

BA (Prog) with Sanskrit as Major  
UGCF for Multidisciplinary Courses of Study

**DISCIPLINE SPECIFIC CORE COURSE, DISCIPLINE A 5:  
DSC-9: Indian Epigraphy & Paleography**

Credit distribution, Eligibility and Pre-requisites of the Course

Course title & Code	Credits	Credit distribution of the course			Eligibility Criteria	Pre-requisite of the course
		Lecture	Tutorial	Practical/Practice		
(Discipline A 5) Indian Epigraphy & Paleography DSC - 9	04	3	1	0	12th Passed	Working Knowledge of Sanskrit

**Learning Objectives:**

This course known as the Indian Epigraphy and Paleography provides background and basis of Indian history of ancient period. Students with no knowledge of Sanskrit but interested in acquiring historical facts direct from their source can be benefitted with this course. It is extremely helpful for those who are willing to involve in archaeological studies.

This course provides basics covered in ancient Indian inscriptions. Some of the terminologies available in inscriptions are introduced here. Unit II of this section provides historical facts through the inscriptions.

It introduces background of the Indian epigraphical study. Importance of inscriptions on the basis of contents, their impact and reflections of society, economy, religious, political instances can also be understood here. It helps to understand about prevailing theories of the origin of the Brahmi script. Development of the letters of this script in different regions in a span of time is introduced. Their causes of change are also made clear to illustrate different forms in the script. Unit III provides the history of study of inscriptions in India. A number of Indian and foreign scholars made attempts in this field. Students are made aware about some prominent scholars who made valuable efforts in this field.

**Learning Outcomes:**

Contents of this course are related to formation of history of ancient India, so it is an interdisciplinary course within Sanskrit. Students of Sanskrit can understand how important role Sanskrit based inscriptions play in preparing history, and their knowledge of the language can

help historians to make a perfect history, undoubtedly. Similarly students of History will find themselves on the positive ground and direct in touch with material related to history of ancient India.

## **Syllabus**

### **Unit-I:**

**15 hrs**

Inscription of Rudradāman.  
Eran Pillar Inscription:  
Status of Samudragupta  
Iron Pillar Inscription of Ćandra

### **Unit-II:**

**10 hrs**

**Antiquity of writing in India**  
Observations of foreign scholars  
Literary evidences  
Observations made by Indian Epigraphists.  
**Importance of the study of Inscriptions.**  
Geographical description  
Historical evidences  
Society, Religion, Literature  
Economic Conditions  
Administration

### **Unit-III**

**10 hrs**

#### **Types of Inscriptions:**

Praśasti  
Religious  
Donations  
Grants

#### **Writing material:**

Rocks  
Pillars  
Metal Plates  
Statues  
Pen, Brush, Chisel, Stylus, Paint/Colour

### **Unit-IV**

**10 hrs**

#### **Origin of the Brāhmī Script**

Foreign Origin, Indian Origin, Greek origin, Phoenician origin  
Theory of South Indian Origin  
Theory of Aryan Origin.

#### **History of reading of Indian Inscriptions.**

Contribution of Epigraphists: G.H. Ojha, Fleet, Princep, D.C. Sircar, Cunningham, Buhler.

System of dating and use of eras:  
Vikram Era, Śaka Era, Gupta Era, Harśa Era.

**Essential/recommended readings:**

1. Buhler, G, On the origin of the Indian alphabet & numerals.
2. Dani, A. H, Indian Paleography
3. Ojha, G.H, Bhāratīya Prācīna Lipimāla (Hindi)
4. Pandey, R.B, Bhāratīya Purālīpi (Hindi)
5. Rana, S.S., Bhāratīya Abhilekha
6. Sircar, D.C., Indian Epigraphy, Select Inscriptions (Part-I)
7. Upadhyay, V., Prācīna Bhāratīya Abhilekha (Hindi)

**Suggested Readings:**

1. Classical Age by Altekar, Majumdar, Sircar
2. श्रेण्य-युग (हिंदी अनुवाद): अल्तेकर, मजुमदार, सरकार
3. गुप्त-सम्राट और उनका काल: उदित नारायण राय

**Examination scheme and mode: Subject to directions from the Examination Branch/University of Delhi from time to time.**

## UGCF for Multidisciplinary Courses of Study

### DISCIPLINE SPECIFIC CORE COURSE, DISCIPLINE A 6: DSC-10: Basic Elements of Indian Philosophy

#### Credit distribution, Eligibility and Pre-requisites of the Course

Course title & Code	Credits	Credit distribution of the course			Eligibility Criteria	Pre-requisite of the course
		Lecture	Tutorial	Practical/Practice		
(Discipline A 6) Basic Elements of Indian Philosophy DSC - 10	04	3	1	0	Passed in Semester- IV	Working Knowledge of Sanskrit

#### Learning Objectives:

The objective of the Syllabus is to study the basic issues in Indian Philosophy.

#### Learning Outcomes:

Indian Philosophy teaches critical thinking, close reading, clear writing, and logical analysis. It develops the tools of logic and reason to analyze the ways in which the individual experiences the Universe. It guides the student to understand the language we use to describe the world, and our place within it. Different areas of philosophy are distinguished by the questions they ask. The most important reason to study philosophy is that it is of enormous and enduring interest. Philosophy is important, but it is also enormously enjoyable in which students are provided with the tools and the opportunity to develop and express their own philosophical views.

#### Syllabus

##### Unit-I:

09 hrs

Darśana - concept and aims, Classification of Indian Philosophical schools,  
Fundamental issues in Indian Philosophy - Epistemology: Six Pramanas

##### Unit-II:

12 hrs

Metaphysics: Realism, Idealism, Causation – Satkaryavada, Asatkaryavada, Parinamavada,  
Vivartavada  
Ethics: Karma & Punarjanma theory

##### Unit-III

12 hrs

##### Schools of Indian Philosophy

Heterodox Schools - Cārvāka – General introduction with emphasis on Challenge to Veda,  
Rejection of Transcendental Entities, Ethics (Based on Sarvadarshansamgrah)  
Jainism – General introduction with emphasis on Anekāntavāda, Syādvāda, Saptabhaṅginyāya,  
Triratna

Buddhism- General Introduction with emphasis on Four Noble Truths

**Unit-IV**

**12 hrs**

Sāṃkhya – General Introduction with emphasis on Prakṛti, three Guṇas & Puruṣa  
(Based on Sāṃkhyakārikā)

Yoga - Eight fold path of Yoga (Based on Yogasūtra Sādhana-pāda and Yogabhāṣya thereon)

Nyāya Vaiśeṣika - General Introduction with emphasis on Tarkasamgraha – seven padarthas  
(overview only)

Mīmāṃsā – Concept of dharma

Advaita Vedānta – General Introduction with emphasis on Brahman, Māyā, Jīva and Jagat (Based  
on Vedāntasāra)

**Essential/recommended readings:**

1. Bhartiya, Mahesh - *Bhāratīya Darśana Kī Pramukha Samasyāḥ*, Ghaziabad, 1999.
2. Chatterjee, S. C. & D. M. Datta - *Introduction to Indian Philosophy*, Calcutta University, Calcutta, 1968 (Hindi Translation also).
3. Hiriyanna, M. - *Outline of Indian Philosophy*, London, 1956 (also Hindi Translation).
4. Shastri, Kuppaswami, *A Primer of Indian Logic*, 1951 (only introduction).
5. Bhartiya, Mahesh - *Causation in Indian Philosophy*, Ghaziabad, 1975.
6. Pandey, Ram Chandra - *Panorama of Indian Philosophy* (also Hindi version), M.L.B.D., Delhi, 1966.
7. Raja, Kunnhan - *Some Fundamental Problems in Indian Philosophy*, MLBD, Delhi, 1974.
8. Rishi, Uma Shankar (Ed.), *Sarva-Darshana Samgraha*, Chowkhamba Vidyabhawan, Varansi, 1984.

**Suggested Readings:**

1. Hiriyanna, M. - *Outline of Indian Philosophy*, London, 1956 (also Hindi Translation).
2. Shastri, Kuppaswami, *A Primer of Indian Logic*, 1951 (only introduction).
3. Bhartiya, Mahesh - *Causation in Indian Philosophy*, Ghaziabad, 1975.
4. O'Flaherty, Wendy Doniger – *Karma and Rebirth in Classical Indian Tradition*, MLBD, Delhi, 1983.
5. Radhakrishnan, S. - *Indian Philosophy*, Oxford University Press, Delhi, 1990.
6. Raja, Kunnhan - *Some Fundamental Problems in Indian Philosophy*, MLBD, Delhi, 1974.
7. Chatterjee, S. C. – *The Nyāya Theory of Knowledge*, Calcutta, 1968.
8. Radhakrishnan, S. - *Indian Philosophy*, Oxford University Press, Delhi, 1990.

**Examination scheme and mode: Subject to directions from the Examination Branch/University of Delhi from time to time.**

BA (Prog.) with Sanskrit as Non-Major

**DISCIPLINE SPECIFIC CORE COURSE, DISCIPLINE A 5:  
DSC-5: Indian Epigraphy & Paleography**

Credit distribution, Eligibility and Pre-requisites of the Course

Course title & Code	Credits	Credit distribution of the course			Eligibility Criteria	Pre- requisite of the course
		Lecture	Tutorial	Practical/Practice		
(Discipline A 5) Indian Epigraphy & Paleography DSC - 5	04	3	1	0	12th Passed	Working Knowledge of Sanskrit

**Learning Objectives:**

This course known as the Indian Epigraphy and Paleography provides background and basis of Indian history of ancient period. Students with no knowledge of Sanskrit but interested in acquiring historical facts direct from their source can be benefitted with this course. It is extremely helpful for those who are willing to involve in archaeological studies.

This course provides basics covered in ancient Indian inscriptions. Some of the terminologies available in inscriptions are introduced here. Unit II of this section provides historical facts through the inscriptions.

It introduces background of the Indian epigraphical study. Importance of inscriptions on the basis of contents, their impact and reflections of society, economy, religious, political instances can also be understood here. It helps to understand about prevailing theories of the origin of the Brahmi script. Development of the letters of this script in different regions in a span of time is introduced. Their causes of change are also made clear to illustrate different forms in the script. Unit III provides the history of study of inscriptions in India. A number of Indian and foreign scholars made attempts in this field. Students are made aware about some prominent scholars who made valuable efforts in this field.

**Learning Outcomes:**

Contents of this course are related to formation of history of ancient India, so it is an inter-disciplinary course within Sanskrit. Students of Sanskrit can understand how important role Sanskrit based inscriptions play in preparing history, and their knowledge of the language can help historians to make a perfect history, undoubtedly. Similarly students of History will find

themselves on the positive ground and direct in touch with material related to history of ancient India.

## **Syllabus**

### **Unit-I:**

**12 hrs**

Inscription of Rudradāman.  
Eran Pillar Inscription:  
Status of Samudragupta  
Iron Pillar Inscription of Ćandra

### **Unit-II:**

**12 hr**

**Antiquity of writing in India**  
Observations of foreign scholars  
Literary evidences  
Observations made by Indian Epigraphists.  
**Importance of the study of Inscriptions.**  
Geographical description  
Historical evidences  
Society, Religion, Literature  
Economic Conditions  
Administration

### **Unit-III**

**12 hrs**

#### **Types of Inscriptions:**

Praśasti  
Religious  
Donations  
Grants

#### **Writing material:**

Rocks  
Pillars  
Metal Plates  
Statues  
Pen, Brush, Chisel, Stylus, Paint/Colour

### **Unit-IV**

**09 hrs**

#### **Origin of the Brāhmī Script**

Foreign Origin, Indian Origin, Greek origin, Phoenician origin  
Theory of South Indian Origin  
Theory of Aryan Origin.

#### **History of reading of Indian Inscriptions.**

Contribution of Epigraphists: G.H. Ojha, Fleet, Princep, D.C. Sircar, Cunningham, Buhler.  
System of dating and use of eras:

Vikram Era, Śaka Era, Gupta Era, Harśa Era.

**Essential/recommended readings:**

8. Buhler, G, On the origin of the Indian alphabet & numerals.
9. Dani, A. H, Indian Paleography
10. Ojha, G.H, Bhāratīya Prācīna Lipimāla (Hindi)
11. Pandey, R.B, Bhāratīya Purālīpi (Hindi)
12. Rana, S.S., Bhāratīya Abhilekha
13. Sircar, D.C., Indian Epigraphy, Select Inscriptions (Part-I)
14. Upadhyay, V., Prācīna Bhāratīya Abhilekha (Hindi)

**Suggested Readings:**

4. Classical Age by Altekar, Majumdar, Sircar
5. श्रेण्य-युग (हिंदी अनुवाद): अल्टेकर, मजुमदार, सरकार
6. गुप्त-सम्राट और उनका काल: उदित नारायण राय

**Examination scheme and mode: Subject to directions from the Examination Branch/University of Delhi from time to time.**



## Pool of Discipline Specific Electives

### DSE-09: Lexicographical Tradition in Sanskrit

#### Credit distribution, Eligibility and Pre-requisites of the Course

Course title & Code	Credits	Credit distribution of the Course			Eligibility criteria	Prerequisite of the course
		Lecture	Tutorial	Practical/ Practice		
Lexicographical Tradition in Sanskrit	04	3	1	0	12th Passed	Working Knowledge of Sanskrit

#### Learning Objectives

This course will introduce the theories of writing dictionaries in Sanskrit and its traditions.

#### Learning outcomes

After doing this course, students will learn the rich lexicographical tradition of Sanskrit field and they will get an outlook of the traditional and modern works in this field which will work as a great source of research tools for their future research endeavors.

#### Detailed Syllabus

##### Unit I

12 hrs

##### Introduction to Sanskrit Lexicography

Origin and Development

Brief Introduction to Major Lexicons

Types of Dictionaries

##### Unit II

12 hrs

##### Tradition of Sanskrit Lexicons

Early Sanskrit Lexicography:

Saravanukarmani, Nighaṇṭu and Nirukta

Dhātupāṭha, Gaṇapāṭha and Word lists in Śikṣās, Prātiśākhya

##### Unit III

12 hrs

##### Classical Sanskrit Lexicons

Vācaspatyam:

Textual organisation, Commentaries, Translations and Digitized works

Śabdakalpadruma:

Textual organisation, Commentaries, Translations and Digitized works

Halāyudhakośa:

Textual organisation, Commentaries, Translations, and Digitized works

Amarakośa:

Textual organisation, Commentaries, Translations, and Digitized works

Mankhakośa:

Textual organisation, Commentaries, Translations and Digitized works

Medinīkośa:

Textual organisation, Commentaries, Translations and Digitized works

#### **Unit IV**

**09 hrs**

##### **Modern Sanskrit Lexicographers**

Monier William, Apte, Acharya Vishbandhu, Jainendra Siddhantakosha, Nyayakosha, M.  
Bloom Field

#### **Essential/recommended readings**

Amarakosha compiled by B.L.Rice, edited by N.Balasubramanya, 1970, page

#### **Additional Resources:**

**Examination scheme and mode: Subject to directions from the Examination  
Branch/University of Delhi from time to time**

## DSE-10: Introduction to Sanskrit Poetics

### Credit distribution, Eligibility and Pre-requisites of the Course

Course title & Code	Credits	Credit distribution of the Course			Eligibility Criteria	Prerequisite of the course
		Lecture	Tutorial	Practical/ Practice		
Introduction to Sanskrit Poetics	04	3	1	0	12th Passed	Working Knowledge of Sanskrit

### Learning Objectives

This course on an introduction to Sanskrit Poetics aims at providing the students with the knowledge of fundamental principles of Sanskrit Poetics in the Indian tradition on the basis of Kāvya-prakāśa and Sahityadarpana.

### Learning outcomes

This course will make students aware of the fundamental principles of Sanskrit Poetics. They will be able to recognize the various genres of Sanskrit Poetics, appreciate the objectives of Sanskrit Poetics, and also analyze the structure of a work in terms of the essential ingredients of Sanskrit Poetics as propounded.

### Detailed Syllabus

#### Unit I

09 hrs

#### Kāvya-Prayojana (objectives of poetry)

Kāvya-Prayojana (objectives of poetry) based on Bhāmaha and Mammaṭa.

#### Unit II

12 hrs

#### Kāvya-Hetu (causes of poetry)

Kāvya-Hetu (causes) of poetry based on Daṇḍī, Mammaṭa and Paṇḍitarāja Jagannātha.

#### Unit III

12 hrs

#### Kāvya- Lakṣaṇa (definition)

Kāvya-Lakṣaṇa (definition) based on Bhāmaha, Daṇḍī, Kuntaka, Mammaṭa and Vishvanath.

#### Unit IV

12 hrs

#### Figures of speech (Alaṅkāra)

Figures of speech based on Candrālōka -

Definition of Alaṅkāra, Anuprāsa, Yamaka, Upamā, Rūpaka, Utprekṣā, Bhrānti, Sandeha, Kāvyaṅga, Śleṣa, Aprastutaprasaṅga, Arthāntaranyāsa, Vibhāvanā and Viśeṣokti,

### Essential/recommended readings

1. Kāvyaṅga - Bhāmaha, Bhāṣyakāra, Devendra Nath Sharma, Bihaar rāṣṭrabhāṣā pariṣad, Patna, 1962.
2. Kāvyaṅga - Mammāṭa, Srinivas Shastri, Sahitya Bhandara Meerut.
3. Kāvyaṅga - Daṇḍī, Ramchandra Mishra, Chaukhamba Vidyabhavan, Varanasi.
4. Rasagaṅgādhara - Paṇḍitarāja Jagannātha, Chaukhamba Vidyabhavan, Varanasi
5. Vakroktijīvitam (1<sup>st</sup> Unmeṣa) – Kuntaka, Ved Prakash Dindoriya, Shivalik Prakashan, Delhi.
6. Sāhityadarpaṇa – Viśvanātha, Nirupan Vidyalankar, Sahitya Bhandara Meerut
7. Candrālōka – Jayadeva, Subodha Chandra Pant, MLBD, Delhi.

### Additional Resources:

1. बलदेव उपाध्याय, संस्कृत—आलोचना, हिन्दी समिति, सूचना विभाग, उ. प्र., 1963.
2. Kane P.V., *History of Sanskrit Poetics* pp.352-991,
3. Kane, P.V., 1961, *History of Sanskrit Poetics* and its Hindi translation by Indrachandra Shastri, Motilal Banarasidas, Delhi.

**Examination scheme and mode: Subject to directions from the Examination Branch/University of Delhi from time to time**

## DSE-11: Phonetics in Sanskrit Tradition

### Credit distribution, Eligibility and Pre-requisites of the Course

Course title & Code	Credits	Credit distribution of the course			Eligibility Criteria	Prerequisite of the course
		Lecture	Tutorial	Practical/ Practice		
Phonetics in Sanskrit Tradition	04	3	1	0	12th Passed	Working Knowledge of Sanskrit

### Learning Objectives

The main objective of this course is to introduce basic concepts of phonetics in Sanskrit. This course aims at acquainting students with the mechanisms of speech production and to train them to perceive, identify and transcribe speech sounds. To make aware the students to phonetics in Indian tradition.

### Learning outcomes

After completing this course the students will learn the basics of Sanskrit Phonetics. They will get acquainted with the sound systems, and the speech production mechanism of Sanskrit. They will also learn the traditional Sanskrit theories and principles of Phonetics.

### Detailed Syllabus

#### Unit I

12 hrs

#### Brief Introduction to Phonetics

- Definition of Phonetics
- Origin and Development
- Indian Phonetic traditions
- Types of Phonetics

#### Unit II

09 hrs

General Introduction to Pratishakyas and Paniniya Shiksha

#### Unit III

12 hrs

#### Introduction to Paniniya Shiksha (Vridhapaatha)

- Sthana-prakarna
- Karana-prakarna
- Antahprayatna-prakarna
- Bahyaprayatna-prakarna
- Sthanapeedana-prakarna
- Vrittikars-prakarna
- Prakrama—prakarna

Nabhitala-prakrana

**Unit IV**

**12 hrs**

**Introduction to Paniniya Shiksha (Shlokatika)**

Paniniya Shiksha (Shlokatika)

Based on Shloks 1-22

**Essential/recommended readings**

1. Paniniya Shiksha- Somlekha, Chaukhamba Sanskrit Pratishthan, Delhi, 2014
2. पाणिनीयशिक्षा, शिवराज आचार्य कौडिण्ययन, CHAUKHAMBHA VIDYA BHAWAN, 2012

**Additional Resources:**

**Examination scheme and mode: Subject to directions from the Examination Branch/University of Delhi from time to time**

## DSE-12: Ancient Indian Robotics

### Credit distribution, Eligibility and Pre-requisites of the Course

Course title & Code	Credits	Credit distribution of the Course			Eligibility criteria	Prerequisite of the course
		Lecture	Tutorial	Practical/ Practice		
Ancient Indian Robotics	04	3	1	0	Twelfth Passed	Working Knowledge of Sanskrit

### Learning Objectives

Ancient Indian Robotics is a comprehensive course that delves into the rich history of robotics in ancient India. The course explores the fascinating world of ancient Indian engineering and automaton technology, shedding light on the remarkable achievements and advancements made by ancient Indian civilizations in the field of robotics. Students will study the principles, designs, and mechanisms of ancient Indian robots, and gain insights into the cultural, social, and scientific contexts that influenced their development. Through a combination of lectures, discussions, and hands-on activities, students will develop a deep understanding of ancient Indian Robotics and its relevance to contemporary technology.

### Learning outcomes

After completion of this course, students will be able to

- Explore the historical and cultural background of ancient India and its contributions to the field of robotics.
- Study the principles, designs, and mechanisms of ancient Indian robots.
- Examine the cultural, social, and scientific contexts that influenced the development of ancient Indian Robotics.
- Analyze the impact of ancient Indian Robotics on contemporary technology.
- Foster critical thinking, research skills, and the ability to draw connections between historical developments and present-day technology.

### Detailed Syllabus

#### Unit: I

##### Historical Background

Introduction to ancient Indian civilization and its technological advancements

Discussion on the significance of studying ancient Indian Robotics in the context of contemporary technology

Examination of ancient Indian texts and scriptures mentioning robots and automata

Exploration of ancient Indian scientific traditions relevant to Robotics

#### Unit: II

### **Types of Ancient Indian Robots**

Study of various types of ancient Indian robots, such as humanoid robots, animal-shaped robots, and mechanical devices  
Analysis of their designs, mechanisms, and functions  
Case studies of notable ancient Indian robots, such as the Yantra Sarvasva.  
Exploration of religious and mythological beliefs related to robots in ancient Indian society.

### **Unit: III**

#### **Scientific and Mathematical Foundations**

Study of scientific concepts/knowledge utilized in ancient Indian Robotics.  
Examination of the instruments developed by ancient Indian scientists

### **Unit: IV**

#### **Samarangan-sutradhar**

Verse 101-107, Chapter 31 (दृग्ग्रीवातल ,योगतस्ते गुणानाम् -Ed. T. Ganpati Shastri)

### **Essential/recommended readings**

1. SamranganSutradhar by Shukla, Dr.dijendranath, भारत भारती प्रेस, 1 अन्सारी रोड दरयागंज दिल्ली-6 1965
2. SamranganSutradhar S.K.Jugnu. ISBN: 9788170803676. 2011. Publisher: Chaukhamba Sanskrit Series.
3. मयमतम्, डॉ॰ श्रीमती शैलजा पाण्डेय, चौखम्बा सुरभारती प्रकाशन, वाराणसी, 2007
4. History of Mechanical Inventions in Ancient India by Debiprasad Chattopadhyaya FIRMA KLM PRIVATE LIMITED 257-B, B. B. Ganguly Street Calcutta 700 012 INDIA
5. Ancient India and the Indian Robotics by Jayant Vishnu Narlikar
6. The Wonder That Was India by A.L. Basham
7. Indian Scientific Heritage: An Introduction by P.R. Sarkar
8. Indian Civilization and Culture by S.N. Sadasivan

**Examination scheme and mode: Subject to directions from the Examination Branch/University of Delhi from time to time.**