

DR.BABASAHEB AMBEDKAR MARATHWADA UNIVERSITY,  
CHHATRAPATI SAMBHAJINAGAR.



CIRCULAR NO.SU/ SCIENCE & TECHNOLOGY/B.Voc/NEP/64/2025.

It is hereby informed to all concerned that, in continuation circular No/ SU./ IKS/ 2-credits/ curriculum-UG/ NEP-2020/ 05/ 2024/1219-28 dated on 19.06.2024 on the recommendation of Dean, Faculty of Science & Technology; the Hon'ble Vice-Chancellor has been accepted the addition of IKS Course entitled 'Introduction to Ancient Indian Technology' in the existing list of 'Indian Knowledge System' ( a compulsory course of two credits for First Year First Semester ) for all faculties of Graduate level in University Departments and all affiliated colleges under National Education Policy-2020 as per norms of university grants commission in his emergency powers under Section 12 [7] of the Maharashtra Public University Act,2016 on the behalf of Academic Council.

This is effective from the Academic Year 2024-25 onwards as per appended herewith.

All concerned are requested to note the contents of this circular and bring notice to the students, teachers and staff for their information and necessary action.

University campus,  
Chhatrapati Sambhajinagar-431004.  
Ref. No.SU/B.voc./syllabus./2024-25/  
Date:-20.01.2025

12637-85

Head,  
Syllabus Section.

Copy forwarded with compliments to:-

- 1] **The Principals, affiliated concerned Colleges, Dr. Babasaheb Ambedkar Marathwada University.**
- 2] **The Director, University Network & Information Centre, UNIC, with a request to upload the curriculum along with this Circular on University Website.**

Copy to :-

- 1] **The Director, Board of Examinations & Evaluation, Dr.Babasaheb Ambedkar Marathwada University, Chhatrapati Sambhajinagar.**
- 2] **The Section Officer, [B.Voc Unit] Examination Branch, Dr.Babasaheb Ambedkar Marathwada University, Chhatrapati Sambhajinagar.**
- 3] **The Programmer, [Computer Unit-1] Examination Branch, Dr.Babasaheb Ambedkar Marathwada University, Chhatrapati Sambhajinagar.**
- 4] **The Programmer, [Computer Unit-2] Examination Branch, Dr.Babasaheb Ambedkar Marathwada University, Chhatrapati Sambhajinagar.**
- 5] **The In-charge, [E-Suvidha Kendra], Rajarshi Shahu Maharaj Pariksha Bhavan, Dr.Babasaheb Ambedkar Marathwada University, Chhatrapati Sambhajinagar.**
- 6] **The Public Relation Officer, Dr.Babasaheb Ambedkar Marathwada University, Chhatrapati Sambhajinagar.**
- 7] **The Record Keeper,Dr.Babasaheb Ambedkar Marathwada University, Chhatrapati Sambhajinagar.**

**IA/IKS/T/101: Introduction to Ancient Indian Technology**

Total Credits : 02

Total Contact Hours : 30 Hrs

Maximum Marks : 50

**Learning Objectives of the Course:**

This course aims to provide important glimpses of the ancient Indian Technology which is hallmark of glorious Indian civilization, only living civilization of the world that exists till today. The main emphasis is placed on nature centric aspects of ancient Indian technologies that can be adopted in modern time. Materials will be presented in a gradual manner to instill confidence in the minds of the students and lead them to take exploratory route to learn more about it in future. Adequate emphasis will be given in this course for exposing the students to ancient science and technologies which can be adopted for modern technological development. The tenets of various technologies which are essential for human living will be discussed in detail.

**Course Outcomes ( COs) :**

On completion of the course, students should be able to -

1. Recognize the glorious heritage of Ancient Indian Technology in variant contextual domains.
2. Describe the tools and techniques of Ancient Technique that has present relevance and potency

**CO –PO – PSO Articulation Matrix**

	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12	PSO1	PSO2	PSO3	PSO4
CO1	L				M		M									M
CO2	L				M		M									M

Module No.	Course Content	Contact Hours
I	<b>Introductory Concepts</b> Relevance of Indian Knowledge System in Today's Perspective, Difference between science and technology, Ancient Indian technology in contrast to modern technology, Ancient Indian Scientific methods; Glimpses of ancient Indian science and technology	10 Hrs
II	<b>Ancient Indian Knowledge in Technology – I</b> Material Technology : Mining, Metals and Metallurgy, Iron Making and craftsmanship, Wootz Steel Technology, Extraction of Zinc in ancient India, Glass making, Bead making Techniques, Ceramic Technology	10 Hrs
III	<b>Ancient Indian Knowledge in Technology – II</b> Water Harvesting Technology, Irrigation Systems, Town planning, Building construction, Sanitation, Agriculture and Textile Technology	10 Hrs

**Text Books:**

1. B. Mahadevan, Nagendra Pavana, Vinayak Rajat Bhat; 'Introduction To Indian Knowledge System : Concepts And Applications', First Edition, Prentice Hall of India, 2022

**Online Reference:**

<https://archive.nptel.ac.in/courses/101/104/101104065/>



