



THE ASSAM ROYAL GLOBAL UNIVERSITY

**COURSE STRUCTURE AND SYLLEBUS
FOR
INTRODUCTION TO INDIAN KNOWLEDGE SYSTEM**

**W.E.F
AY – 2023 – 2024**

(Based on National Education Policy 2020)

Preamble

In view of the importance accorded in the NEP 2020 to rooting our curricula and pedagogy in the Indian context and in the corpus of the Indian Knowledge System, the following points were taken into consideration while making the syllabus for Indian Knowledge System in UG-level following the UGC guidelines of Learning Outcome Based Curriculum Framework. The Indian Knowledge System (IKS) undergraduate course is designed to achieve a set of comprehensive learning outcomes that equip students with a deep understanding of the diverse intellectual heritage of India. Upon completing the course, students should be able to:

1. **Demonstrate a Holistic Understanding:** Display a comprehensive grasp of the multidimensional aspects of Indian knowledge systems, spanning philosophy, science, arts, literature, mathematics, social sciences, and health sciences and recognize their interconnectedness.
2. **Engage with Primary Texts:** Analyze and interpret primary texts from various historical periods, demonstrating the ability to critically engage with classical Indian texts and their relevance to contemporary contexts.
3. **Contextualize Historical Development:** Describe the evolution of Indian knowledge systems over time, identifying key historical landmarks, influences, and transformations that have shaped India's intellectual landscape.
4. **Synthesize Interdisciplinary Insights:** Apply interdisciplinary approaches to synthesize insights from different branches of Indian knowledge, fostering a holistic perspective that transcends disciplinary boundaries.
5. **Critically Evaluate Concepts and Ideas:** Evaluate key philosophical, scientific, artistic, and social concepts within the Indian context, demonstrating critical thinking and the capacity to assess their cultural, social, and ethical implications.
6. **Explore Cultural Diversity:** Examine the diversity within Indian knowledge systems, recognizing regional, linguistic, and sectarian variations, while appreciating the unity that underlies this diversity.
7. **Articulate Comparative Perspectives:** Compare and contrast Indian knowledge systems with global traditions, identifying similarities, differences, and areas of cross-cultural influence.
8. **Apply Ethical and Moral Insights:** Apply ethical and moral insights derived from Indian knowledge systems to real-world challenges, demonstrating an understanding of their practical relevance.
9. **Contribute to Interdisciplinary Discourse:** Contribute to interdisciplinary academic and public discourse by sharing insights and perspectives that bridge the gap between Indian knowledge systems and other fields of study.
10. **Nurture Lifelong Learning:** Develop a genuine passion for lifelong learning by embracing the rich legacy of Indian knowledge systems, encouraging continuous exploration and discovery beyond the formal course.

By achieving these learning outcomes, students of the IKS undergraduate course will not only gain a deep appreciation for India's intellectual heritage but also be prepared to engage critically, ethically, and thoughtfully with the globalized world and its challenges.

Introduction to The Indian Knowledge System

The Indian Knowledge System Syllabus for the Undergraduate Course is designed to provide students with a comprehensive and holistic understanding of the rich and diverse knowledge traditions that have evolved within the Indian subcontinent. This syllabus seeks to explore the multidimensional aspects of India's intellectual heritage, encompassing ancient, medieval, and modern contributions across various disciplines such as philosophy, science, arts, literature, spirituality, and social sciences.

Recognizing the profound influence of India's cultural, philosophical, and scientific legacy on global thought, this syllabus aims to foster a deep appreciation for the indigenous wisdom that has shaped not only the subcontinent's history but also continues to resonate in contemporary times. Through a balanced combination of theoretical study, practical engagement, and critical analysis, this syllabus endeavors to equip students with the tools to engage with and interpret the intricacies of the Indian knowledge system.

By delving into the texts, concepts, practices, and methodologies that have been integral to Indian knowledge traditions, students will gain insights into the interconnectedness of various fields of study. This syllabus also encourages the exploration of the dynamic interactions between tradition and modernity, enabling learners to appreciate the enduring relevance of Indian thought while navigating the complexities of our rapidly changing world.

Furthermore, this syllabus emphasizes the significance of interdisciplinary learning, inviting students to bridge gaps between different domains of knowledge and fostering a holistic understanding of the Indian intellectual landscape. Through a blend of historical perspectives, contemporary interpretations, and interactive learning experiences, students will be empowered to engage in nuanced discussions, critical debates, and innovative inquiries that contribute to a deeper comprehension of the Indian knowledge system.

Ultimately, the Indian Knowledge System Syllabus for the Undergraduate Course aspires to nurture open-mindedness, curiosity, and a lifelong commitment to learning among students. By exploring the multifaceted dimensions of Indian knowledge, this syllabus seeks to instill a sense of cultural pride, intellectual curiosity, and a spirit of inquiry that transcends disciplinary boundaries and enriches the educational journey of each student.

Proposed course Structure Under IKS

Students of UG programmes will study following courses under IKS-

Indian Knowledge System (IKS)	Nature of the Course	Credits Assigned
Semester – I	Introduction to Indian Knowledge System - I	3
Semester – II	Introduction to Indian Knowledge System - II	3
Semester – III/IV	Major/Core course linked to IKS	3
	Total	9
Minimum Required Credits is 8 by 4 th Semesters		

Semester – I	
Paper I/Subject Name: Introduction to Indian Knowledge System - I	
Subject Code: IKS982I101	
L-T-P-C – 3-0-0-3	
Credit Units: 3	
Course Level: 100	
Scheme of Evaluation: Theory (70%) + Continuous Evaluation (30%)	

Credit Distribution (hours)		
L/T	P	EL
45	0	15

Course objectives:

This Foundation course is designed to present an overall introduction to all the streams of IKS relevant to the UG programme. It would enable students to explore the most fundamental ideas that have shaped Indian Knowledge Traditions over the centuries.

Course Outcomes:

On completion of this course students will be able to –

CO	Contents	BT Level
CO ₁	Recall the rich heritage of Indian knowledge systems	BT level 1
CO ₂	Analyse the contribution of Indian knowledge systems to the world	BT level 2
CO ₃	Demonstrate knowledge on sociocultural and ethnolinguistic diversity that constitutes the soul of Bharatvarsha	BT level 2
CO ₄	Interpret usefulness and benefits of applying traditional knowledge in day-to-day life	BT level 3
CO ₅	Distinguish knowledge traditions that originated in the Indian subcontinent	BT level 4

Module	Course Contents	Periods
I	Introduction to Indian Knowledge Systems (IKS) & Its Importance: Introduction to Indigenous/ Traditional Knowledge: Concept and Definition, Nature, Scope, and Importance of Traditional Knowledge. Defining Indian Knowledge System Bharatvarsha—A Land of Rare Natural Endowments: Demography of Ancient Bharatvarsha. The Great Himalayas. The Sindhu-Ganga Valley. Brahmaputra Valley. The great coastal plains. The great rivers of India. Climate and Vegetation. Mineral Wealth. Forests. Sacred Groves.	08
II	Foundational Literature: The Vedas. The Vedangas. Sastras. Ramayana and Mahabharata, and their important regional versions: Special reference to Madhav Kandali Ramayan and Dasam Skandha Bhagavat of Srimanta Sankardev. The Puranas. The Agamas. The Tripitaka: Vinaya, Sutta and Abhidhamma Pitaka	15

	<p>Indian Linguistics: Linguistics: Introduction and Importance. Script and Language. Varnamala of Indian languages: History, Origin and Phonetic Features. Languages of India. Important texts of Indian Linguistics: Siksha, Nirukta, Vyakarana, Chandas. Paninian Grammar: A Brief Introduction</p> <p>Fine Arts: Fine Arts: Introduction. Indian Classical Music and Dance forms. Natyasastra and Gandharva-Veda: Significance in Indian Aesthetics. Folk music and Dance forms of NE India.</p>	
III	<p>Indian Science & Technology</p> <ul style="list-style-type: none"> • Mathematics: Number System. Algebra and Arithmetic. Trigonometry. Calculus. Fractions and Geometry in the Vedas. Decimal nomenclature of numbers in the Vedas. Zero and Infinity. Sulba-sutras. Contribution of Brahmagupta and Sridhar Acharya to Mathematics. Important texts of Indian mathematics. • Indian Astronomy: Planetary System. Motion of the Planets. Velocity of Light. Eclipse. Astronomy. Navagrahas. Important works in Indian Astronomy. Aryabhata and Nilakantha: Contribution to Astronomical Studies • Indian Metal Works: Mining Techniques. Types of Metals. Tools & Techniques for Metal Smelting with examples. Matel works in pre-modern India: Special reference to NE India. 	15
IV	<p>Indian Health Sciences: Traditional/ Indigenous medicine: Definition and Significance. Yoga. Ayurveda: Introduction and Significance. Basic concepts in Ayurveda: Gunas and Doshas, Pancha-Mahabhuta and Sapta-dhatu. Ayurvedic view on diseases. Dinacharya and Ritucharya. Important Texts of Ayurveda. Hospitals in ancient and medieval India. How Ayurveda continued to flourish till 18/19th centuries.</p>	07
EL		15
	Total	60

Textbooks/Reference Books:

1. Baladev Upadhyaya, Samskrita Śāstrom ka Itihās, Chowkhambha, Varanasi, 2010.
2. D. M. Bose, S. N. Sen and B. V. Subbarayappa, Eds., A Concise History of Science in India, 2nd Ed., Universities Press, Hyderabad, 2010.
3. Astāngahrdaya, Vol. I, Sūtrasthāna and Śārīrasthāna, Translated by K. R. Srikantha Murthy, Vol. I, Krishnadas Academy, Varanasi, 1991.
4. Dharampal, Some Aspects of Earlier Indian Society and Polity and Their Relevance Today, New Quest Publications, Pune, 1987.
5. Dharampal, Indian Science and Technology in the Eighteenth Century: Some Contemporary European Accounts, Dharampal Classics Series, Rashtrottana Sahitya, Bengaluru, 2021
6. Dharampal, The Beautiful Tree: Indian Indigenous Education in the Eighteenth Century, Dharampal Classics Series, Rashtrottana Sahitya, Bengaluru, 2021.

7. J. K. Bajaj and M. D. Srinivas, Indian Economy and Polity in Eighteenth century Chengalpattu, in J. K. Bajaj ed., Indian Economy and Polity, Centre for Policy Studies, Chennai, 1995, pp. 63-84.
8. J. K. Bajaj and M. D. Srinivas, Annam Bahu Kurvita Recollecting the Indian Discipline of Growing and Sharing Food in Plenty, Centre for Policy Studies, Chennai, 1996.
9. J. K. Bajaj and M. D. Srinivas, Timeless India Resurgent India, Centre for Policy Studies, Chennai, 2001.
10. M. D. Srinivas, The methodology of Indian sciences as expounded in the disciplines of Nyāya, Vyākaraṇa, Ganita and Jyotisa, in K. Gopinath and Shailaja D. Sharma (eds.), The Computation Meme: Explorations in Indic Computational Thinking, Indian Institute of Science, Bengaluru, 2022 (in press)

Semester – II

Paper II/Subject Name: Introduction to Indian Knowledge System - II
Subject Code: IKS982I201
L-T-P-C – 3-0-0-3
Credit Units: 3
Course Level: 100
Scheme of Evaluation: Theory (70%) + Continuous Evaluation (30%)

Credit Distribution (hours)

L/T	P	EL
45	0	15

Course objectives:

This Foundation course is designed to present an overall introduction to all the streams of IKS relevant to the UG programme. It would enable students to explore the most fundamental ideas that have shaped Indian Knowledge Traditions over the centuries.

Course Outcomes:

On completion of this course students will be expected to –

CO	Contents	BT Level
CO ₁	Recall about classical literature in Sanskrit and other Indian languages	BT level 1
CO ₂	Discuss traditional Indian knowledge systems formulating the Indian culture.	BT level 1
CO ₃	Summarize the Indian Art, Architecture, Agriculture, Polity and Economy	BT level 2
CO ₄	Demonstrate knowledge of Spirituality and existence as defined	BT level 3
CO ₅	Compare knowledge traditions originating in NE India	BT level 4

Module	Course Contents	Periods
I	Classical Literature in Sanskrit and Other Indian Languages: Indian Classical Literature: A Brief Introduction. Prominent works in Indian Classical Literature. Kavya: Definition, Classification, Characteristics. Indian Culture: Characteristic features. Indigenous Faith and Religion. Preservation of culture. Role of family and education in preserving Indigenous Knowledge The Purpose of Knowledge: Spirituality. Self-Awareness. Mundaka Upanishad: Para and Aparā Vidya. Integration of Para and Aparā Vidya	12
II	Methodology of Indian Knowledge System: Shruti and Smriti traditions. Shastra. Manuscriptology: Art of Preserving Knowledge. Manuscripts: It's History, types, and preservation Techniques.	

	Manuscript repositories of India: Special reference to NE India. Indian Architecture and Town Planning: Introduction Ancient Indian Architecture. Sthapatya-veda: Introduction and Significance. Indigenous tools & techniques for town planning & Temple Architecture. Lothal, Mohan Jo Daro. Temple Art: Lepakshi Temple, Jagannath Puri Temple, Konark Sun Temple. Vernacular architecture of Assam: Special reference to Brahmaputra Valley	15
III	Indian Agriculture: Agriculture: Significance in Human Civilization. Sustainable Agriculture. Historical significance of agriculture and sustainable farming in India. Step Cultivation of India: Special reference to Northeast India. Wet rice cultivation of Assam. Indian Textiles: Textile: Definition. Indigenous textile. Cotton and silk Industries of India. Historical contribution of textile and weaving in Indian economy. Varieties of textiles and dyes developed in different regions of India: Special reference to NE India. Muga and Eri Silk industries of NE India	15
IV	Indian Polity and Economy: Kingdom and Chiefdom: Concepts. Role of a king in protecting dharma, protecting his subjects, and Varta. Indian idea of a well organised polity ad flourishing economy. The Chakravarti System: Administrative System of Ancient Bharatvarsha. Village administrative system: NE India. Arthashastra: Brief synopsis The Outreach of Indian Knowledge System: Languages. Scripts. Linguistics. Ayurveda. Yoga. Mediation. Textile. Decimal value place system-based arithmetic. Algebra. Astronomy	13
EL		15
	Total	60

Textbooks/Reference Books:

1. Baladev Upadhyaya, Samskrta Śāstrom ka Itihās, Chowkhambha, Varanasi, 2010.
2. D. M. Bose, S. N. Sen and B. V. Subbarayappa, Eds., A Concise History of Science in India, 2nd Ed., Universities Press, Hyderabad, 2010.
3. Astāngahrdya, Vol. I, Sūtrasthāna and Śarīrasthāna, Translated by K. R. Srikantha Murthy, Vol. I, Krishnadas Academy, Varanasi, 1991.
4. Dharampal, Some Aspects of Earlier Indian Society and Polity and Their Relevance Today, New Quest Publications, Pune, 1987.
5. Dharampal, Indian Science and Technology in the Eighteenth Century: Some Contemporary European Accounts, Dharampal Classics Series, Rashtrottana Sahitya, Bengaluru, 2021
6. Dharampal, The Beautiful Tree: Indian Indigenous Education in the Eighteenth Century, Dharampal Classics Series, Rashtrottana Sahitya, Bengaluru, 2021.
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8. J. K. Bajaj and M. D. Srinivas, *Annam Bahu Kurvita Recollecting the Indian Discipline of Growing and Sharing Food in Plenty*, Centre for Policy Studies, Chennai, 1996.
9. J. K. Bajaj and M. D. Srinivas, *Timeless India Resurgent India*, Centre for Policy Studies, Chennai, 2001.
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