
Sorton, G., *Introduction to the History of Science* (Washington, 1952).
Pant, Rajnikant, *Prāchīn Sabhyatāon Mein Vigyāna Evam Taknik* (in Hindi), Jaipur, 2007.

Books for reference:

- Agrawal, D. P., *Ancient Metal Technology and Archaeology of South Asia*, 2000, New Delhi.
Agrawal, D.P. & J.S. Kharakwal, *Bronze & Iron Ages in South Asia*, 2003, New Delhi.
Bag, A.K. (ed.) *History of Technology in India*, Vol. I. New Delhi. 1997.
Bernal, J.D., *Science in History*, (London 1969).
Chakrabarti, D.K. and N.Lahiri, *Copper and Its Alloys in Ancient India*, New Delhi, 1996.
Chattopadhyay, P.K., *Archaeometallurgy in India*, Patna, 2004.
Chowdhary, K. A., *Ancient Indian Agriculture and Forestry in Northern India*. Bombay, 1977
Forbes, R.I., *Studies in Ancient Technology*, Vol. I to IX, Leiden, 1976.
Gopal, L., *Aspects of History of Agriculture in Ancient India*. Varanasi, 1980.
Hodges, H., *Artifacts – An Introduction to Early Materials and Technology*, London

- Duckworth, 2003.
- Hodges, H., *Technology in the Ancient World* (London, Pelican, 1970).
- Indian Journal of History of Science* (relevant volumes). INSA, New Delhi..
- Mule, Gunakar., *Bhārtīya Vigyāna kā Brihad Itihāsa*, Delhi, 1993.
- Sankalia, H.D., *Some Aspects of Prehistoric Technology in India*, Poona, 1989.
- Sharma, V.L. *Antarrashtriya Paripekṣya Mein Prāchīn Bhārtīya Vigyāna*. New Delhi. 1990.
- Upadhyay, P. *Minerals and Mining in Ancient India*, Varanasi, 2007.
- Singh, R.P., *Agriculture in Protohistoric India*, Pratibha Prakash, Delhi, 1990.
- Singh R.P., *India's First Farmers*, Kala Prakashan, Varanasi, 2010.

Course II

Science & Technology in Chalcolithic Cultures and Vaidika Period

Unit-I Non Harappan Copper using Communities

1. Metal Technology: Copper objects of Non-Harappan Cultures, Copper Hoards
2. Settlements: Houses & Shelters
3. Flora & Fauna: Crops and Crop Rotation
4. Ceramics: OCP & others

Unit-II Early Iron Age Cultures

5. Metal Technology
6. Ceramic Technology: Black and Red ware and PGW
7. Glass Technology
8. Fauna and Bone Objects

Unit-III Physical Science in Vaidika Literature

9. Introduction of Metal & Metallurgy
10. Mathematics
11. Astronomy
12. Concept of Time

Unit-IV Biological Science in Vaidika Literature

13. Medical Science
14. Agriculture & Botany
15. Zoological Knowledge

Unit-V An outline of the development of Physical Concepts

16. Doctrine of Five Elements
17. Concept of Atomism
18. Attributes of Matter : Heat, Light and Sound

Recommended Reading

- Bose, D. M. et. al., *Concise History of Science in India* (New Delhi, INSA, 1971)
- Chattopadhyaya, D., *Studies in the History of Science in India*, Vol, I &; New Delhi, 2004.
- Hegde, K.T.M., *An Introduction to Ancient Indian Metallurgy*, Bangalore, 1991.
- Kutumbia, P., *Ancient Indian Medicine*, Madras, 1962.
- Prakash, S., *Prāchīn Bhārta men Rasāyana Kā Vikāsa* Delhi, 1970.
- Prasad, G., *Bhārtīya Jyotish Kā Itihāsa*, Lucknow, 1956.
- Porter, R. et.al., *The Cambridge History of Science*, Vol. 1, Cambridge 2003.
- Ray, P., *History of Chemistry in Ancient and Medieval India*, Calcutta, 1956.
- Seal, B.N., *Positive Sciences of Ancient India*, New Delhi, 1958.

Sen. S.N., *Vigyāna Kā Itihāsa*. Two Volumes. Patna, 1972.
 Singer. C. et. al. *A History of Technology* Vol. I, Oxford, 1958.
 Randhawa, M.S., *A History of Agriculture in India*. Delhi. 1980.
 Singh, A.N. and Dutta, B.B., *Hindū Gaṇita Śāstra kā Itihāsa*, Lucknow, 1974 (Hindi & English).

Books for reference:

Agrawal, D. P., *Ancient Metal Technology and Archaeology of South Asia*, 2000, New Delhi.
 Agrawal, D.P. & J.S. Kharakwal, *Bronze & Iron Ages in South Asia*, 2003, New Delhi.
 Bag, A.K. (ed.) *History of Technology in India*, Vol. I. New Delhi. 1997.
 Bhardwaj, H.C., *Aspects of Ancient Indian Technology*. (Delhi, 1979)
 Bhardwaj, H. C., *Metallurgy in Indian Archaeology*. Varanasi. 2000.
 Bhardwaj, H.C. & V.L.Sharma., *Technology, Tools and Appliances*. Allahabad, 1997.
 Biswas, A.K. and S. Biswas., *Minerals and Metals in Ancient India*, Delhi, 1996.
 Chakrabarti, D.K., *The Early Use of Iron in India*, OUP, Bombay, 1992.
 Chakrabarti, D.K. and N.Lahiri., *Copper and Its Alloys in Ancient India*, New Delhi; 1996.
 Chattopadhyay, P.K., *Archaeometallurgy in India*, Patna, 2004.
 Chowdhary, K. A., *Ancient Indian Agriculture and Forestry in Northern India*. Bombay, 1977
 Forbes, R.I., *Studies in Ancient Technology*, Vol. I to IX (Leiden, 1976).
 Gopal, L., *Aspects of History of Agriculture in Ancient India*. Varanasi, 1980.
 Hegde, K. T. M., *An Introduction to Ancient Indian Metallurgy*, Bangalore, 1991
 Hodges, H., *Artifacts - An introduction to Early Materials and Technology* (London Duckworth, 2003.
 Hodges, H., *Technology in the Ancient World* (London, Pelican, 1970).
 Dikshit, M.G., *History of Indian Glass* (Bombay, 1964).
Indian Journal of History of Science (relevant volumes). INSA, New Delhi.
 Lal, A., *Prāchīn Bhārta men Kriṣi*. Varanasi, 1980.
 Mule, Gunakar., *Bhārtīya Vigyāna kā Brihad Itihāsa*, (Delhi, 1993).
 Prakash, S., *Founders of Sciences in Ancient India* (English and Hindi). New Delhi, 1965.
 Sankalia, H.D., *Some Aspects of Prehistoric Technology in India*. (1989). New Delhi
 Sharma, V.L., *Antarrāṣṭriya Paripekṣya mein Prāchīn Bhārtīya Vigyāna*, New Delhi, 1990.
 Singh, R. N., *Ancient Indian Glass: Archaeology & Technology*, Delhi, 1989.
 Tripathi, V., (ed.) *Archaeometallurgy in India*, Delhi, 1998.
 Tripathi, V., *The Age of Iron in South Asia : Legacy & Tradition*, New Delhi, 2001.

Course III

A Survey of Science & Technology from 6th Century B.C. to 1st century B.C.

- Unit-I. Introduction and Development of Science and Technology**
1. Sources
 2. Mathematics & Astronomy
 3. Biological Science
 4. Metallurgy & Ceramics
- Unit-II. Interaction with Foreign Sciences**
5. Greece
 6. China
 7. Arabia

- Unit-III. Science and Technology during NBP Phase**
8. Development of copper
 9. Development of iron metallurgy
 10. Ceramic and glass technology
- Unit-IV. Science and Technology as revealed from Literature**
11. Shulbsutra
 12. Vedāṅga Jyotish
 13. Buddhist & Jain Texts
- Unit -V. Science and Technology from 3rd Century B.C. to 1st Century B.C.**
14. Kauṭilya's Arthashastra- Agriculture, Gems, Minerals and Other sciences
 15. Metal technology : Copper & Iron
 16. Iron and Steel; Wootz Steel

Recommended Reading

- Bose, D. M. *et. al.*, *Concise History of Science in India* (New Delhi, INSA, 1971)
- Chattopadhyaya, D., *Studies in the History of Science in India*, Vol. I & n.
- Hegde, K.T.M., *An Introduction to Ancient Indian Metallurgy*, Bangalore, 1991.
- Kutumbia, P., *Ancient Indian Medicine*. Orient Congmou, Madras, 1962.
- Prakash, S., *Prāchīn Bhārta men Rasāyana Kā Vikāsa*, New Delhi, 1970.
- Prasad, G., *Bhārtīya Jyotiśa Kā Itihāsa.*, Lucknow, 1956.
- Porter, R. *et.al.*, *The Cambridge History of Science*, Vol. I, Cambridge 2003
- Ray, P., *History of Chemistry in Ancient and Mediēval India*. Calcutta, 1956.
- Seal. B.N., *Positive Sciences of Ancient India*. New Delhi, 1958.
- Sen, S.N., *Vigyāna Kā Itihāsa*. Two Volumes. Patna, 1972.
- Singer, C., *et. al.*, *A History of Technology* Vol. 1 Oxford 1954. (relevant chapters).
- Randhawa, M.S., *A History of Agriculture in India*. Delhi, 1980.
- Singh, A.N. and Dutta, B.B., *Hindū Gaṇita Śāstra kā Itihāsa*, Lucknow, 1974 (Hindi & English).

Books for reference:

- Agrawal, D. P., *Ancient Metal Technology and Archaeology of South Asia*, 2000, New Delhi.
- Agrawal, D.P. & J.S. Kharakwal., *Bronze & Iron Ages in South Asia*, 2003, New Delhi.
- Bag, A.K., (ed.) *History of Technology in India*, Vol. I. New Delhi. 1997.
- Bhardwaj, H.C., *Aspects of Ancient Indian Technology*, (Delhi, 1979)
- Bhardwaj, H. C., *Metallurgy in Indian Archaeology*. Varanasi. 2000.
- Bhardwaj, H.C., & V.L.Sharma.. *Technology, Tools and Appliances*, Allahabad, 1997.
- Biswas, A.K. and S. Biswas., *Minerals and Metals in Ancient India*, Delhi, 1996.
- Chakrabarti, D.K., *The Early Use of Iron in India*, OUP, Bombay, 1992.
- Chakrabarti, D.K. and N.Lahiri., *Copper and Its Alloys in Ancient India*, New Delhi, 1996.
- Chattopadhyay, P.K., *Archaeometallurgy in India*, Patna, 2004.
- Chowdhary, K. A., *Ancient Indian Agriculture and Forestry in Northern India*, Bombay, 1977
- Forbes, R.I., *Studies in Ancient Technology*, Vol. I to IX (Leiden, 1976).
- Gopal, L., *Aspects of History of Agriculture in Ancient India*. Varanasi, 1980.
- Hegde, K. T. M., *An Introduction to Ancient Indian Metallurgy*, Bangalore, 1991
- Hodges, H., *Artifacts - An introduction to early materials and Technology* (London Duckworth,
- Hodges, H., *Technology in the Ancient World* London, Pelican, 1970.
- Dikshit, M.G., *History of Indian Glass* Bombay, 1964.
- Indian Journal of History of Science* (relevant volumes). INSA, New Delhi.
- Lal, A., *Prāchīn Bhārta men Kriṣi*, Varanasi, 1980.

- Mule, Gunakar., *Bhārtīya Vigyāna ka Brihad Itihāsa*, Delhi, 1993.
 Prakash, S., *Founders of Sciences in Ancient India* English and Hindi, New Delhi, 1965.
 Sankalia, H.D., *Some Aspects of Prehistoric Technology in India*. (1989). New Delhi.
 Sharma, V.L., *Antarraṣṭrīya Paripekṣya mein Prāchīna Bhārtīya Vigyāna*, New Delhi, 1990.
 Singh, R. N., *Ancient Indian Glass: Archaeology & Technology*, Delhi, 1989.
 Singh, R.N., *Aspects of Archaeometallurgy in India*, Varanasi, 2007
 Tripathi, V., (ed.) *Archaeometallurgy in India*, Delhi, 1998.
 Tripathi, V., *The Age of Iron in South Asia : Legacy & Tradition*, New Delhi, 2001.
 Upadhyay, P., *Minerals and Mining in Ancient India*, Varanasi, 2007.
 Tripathi, V., *History of Iron Technology in India*, New Delhi 2009.

Course IV

Science & Technology from 1st Century A.D. to c. 7th Century A.D.

- Unit-I. Development of Medicine and Surgery**
1. Vāgbhaṭṭa
 2. Charak
 3. Suśruta
- Unit-II. Development of Mathematics & Astronomy**
4. Arithmetic & Algebra
 5. Geometry
 6. Āryabhatta & Varāhmihira
 7. Brahmagupta
- Unit-III. Technological achievements: Metallurgy**
8. Copper
 9. Iron
 10. Silver and Gold
- Unit-IV. Indian Alchemy**
10. Origin
 11. Nāgārjuṇa
 12. Later developments in Alchemy
- Unit-V. Development of Agricultural and Biological Sciences**
13. Agricultural Practices
 14. Flora
 15. Fauna

*Students shall be taken for study tour/ visit laboratories related to their course.

Recommended Reading

- Bose, D. M. et. al., *Concise History of Science in India*, New Delhi, INSA, 1971
 Chattopadhyaya, D., *Studies in the History of Science in India*, Vol, I &; New Delhi, 2004.
 Hegde, K.T.M., *An Introduction to Ancient Indian Metallurgy*, Bangalore, 1991.
 Kutumbia, P., *Ancient Indian Medicine*. Madras, 1962.
 Prakash, S., *Prāchīn Bhārta men Rasāyana Kā Vikāsa*, Delhi, 1970.
 Prasad, G., *Bhārtīya Jyotiṣa Kā Itihāsa*, Lucknow, 1956.
 Porter, R., et.al., *The Cambridge History of Science*, Vol. I, Cambridge 2003
 Ray, P., *History of Chemistry in Ancient and Medieval India*. Calcutta, 1956.