



SARDAR VALLABHBHAI PATEL EDUCATION SOCIETY'S
R. N. G. PATEL INSTITUTE OF TECHNOLOGY - RINGPIT

An Autonomous Institute u/s UGC Act 1956

Approved by AICTE & affiliated to Gujarat Technological University

Bardoli - Navsari Road, At: Isroli (tajpore), Po: Afwa, Tal: Bardoli, Dist: Surat, Pin - 394620
 Phone: 95129 00457, 95129 00458 • Email: Info@rngpit.ac.in • Website: www.rngpit.ac.in

Program Name: Integrated M.Sc. (IT)

Level: Post Graduate

Branch: Information Technology

Subject Code : IBS307

Subject Name : Indian Knowledge Systems-II

w. e. f. Academic Year:	2025-26
Semester:	III
Category of the Course:	Value Added Course

Prerequisite:	Basic academic skill, Cultural Awareness, Curiosity and Reflective Thinking.
Rationale:	This course covers basic information about Astronomy, Knowledge Framework and classifications of ancient India, Health Wellness and Psychology, Town Planning and Architecture in context of Indian Knowledge System.

Course Outcome:

After Completion of the Course, Student will able to:

No	Course Outcomes
01	Recall key features and historical milestones of Indian astronomy.
02	Understand and describe the Indian framework of knowledge systems, their structure, and classifications.
03	Explain the Indian perspective on mind and psychological well-being
04	Describe key features and practices of town planning in ancient and medieval India

Teaching and Examination Scheme:

Teaching Scheme (in Hours)			Total Credits L+T+ (PR/2)	Assessment Pattern and Marks				Total Marks
L	T	PR	C	Theory		Tutorial / Practical		
				SEE (TH)	IAT	CCE	SEE (P)	
2	0	0	2	25	25	-	-	50

Where SEE: Semester End Examination, IAT: Internal Assessment Test, CCE: Continuous and Comprehensive Evaluation

Course Content:

Unit No.	Content	No. of Hours	% of Weightage
1.	Unit 1: Astronomy 1. Introduction to Indian astronomy 2. Indian contributions in astronomy 3. The celestial coordinate system 4. Elements of the Indian calendar 5. Notion of years and months 6. Pañcāṅga – The Indian calendar system 7. Astronomical Instruments (Yantras) 8. Jantar Mantar of Rājā Jai Singh Sawai	6	20
2.	Unit 2: Knowledge Framework and classifications 1. Indian scheme of knowledge 2. The knowledge triangle 3. Prameya – A vaiśeṣikan approach to physical reality 4. Dravyas – the constituents of the physical reality 5. Attributes – the properties of substances and Action – the driver of conjunction and disjunction 6. sāmānya, viśeṣa, samavāya 7. Pramāṇa – the means of valid knowledge 8. Saṁśaya – ambiguities in existing knowledge 9. Framework for establishing valid knowledge 10. Deductive or inductive logic framework 11. Potential fallacies in the reasoning process 12. Siddhānta: established tenets in a field of study	9	30
3.	Unit 3: Health Wellness and Psychology 1. Distinguish thought on Health and wellness in Indian system 2. Āyurveda: approach to health 3. Āyurveda: definition of health 4. Tri-doṣas 5. Role of agni in health 6. Sapta-dhātavaḥ: seven-tissues 7. Psychological aspects of health 8. Disease management elements 9. Dinacaryā: daily regimen for health & wellness 10. Importance of sleep 11. Food intake methods and drugs 12. Approach to lead a healthy life 13. Indian approach to psychology 14. Basic tenets of Indian psychology 15. The tri guṇa system & holistic picture of the individual 16. Prakṛti and its evolution and nature of individual 17. The Pañca-kōṣa framework 18. Four states of Consciousness 19. Consciousness studies: An Indian approach	9	30

4.	Unit 4: Town Planning and Architecture 1. Perspective of Arthaśāstra on town planning 2. Vāstu-śāstra – The science of architecture 3. Eight limbs of Vāstu 4. Town planning 5. Temples in India: Marvellous stone architecture for eternity 6. Temple architecture in India 7. Iconography	6	20
	Total	30	100

Suggested Specification Table with Marks(%) (Theory):

Distribution of Theory Marks(%)					
R Level	U Level	A Level	N Level	E Level	C Level
50	50	-	-	-	-

Where R: Remember; U: Understanding; A: Application, N: Analyze and E: Evaluate C: Create (as per Revised Bloom’s Taxonomy)

References/Suggested Learning Resources:

(a) Reference Books:

1. “Introduction to Indian Knowledge System: Concepts and Applications”, By B. Mahadevan, Vinayak Rajat Bhat, Nagendra Pavana R.N., 2022
2. “Pride of India: A Glimpse into India’s Scientific Heritage”, Samskrita Bharati, New Delhi.
3. “The Wonder that is Sanskrit”, Sri Aurobindo, Vijay Poddar, Sri Aurobindo Society, Puducherry.
4. “Indian Architecture”, Munshiram Manoharlal Publishers, New Delhi.
5. “Public Administration in Ancient India”, Macmillan, London.
6. “Indian Knowledge Systems Vol – I & II”, Indian Institute of Advanced Study, Shimla, H.P

(b) Open source software and website:

1. https://onlinecourses.swayam2.ac.in/imb24_mg21
2. https://onlinecourses.swayam2.ac.in/imb24_mg22
