

RASHTRASANT TUKADOJI MAHARAJ NAGPUR UNIVERSITY, NAGPUR
SYLLABUS AS PER NEW EDUCATION POLICY (3-2-1)
Generic IKS Course (SEM I) For All Disciplines
(TO BE IMPLEMENTED FROM THE SESSION 2026-27)

Bachelor Program Semester-I

Title: Indian Knowledge System-I — IKS-Generic (Theory) Credit: 2

Course Code: B1IKS01T (Compulsory Course)

Hours Allotted: 30 Hrs

Marks Allotted: 50 Marks

Passing Marks: Theory 12 out of 30 Marks + Internal 8 out of 20 Marks

Course Learning Outcomes

After completing the course, students will be able to:

CO1: Explain the basic idea, scope and diversity of Indian Knowledge Systems and recognize their role in the development of Indian Civilization.

CO2: Identify Indian knowledge traditions reflected in everyday life, Environment, Arts, Language, Science, Technology, Health, and Social Organization.

CO3: Relate selected Indian knowledge practices to contemporary life and identify their continuing relevance or possible applications.

CO4: Examine a traditional knowledge practice through observation, evidence and reflection and communicate its significance in a simple and meaningful manner.

Syllabus

UNIT 1 – Overview of IKS & Relevance of IKS to Science & Technology

- A. Indian Knowledge Systems, Sources and significance.
- B. Ancient Mathematicians & Calendar System, Primitive methods Natural Soil enrichment.
- C. Ancient Architecture, Sculptures and its significance.

UNIT 2 – Relevance of IKS to Fine Arts, Commerce, Humanities and Social Sciences

- A. Panini's Grammar, Ras Siddhanta and 2 forms of Indian Classical Music.
- B. Dietary Practices, Ayurveda and Ashtangyoga. Introduction of Kautilya Arthshastra and Concept of Rajdharma.
- C. Ancient Indian Universities (Nalanda, Takshshila, Vallabhi, Vikramshila), Guru-Shishya Parampara.

Internal Assessment (20 Marks)

Attendance (05 Marks)

Assignment or Activity on – “Mapping IKS in My Surroundings” (05 Marks)

Group Discussion: Application of IKS for Personal, Familial, Social, Community, National and Global Issues. (05 Marks)

Viva-Voce (05 Marks)

Reference Books

English:

1. Indian Knowledge System, Kurhekar, Shreyas, Dnyanpath Publication, 2024
2. Mahadevan, B., Bhat, V. R., Kurhekar, P. (2022). Introduction to Indian Knowledge System: Concepts and Applications. Prentice Hall India Pvt. Limited.
3. Indian Knowledge Systems (IKS Contribution to Science), Vol. 1, Murthy, G. S.; Venkatraman, K., IKS Division, Ministry of Education, Govt. of India
4. Sharma, Raj Kishore, Singal, Shobita (2025). A concise 21 volume collection of books for IKS based competitive exam, Vidya Bharati Uchcha Shiksha Sansthan. KITABWALE, New Delhi (Available in Hindi & English).

Marathi:

1. Soni, S., Bhartachi Ujjwal Vidnyan Parampara, (Trans.), Bharteey Vichar Sadhna.
2. Apte, M., Pracheen Bharteeya Ganit Bhag 1 ani 2, Rajhansa Prakashan, Pune.
3. Deshmukh, B., Date, N., Bharteeya Kala Ani Sanskriti, Sakal Prakashan, Pune.
4. Apte, M., Aayabhateeya, Rajhansa Prakashan, Pune.

Hindi:

1. Singh, Umesh Kumar, Bharatiya Gyan Parampara: Bodh, Madhya Pradesh Hindi Granth Academy, Bhopal, Madhya Pradesh, 2023.
2. Sharma, Amit, Kumar, N. (Edited), Bhartiya Gyan Parampara: A Multidisciplinary Perspective, M B Publisher, 2025.
3. Thakur, P., Mahajan, D., Bhartiya Gyan Parampara Prabuddh Bharat, Anuradha Prakashan, Delhi, 2025.

Allotment of topics for teaching in Room No. 119 (Offline Mode)

Sr. No.	Topic	Department	Date (Time: 8 to 9 am)
1	Indian Knowledge Systems, Sources and significance	Zoology	Wednesday, 16.9.2026
2	Ancient Mathematicians	Mathematics	Thursday, 17.9.2026
3	Calendar System	Physics	Wednesday, 23.9.2026
4	Primitive methods Natural Soil enrichment	Botany	Thursday, 24.9.2026
5	Ancient Architecture, Sculptures and its significance	History	Wednesday, 30.9.2026
6	Panini's Grammar	Hindi	Thursday, 1.10.2026
7	Ras Siddhanta	English	Wednesday, 7.10.2026
8	2 forms of Indian Classical Music	Sanskrit	Thursday, 8.10.2026
9	Dietary Practices, Ayurveda	Chemistry	Wednesday, 14.10.2026
10	Ashtangyoga	Physical Education	Thursday, 15.10.2026
11	Introduction of Kautilya Arthshastra and Concept of Rajdharma	Political Science	Wednesday, 21.10.2026
12	Ancient Indian Universities (Nalanda, Takshshila, Vallabhi, Vikramshila)	Sociology	Thursday, 22.10.2026
13	Guru-Shishya Parampara	Sanskrit	Wednesday, 28.10.2026