Curriculum for

Introduction to

Indic Knowledge System (IKS)

(Value Added Courses)

For

All Undergraduate Programme of Gujarat University, Ahmedabad (B.Sc., B.Com., B.A, BBA, BCA)

Course Code: 237(IKS)

Objective Of the Course

This course is designed to understand and enhance the holistic understanding of

Indian Knowledge System. This course provides the basic understanding of the rich

Indian knowledge system and its traditions. The course will introduce to the various

ancient Indian Schools and its relevance in contemporary period with the great

achievements of IKS to the world. It helps in understanding and analyzing the

Ancient Indian knowledge system.

Outcome of the Course

Learner will be able to ...

• Learn about the process of ancient Indian traditions

• Understand the contribution of Indian minds in various fields

• Link ancient wisdom in the current context

• Learn about the leading Indian inventors and thinkers in various disciplines

Develop a positive attitude towards Indian traditions and practices

• Increase subject-awareness and self-esteem

• Develop a comprehensive understanding of how all knowledge is ultimately

intertwined

Prerequisite: 12th Pass

Corequisite: Learner can join our other online certificate and diploma courses for

knowledge enhancement.

1. Certificate Course in Indic Knowledge Tradition

Get a glimpse of Indian scientific and technological heritage, know about the

totality of Indic Knowledge & Tradition

2. Diploma in Indic Manuscriptology

Get acquainted with the different types of Indian scripts, their origin, materials

used for them, writing styles, etc. as well as cataloging, scribble notes and

manuscript libraries, know about Indic Manuscriptology

3. Diploma in Indic Paleography

Get acquainted with the ancient scripts, their origin, style of writing, their preservation techniques and the materials used for them, know about Indic Paleography

4. Diploma in Indic Education System

Ancient learning system process - training for the fulfillment of life and character building to overcome the challenges of life with positivity. Know about Indic Education System

5. Diploma in Indic Philosophy

Develop an understanding of Indian culture and history, know and understand the mysteries of life and nature, know about Indic Philosophy

6. Certificate in Vedant

Comprehensive overview of the teachings of our Shastra along with a roadmap to live a fulfilling life and attaining the highest human goal, that is Moksha through our Online Certificate Course Vedant

Evaluation Pattern

Internal	Attendance	Assignment	Unit Test	Total Marks
	3	7	5	25
External		Online MCQ Test		25

Semester - 3

Course Credit: 2

Course Duration: 40 Hrs.

Unit	Topic		
1	Understanding of IKS		
	o Unique aspects of IKS: Idea Vs Ideology, IKS in		
	present perspective		
	 Vocabulary related to IKS – Dharma, Sanatan, 		
	Moksha, Karma etc.		
	 Science of Sastra 		
	Shruti & Smriti Parampara		
	 Methods to Study Shashtra 		
	 Overview of Shastrartha Parampara 		
	o Manuscriptology: Art of preserving Knowledge		
	 Script & Language, Sanskrit Language and 		
	it's importance		
	 Manuscripts: It's History, types and Its 		
	preservation Techniques		
	■ Famous Manuscript repositories		
2	Contribution of IKS in		
	o Science & Technology		
	 Astronomy 		
	 Encryption Method used in ancient India 		
	 Introduction to Yantra Shashtra – Vaimanik 		
	Shashtra		
	■ Textile Technologies		
	 Agriculture Technologies 		
	■ Forest Management and Water management		
	techniques		
	o Trade & Commerce		
	 Concept of Indic Economy (ArthVyavastha) 		

- Trade and Commerce
- o Administration & Governance
 - Concept Introduction: Indic Administration
 - Administrative Structure in Ancient India
 - Niti Sashtra (Law & Orders)
- o Fine Art & Performing Art
 - Performing Art: Bhav, Ras, Types, Process,
 Famous Literature, Famous Art & Artists
 - Fine Art: Types, Process, Famous Literature,
 Famous Art and Artists
 - Case Studies Local Art & Tradition
- o Experiential sessions
 - Introduction to Ashtang Yog and practice of Yogasan & Pranayam
 - Methods of Chanting the Mantra and Chanting Practice

Reference Books

Text Books:

- Introduction to Indian Knowledge System- Concept and Application by B. Mahadevan, Vinayak Rajat Bhat, Nagendra Pavan R.N.
- R.M. Pujari, Pradeep Kolhe, N. R. Kumar, 'Pride of India: A Glimpse into India's Scientific Heritage', Samskrita Bharati Publication.
- 'Indian Contribution to science', compiled by Vijnana Bharati.
- 'Knowledge traditions and practices of India', Kapil Kapoor, Michel Danino, CBSE, India.

Reference Books:

• Dr. Subhash Kak, Computation in Ancient India, Mount, Meru Publishing (2016)

- Dharampal, Indian Science and Technology in the Eighteenth Century,
 Academy of Gandhian Studies, Hyderabad, 1971, republ. Other India
 Bookstore, Goa, 2000
- Robert Kanigel, The Man Who Knew Infinity: A Life of the Genius Ramanujan, Abacus, London, 1999
- Alok Kumar, Sciences of the Ancient Hindus: Unlocking Nature in the Pursuit of Salvation, CreateSpace Independent Publishing, 2014
- B.V. Subbarayappa, Science in India: A Historical Perspective, Rupa, New Delhi, 2013
- S. Balachandra Rao, Indian Mathematics and Astronomy: Some Landmarks, Jnana Deep Publications, Bangalore, 3rd edn, 2004
- S. Balachandra Rao, Vedic Mathematics and Science In Vedas, Navakarnataka Publications, Bengaluru, 2019
- Bibhutibhushan Datta, Ancient Hindu Geometry: The Science of the Sulba, 1932, repr.Cosmo Publications, New Delhi, 1993
- Bibhutibhushan Datta & Avadhesh Narayan Singh, History of Hindu Mathematics, 1935,repr. Bharatiya Kala Prakashan, Delhi, 2004
- George Gheverghese Joseph, The Crest of the Peacock, Penguin Books,
 London & New Delhi, 2000
- J. McKim Malville & Lalit M. Gujral, Ancient Cities, Sacred Skies: Cosmic Geometries and City Planning in Ancient India, IGNCA & Aryan Books International, New Delhi, 2000).
- Clemency Montelle, Chasing Shadows: Mathematics, Astronomy and the Early History of Eclipse Reckoning, Johns Hopkins University Press, 2011
- Anisha Shekhar Mukherji, Jantar Mantar: Maharaja Sawai Jai Singh's
 Observatory in Delhi, AMBI Knowledge Resources, New Delhi, 2010
- Thanu Padmanabhan, (ed.), Astronomy in India: A Historical Perspective,
 Indian National Science Academy, New Delhi & Springer (India), 2010
- Acharya Prafulla Chandra Ray, A History of Hindu Chemistry, 1902,
 republ., Shaibya Prakashan Bibhag, centenary edition, Kolkata, 2002
- R. Balasubramaniam, Delhi Iron Pillar: New Insights, Indian Institute of Advance Study, Shimla & Aryan Books International, New Delhi, 2002

- R. Balasubramaniam, Marvels of Indian Iron through the Ages, Rupa & Infinity Foundation, New Delhi, 2008
- Anil Agarwal & Sunita Narain, (eds), Dying Wisdom: Rise, Fall and Potential of India's Traditional Water-Harvesting Systems, Centre for Science and Environment, New Delhi, 1997
- Fredrick W. Bunce: The Iconography of Water: Well and Tank Forms of the Indian Subcontinent, DK Print world, New Delhi, 2013