Inception of Indian Knowledge System

As per NEP-2020

Syllabus

(w.e.f. 2024-25)

Under Graduate
Indian Knowledge System / Generic
Course Title: Inception of Indian Knowledge System
Course Credit: 02
Duration: 30 hours
Marks: 50
Mode: Offline / Online

Programme: U.G. Generic Course in IKS	**Inception of Indian Knowledge System**
Course Credit	02 Credit
Preamble (Brief Introduction to the Course)	Bharat is considered one of the oldest civilizations of the world. Some of the archaeological evidences proved existence of Indus civilization in 7000 B.C.. Bhartiya traditions, culture, cultural activities, rituals, sacraments, painting, art of dancing, art of singing etc. is being practiced till the modern times without knowing scientific approaches behind that. Eternity of Indian knowledge system proved itself that not only many rituals but also many traditions, many streams of knowledge like astrology, mathematics, physics, chemistry, biology, yoga and meditation had been following from the starting to till now with some changes, in the form of traditions when that were started but overall essence of Indian knowledge system we are following continuously. This course is for undergraduate students to inculcate Indian values in the students. It will promote advance study and inter disciplinary research on all aspects of Indian knowledge system.
Course Outcomes (COs)	This course aim is- 1. to provide a tribune of our rich culture and traditions of

	Indian knowledge system to students of various discipline. 2. to develop over all understanding of the various components of Indian knowledge system. 3. to spread awakening about scientific and eternal knowledge of the Indian knowledge system. 4. to promote advance study and inter disciplinary research on all aspects of Indian knowledge system. Adding career, professional and business opportunities to the students of various discipline.

Course Title	**Inception of Indian Knowledge System**	**Hours 30**
Module 1 (Credit 1): Antiquary and development of Indian knowledge system		
Learning Outcomes	**After learning the module, learners will be able to:** 1. Recognize the sources and concept of Indian knowledge system. 2. Describe about scientific approaches and techniques, used in Indus Valley Civilization, Vedic Civilization and others. 3. Illustrate the origin and development of astronomy and mathematics. 4. Analyze & compare the significances and benefits of life sciences in plants, ayurveda, medicines, yoga, meditation etc. 5. Justify eternal values as a essence of life sciences in ancient India. 6. Develop scientific approach incorporated in Indian knowledge system.	
Content Outline	**Antiquary of Indian knowledge system** • Basic knowledge and scope of IKS • Archaeological Sources of IKS- Pre historic period's evidences	**8 Hours**

	• Indus Valley Civilization- • Various aspects of Vedic civilization • Dharma and darshan- Vedic Dharm and Shad Darshan (6+3) **Development of scientific thoughts in ancient India** • Development of Science and Technology in ancient India • Astronomy - Aryabhatta and Varahmihir • Mathematics- Shulvasutra and Baksali manuscript, Formulation of Arithmetic, Algebra and trigonometry • Life Sciences – Life science in Plants, Anatomy, Physiology, Ayurveda, Medicine, Microbiology, Surgery, Yoga and Meditation etc.	**7 Hours**
Module 2 (Credit 1): Development of Engineering Science, Technology & Fine Arts in India		
Learning Outcomes	**After learning the module, learners will be able to:** 1. define system, methods and engineering science from ancient India to modern times. 2. elaborate vast contribution of ancient Indian researchers, scientists and architects to the modern world. 3. demonstrate many examples in various fields like agriculture, industry, architecture and performing arts etc. 4. differentiate various aspects of life from ancient to modern times. 5. determine the structure and composition of Indian knowledge system. 6. build a strong clairvoyance of the contributions of Indian knowledge system to mankind	
Content Outline	**Development of Engineering Science & Technology in India** • Agriculture, Metallurgy • Various Industries- Silk Industry, cotton Industry and ship building • Indian Fine Arts- Cave architecture	**8 Hours**

	Temple architecture Vastu- Vidya Sculpture Forts and Stepwells Observatories Paintings **Development of Performing arts & culture in India-** ● Music ● Art of singing ● Art of dancing ● Natyakala ● Cultural traditions ● Folk arts	**7 Hours**

Suggested Pedagogy for Teachers:

1. Project based activities and learning.
2. Presentation and case studies.
3. Film screening and book reviews.
4. Visit to historical places, archives centre, research centre or library nearby.

Assessment Criteria:

10m = Assignment/ Presentation (related to syllabus)

10m = MCQ Exam

30m = Theory exam

Bibliography:

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4. Kapoor, K. (2021), Indian Knowledge System: Nature, Philosophy, Character in Indian Knowledge System, vol. 1, Pub. Indian Institute of Advanced Studies, Shimla
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Websites:

- **https://iksin dia.org/index.php**
  Official Websit of IKS- Indian Knowledge System

- **https://www.youtube.com/watch?v=uKcf-hSlcUE**
  Address by Prof Kapil Kapoor | Indian Institute of Advanced Study (FDP 2021)

- **https://www.youtube.com/watch?v=MDJTXNiH2_A**
  Mukul Kanitkar on Bharatiya Knowledge System

- **https://www.youtube.com/watch?v=uARMhv97pjk**
  "भारतीय ज्ञान परंपरा और उसका वततमान सन्दभत" प्रो. रजनीश कुमार शुक्ल का ववशेष व्याख्यान महात्मा गांधी अंतरराष्ट्र ीय वहंदी ववश्ववववद्यालय, वधात Mahatma Gandhi Antarrashtriya Hindi VishwaVidyalaya,Wardha

- **https://www.youtube.com/watch?v=oTwqf56GbsA**
  Scientific History Of India | Mukul Kanitkar Lecture in DTU

- **https://youtu.be/gNJNmPJqXJc?si=WFBbuUT65mLZzpOW**
  Ancient India's Scientific Achievements & Contribution in Mathematics, Astronomy, Science & Medicine

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