

Sarvajanik University

Faculty of Science

B.Sc. (Hons)

Faculty: Science	Department: All
Program: B.Sc. (Hons)	Type: Value Added Course (VAC)
Subject: Indian Knowledge System (Foundation)	Credits: 2
Semester: 1	

Unit 1: Foundational Literature of Indian Civilisation

(08 hours)

- The Vedic Corpus
- Caturdaśa vidyāsthāna-s: 14 branches of learning in ancient India- purāṇa, nyāya, mīmāṃsā, dharmaśāstra, six vedāṅga-s: (śikṣā, vyākaraṇa, nirukta, chanda, jyotiṣa, kalpa) and four Veda-s- rgveda, yajurveda, sāmaveda and atharvaveda; introductory information on them
- Upaveda-s and Upaniṣads: introductory information on them
- śāstra-s and some introductory information on them
- 18 purāṇa-s: Their names and five general characteristics
- The Itihasas: Ramayana and Mahabharata (Learnings from them in brief)

Unit 2: Indian Philosophical System

(07 hours)

- Four Purusartha: Dharma, artha, kama and moksha (Definitions and Meaning)
- Astika and Nastika Darshan
- Tarkashastra
- Hetu-lakṣaṇa and hetvabhāsa lakṣaṇa (Cause and Fallacies)
- Pañca adhikaraṇa System- viśaya, saṃśaya, pūrvapakṣa, uttarapakṣa and saṃgati
- The purpose of knowledge: Para Vidya and Apra Vidya

Unit 3: Indian Mathematics and Astronomy

(08 hours)

- Important texts on Indian Mathematics
- Development of numbers, fractions, decimals, algebra, trigonometry and calculus
- Further continuity of Indian Mathematics: Kerala school and Ramanujan, their influence
- Important texts on Indian Astronomy
- Observations and records on the movement of celestial bodies, equinoxes, solstices, eclipses
- Planetary model of Aryabhata and its revision by Nilkantha
- Further continuity of Indian astronomy by Jaisingh, Sankaravarman, Chandrasekhara Samanta.

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Unit 4: Indian Sciences

(07 hours)

- Important Texts of Ayurveda
- Basic concepts of Ayurveda
- Surgical practices, inoculation, current revival of Ayurveda and Yoga
- Indian agriculture as mentioned by the Greek historians and later travelers
- The Ery system of south India
- Indian attitude towards agriculture based on Walker
- Indian texts which refer to metallurgy
- Mining and manufacture in India of Zinc, Iron, Copper, Gold, etc., from ancient times

References:

1. Sivananda S. All about hinduism. Sivananda literature research institute; 1988.
2. Dharampal G. Essential Writings of Dharampal. Publications Division Ministry of Information & Broadcasting; 2017 Nov 3.
3. Bajaj J, Śrīnivāsa MD. Sanatana Bharat, jagrita Bharat= Timeless India, resurgent India: a celebration of the land and people of India. (No Title).