Estd. 1962
"A++" Accredited by
NAAC (2021)
With CGPA 3.52

SHIVAJI UNIVERSITY, KOLHAPUR - 416004, MAHARASHTRA

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शिवाजी विद्यापीठ, कोल्हापूर -४१६००४,महाराष्ट्र

दूरध्वनी-ईपीएबीएक्स -२६०९०००, अभ्यासमंडळे विभाग दुरध्वनी ०२३१—२६०९०९४
०२३१—२६०९४८७

SU/BOS/Science/144 **Date: 23/02/2024**

To,

The Principal, All Concerned Affiliated Colleges/Institutions Shivaji University, Kolhapur	The Head/Co-ordinator/Director All Concerned Department (Science) Shivaji University, Kolhapur.

Subject: Regarding B.Sc. Part I IKS syllabi as per NEP-2020 under the Faculty of Science and Technology.

Sir/Madam,

With reference to the subject mentioned above, I am directed to inform you that the university authorities have accepted and granted approval to the syllabi, nature of question paper of degree programme under the Faculty of Science and Technology.

No	Indian Knowledge System Syllabus
1.	Interdisciplinary Course in Generic IKS

This syllabus, shall be implemented from the academic year 2024-2025 onwards. A soft copy containing the syllabus is attached herewith and it is also available on university website www.unishivaji.ac.in NEP-2020@suk (Online Syllabus)

You are, therefore, requested to bring this to the notice of all students and teachers concerned.

Thanking you,

Dy Registrar
Dr. S. M. Kubal

Copy to:

1	The Dean, Faculty of Science & Technology	8	P.G. Admission/Seminar Section
2	Director, Board of Examinations and Evaluation	9	Computer Centre/ Eligibility Section
3	The Chairman, Respective Board of Studies	10	Affiliation Section (U.G.) (P.G.)
4	B.Sc. Exam/ Appointment Section	11	Centre for Distance Education

B.Sc. (Part I) (Level 4.5) (Semester – I)
(NEP-2020)
Syllabus to be implemented from Academic Year 2024-25

Title of Course: Interdisciplinary course in Generic IKS

Total Credits: 02; Lecture hours: 30 hours; 02 Lectures/ Week

Course Aims-

1. Creating awareness amongst the youths about the true history and rich culture of the country;
2. Understanding the scientific value of the traditional knowledge of Bhārata;
3. Promoting the youths to do research in the various fields of Bhāratīya knowledge system;
4. Converting the Bhāratīya wisdom into the applied aspect of the modern scientific paradigm;
5. Adding career, professional and business opportunities to the youths.

Course learning Objectives

1. To help to study the enriched scientific Indian heritage.
2. To help student to understand the knowledge, art and creative practices, skills and values in ancient Indian system.
3. To introduce the contribution from ancient Indian system & tradition to modern science & Technology.
4. Understanding the fundamental principles of Indian health systems such as Ayurveda and yoga which are useful in maintaining the human health.
5. Practical implementation of health principles to correct the intake of food, air, water and sunlight to achieve perfect health.
6. Understanding traditional way of cleansing the body regularly, strengthening body with Yogic exercises, maintaining the internal balance to prevent diseases.

Course Learning Outcomes:

1. Inculcate ayurvedic practices in health
2. Apply traditional knowledge for sustainability
3. Follow dincharya and daily regime and appropriate food for the maintenance of good health.

Syllabus-

Unit-I	**1. Introductionj to Indian Knowledge System**	**Lectures-15**
	1.1 Introduction to IKS • Definition, Concept and Scope of IKS • IKS based approaches on Knowledge Paradigms • IKS in ancient India and in modern India 1.2 Importance of Health& Wellness in IKS • Ayurveda -Importance of Sleep and Food, • Role of water in wellbeing • Yoga and Triguṇa System .Healthy regimen to maintain state of wellbeing • Dinacharya, the Daily regimen including Daily detoxification, exercise, Intake of Food, Water, Air and Sunlight, work and ergonomics, Rest and sleep hygiene.	
Unit-II	**2. Life sciences, Environment, and Health**	**Lectures-15**
	2.1 Life sciences, Environment, and Health • Life Science - Plants-Herbal medicines, Herbal preparations, modern herbal medicines , Herbal medicines from *Allium sativum* , Neutraceuticals, Traditional probiotic foods and	

	their importance in human health • Ecology and Environment- Concept & structure of ecosystem, kinds of ecosystem, functions of ecosystem, • Āyurveda, Integrated Approach to Healthcare, Medicine, Microbiology, Medicine, Surgery, and Yoga, etc. **2.2 Basic principles of Food, Nutrition from Ayurveda** • Understanding rich sources of nutrients • Concept of Doshas & assessment • Ayurvedic Principles of food habits and factors determining quality of food (Ahara vidhi visheshaayatana) • FSSAI regulations on Ayurvedic Aahar	

Recommended Books:

1. Introduction to Indian Knowledge System- concepts and applications, B Mahadevan, Vinayak Rajat Bhat, Nagendra Pavana R N, 2022, PHI Learning Private Ltd, ISBN-978-93- 91818-21-02.
1. 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.
2. 2.Allium Sativum: Chemical Constituents, Medicinal Uses and Health Benefits Plant science research and practices- Nova Science Publishers, Incorporated, 2016.
3. 4.Ecology and Environment(BC-4)-by P.D. Sharma, Rastogi publications
4. https://fssai.gov.in/ ***FSSAI Manual***
5. Handbook of Nutraceuticals Volume I: Ingredients, Formulations, and Applications By Yashwant Vishnupant Pathak - Dattani Book Agency7
6. A textbook of Ayurvediya Physiology- Prof. Dr. Yogesh Chandra Mishra, Chaukhambha Publication, edition 2018,
7. Text Book for Environmental Studies by UGC, New Delhi

Reference Books:

1. Gambirananda, Swami, Tr. Upanishads with the Commentary of Sankarachrya. Kolkata: Advaita Ashrama publication Department, 2002.
2. Ranganathananda, Swami. The Massage of the Upanishads. Bombay: Bharathya Vidya Bhaven, 1985. 8. Om Prakash, Religion and Society in Ancient India, Bhariya Vidhya Prakashan, 1985
3. J Auboyer, Daily Life in Ancient India from Approximately 200 BC to AD 700, Munshi ram Manoharlal publication, 1994.
4. DK Chakkrabarty, Makkhan Lal, History of Ancient India (Set of 5 Volumes), Aryan book Internation publication, 2014
5. Dr. Girish Nath Jha, Dr. Umesh Kumar Singh and Diwakar Mishra, Science and Technology in Ancient Indian Texts, DK Print World limited,
6. Swami BB Vishnu, Vedic Science and History - Ancient Indian's Contribution to the Modern World, gosai publication, 2015
7. Chatterjee, S.C. The Nyaya Theory of Knowledge. Calcutta: University of Calcutta Press, 1950. 16. Dasgupta, Surendra. A History of Indian Philosophy. Delhi: Motilal Banarsidass, 1991.Vols. III & IV
8. Textbook on The Knowledge System of Bhārata by Bhag Chand Chauhan,