

MDE101	Indian Knowledge System	2L:0T:0P	2Credits
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*For Detailed Course Refer APPENDIX-2

Appendix-2: Indian Knowledge System (IKS)

Institutions are advised to choose any one of the following module as per the available resources/ university norms.

1. IKS-I: Introduction to Indian Culture and Civilization (with some present practices)
2. IKS-II: Indian Culture and Civilisation with its Knowledge Systems and Traditions
3. IKS III Vision for a Human Society (*Vishva Kalyan* thru *Vasudhaiva Kutumbkam*)^{*1}
4. IKS IV Indian Science, Engineering and Technology- Past, Present & Future^{*1}
5. IKS V Indian Town Planning and Architecture^{*1}
6. IKS VI Indian Mathematics and Astronomy^{*1}
7. IKS VII Indian Aesthetics (including Music & Musical Instruments)/ Arthashastra^{*1}
8. IKS VIII Indian Health, Wellness and Psychology- including Ayurved^{*1}

Other Possible Courses in IKS -

- Indian System of Proof and Logic (including Nyay Shastra)
- Indian Linguistics and Phonetics (including Panini's grammar, languages)
- Indian Governance, Administration and Management Systems (including Arthshastra) Indian Physics (e.g. Vaisheshik)
- Textile Industry in India Shipbuilding and Maritime Trade Transport Systems in India
- Principles and practice of Mechanics and Machines Water Management in India
- Ecology and Geography in India
- Natural Agriculture and horticulture (e.g. vriksha ayurved)
- Practices in India Indian Economics (Arthshastra)

IKS-I: Indian Knowledge Systems and Traditions

Course Objectives

- To sensitize the students about context in which they are embedded i.e. Indian culture and civilisation including its Knowledge System and Tradition.
- To help student to understand the knowledge, art and creative practices, skills and values in ancient Indian system.
- To help to study the enriched scientific Indian heritage.
- To introduce the contribution from Ancient Indian system & tradition to modern science & Technology

Detailed contents:

Module 1: Introduction to IKS

(Any eight of total sessions assigned for Literary activity)

Introductory lecture on the **any eight** topics below:

1. Indian Knowledge System
2. Indian Culture & Civilization
3. Ancient Indian Chemistry
4. Ancient Indian Metallurgy
5. Ancient Indian Mathematics
6. Ancient Indian Astronomy
7. Indian Astronomical Instruments
8. Indian Knowledge System (Upveda: Ayurveda)
9. Indian Knowledge System (Upveda: Gandharveda)
10. Indian Knowledge System (Vedangas: Shiksha, Kalpa, Vyakrana)
11. Indian Knowledge System (Vedangas: Jyotisha, Nirukta, Chandas)
12. Indian Architecture I: Sthapatya-Veda
13. Indian Architecture II: Temples
14. Indian Architecture III: Town & Planning
15. Indian Philosophical System

Module 2: Introduction to Creative Practices

(Twenty Lectures with at least Five different topics of total session under Creative activity)

Introductory lecture on the topics below:

1. Dhatuvada: art of metallurgy
2. Akara jnana: art of mineralogy
3. Vastuvidya: art of engineering
4. Yantramatrika: art of mechanics
5. Takshana: art of carpentry
6. Chalitakayoga: art of practicing as a builder of shrines
7. Raupyaratnapariksha: art of testing silver and jewels
8. Maniraga jnana: art of tinging jewels

9. Suciwayakarma: art of needleworks and weaving
10. Vadya vidya: art of playing on musical instruments
11. Geet vidya : art of singing
12. Nritya vidya: art of dancing
13. Natya vidya: art of theatricals
14. Alekhya vidya: art of painting
15. Viseshakacchedya vidya: art of painting the face and body with color
16. Udakavadya: art of playing on music in water
17. Manasi kavyakriya: art of composing verse
18. Bhushanayojana: art of applying or setting ornaments
19. Citrasakapupabhakshyavikarakriya: art of preparing varieties of delicious food
20. Dasanavasanganagara: art of applying preparations for cleansing the teeth, cloths and painting the body
21. Utsadana: art of healing or cleaning a person with perfumes
22. Vastragopana: art of concealment of cloths
23. Balakakridanaka: art of using children's toys
24. Tandulakusumabalivikara: art of preparing offerings from rice and flowers
25. Pushpastarana: art of making a covering of flowers for a bed

References:

1. Textbook on IKS by Prof. B Mahadevan, IIM Bengaluru
2. Kapur K and Singh A.K (Eds) 2005). Indian Knowledge Systems, Vol. 1. Indian Institute of Advanced Study, Shimla. Tatvabodh of sankaracharya, Central chinmay mission trust, Bombay, 1995.
3. The Cultural Heritage of India. Vol.I. Kolkata:Ramakrishna Mission Publication, 1972.
4. Nair, Shantha N. Echoes of Ancient Indian Wisdom. New Delhi: Hindology Books, 2008.
5. Dr. R. C. Majumdar, H. C. Raychaudhuri and Kalikinkar Datta: An Advanced History of India (Second Edition) published by Macmillan & Co., Limited, London, 1953.
6. Rao, N. 1970. The Four Values in Indian Philosophy and Culture. Mysore: University of Mysore.
7. Avari, B. 2016. India: The Ancient Past: A History of the Indian Subcontinent from c. 7000 BCE to CE 1200. London: Routledge.
