

COURSE TITLE	INDIAN KNOWLEDGE SYSTEM - II
COURSE CODE	07BA1317
COURSE CREDITS	2

Objective:

- 1 To understand the concepts of language and its components in Indian knowledge system.
- 2 To understand the role of Sanskrit.
- 3 To understand the concept of various numerical systems in ancient India.

Course Outcomes: After completion of this course, student will be able to:

- 1 Learn the great tradition and components of Sanskrit language in Indian knowledge system
- 2 Develop an understanding of the different contributors of the numerical value of Indian traditional knowledge
- 3 Learn the role of Sanskrit in ancient and cotemporary India

Pre-requisite of course:NA

Teaching and Examination Scheme

Theory Hours	Tutorial Hours	Practical Hours	ESE	IA	CSE	Viva	Term Work
2	0	0	0	0	0	50	50

Contents : Unit	Topics	Contact Hours
1	UNIT 1 Linguistics (Components of a Language, Panini's work on Sanskrit Grammar, Phonetics in Sanskrit, Role of Sanskrit in Natural Language processing)	10
2	UNIT 2 Number System and Units of Measurement (Number System in India and features of Indian Numeral System including the Concept of Zero and its importance, Large Numbers and their representation, Unique approaches to represent numbers)	10
3	UNIT 3 Pingala and the Binary System	10
Total Hours		30

Textbook :

- 1 Introduction to India Knowledge System ???Cocepts and Applications, B. Mahadevan, Vinayak Rajat Bhat and Nagendra Pavana R. N., PHI Learning Private Limited, Delhi, 2022

References:

- 1 Ancient Indian Knowledge: Implications to Education System,, Ancient Indian Knowledge: Implications to Education System,, Boski Singh, LAP Lambert Academic Publishing, 2019
- 2 Maths Sutra: The Art of Indian Speed Calculation, Maths Sutra: The Art of Indian Speed Calculation, Gaurav Tekriwal, Penguin India Publication, 2015
- 3 Exploring Science in Ancient Indian Texts, Exploring Science in Ancient Indian Texts, Bal Ram Singh, D. K. Print World Ltd.,, 2014

Suggested Theory Distribution:

The suggested theory distribution as per Bloom’s taxonomy is as follows. This distribution serves as guidelines for teachers and students to achieve effective teaching-learning process

Distribution of Theory for course delivery					
Remember / Knowledge	Understand	Apply	Analyze	Evaluate	Higher order Thinking / Creative
0.00	15.00	25.00	35.00	25.00	0.00

Instructional Method:

- 1 Lecture method combined with discussion
- 2 Use of ICT tools
- 3 Assignments
- 4 Presentations
- 5 Workshops
- 6 Expert lectures
- 7 Self-study

Supplementary Resources:

- 1 <http://bhavana.org.in>
- 2 www.hamsi.org.nz/
- 3 <http://insaindia.res.in/journals/ijhs.php>