

**Shivaji University, Kolhapur**  
**B. A. / B. A. B. Ed. II**  
**Geography**  
**Semester III**  
**IKS: Water Management Systems in Ancient India as per**  
**NEP 2020 (2.0)**

|                                 |   |   |
|---------------------------------|---|---|
| <b>Name of the Programme</b>    | : | B. A. / B. A. B. Ed. (Geography)  |
| <b>Class</b>                    | : | B. A. / B. A. B. Ed.-II   |
| <b>Year of Implementation</b>   | : | Revised Syllabus will be implemented from June, 2025 onwards.   |
| <b>Semester</b>                 | : | III   |
| <b>Name of Vertical Group</b>   | : | IKS   |
| <b>Course Code</b>              | : | <b>BAU0325IKL322C01</b>   |
| <b>Course Title</b>             | : | <b>Water Management Systems in Ancient India</b>  |
| <b>Total Credit</b>             | : | 02  |
| <b>Workload</b>                 | : | 02 credit X 15 Hours = 30 hours in semester   |
| <b>Duration</b>                 | : | The course shall be a full time course  |
| <b>Medium of instruction</b>    | : | Marathi / English   |
| <b>Eligibility of Admission</b> | : | As per eligibility criteria prescribed by the University  |
| <b>Examination Pattern</b>      | : | 40:10, The pattern of examination will be Semester End Examination with Internal Assessment/Evaluation. |

**Preamble:**

Water management has been a critical aspect of sustainable development since ancient times. India, with its rich heritage, has developed various ingenious water management systems that are still relevant today. This course delves into the traditional water management practices in India, highlighting the importance of indigenous knowledge systems (IKS) and their contributions to sustainable water management. By exploring both historical and contemporary perspectives, students will gain a comprehensive understanding of how traditional practices can inform and enhance modern water management strategies.

**Course Objectives:**

1. To explore the concept, historical context, and importance of traditional water management systems in ancient India.
2. To understand and analyze various traditional water harvesting and irrigation techniques, and their cultural and environmental significance.

### Course Outcomes:

By the end of the syllabus, Students will be able to:

1. Explain the historical context and significance of traditional water management systems in ancient India, recognizing the value of indigenous knowledge.
2. Identify and describe traditional water harvesting and irrigation techniques, and assess their cultural and environmental significance through case studies.

### Scheme of Teaching and Examination:

The Scheme of teaching and examination should be given as applicable to the course / paper concerned)

#### B. A. / B. A. B. Ed. part –II

| Sr. No. | Subjects/Course & Credit                      | Theory Teaching Hours per week |    |     |       | Examination scheme (Marks) |           |                  |
|---------|---|--------------------------------|----|-----|-------|----------------------------|-----------|------------------|
|         |   | L                              | T  | P   | Total | Theory                     | Term Work | Total (Semester) |
| 1       | Water Management Systems in Ancient India - 2 | 02                             | 02 | --- | 02    | 40                         | 10        | 50               |

### Scheme of Examination:

- The examination shall be conducted at the end of each semester year.
- The theory course shall carry 50 marks.
- The evaluation of the performance of the student in theory course shall be on the basis of semester theory examination of 40marks.
- The evaluation of the performance of the student in theory course shall be on the basis of semester internal evaluation of 10 marks.
- Question Paper will be set in the view of the / in accordance with the entire syllabus and preferably covering each Module of syllabi.

### Standard of Passing:

(As prescribed under rules & regulation for each diploma / degree / programme)

### Nature of Question Paper:

The student's examination and evaluation methods are as per the guidelines of the Shivaji University, Kolhapur.

Internal evaluation should be based on Group Activity / Case Study

| Modules: Water Management Systems in Ancient India |   |  |              |        |
|--|---|--|--------------|--------|
| Module No.   | Module Name   | Sub-module   | No. of hours | Credit |
| I  | Introduction to Water Management Systems in Ancient India   | 1.1 Meaning of water management<br>1.2. Historical Context of Water Management<br>1.3. Water Sources in Ancient India<br>1.4 Importance of traditional knowledge in sustainable water management                                   | 15           | 01     |
| II   | Traditional Water Harvesting Methods and Irrigation Systems | 2.1. Traditional water harvesting techniques (e.g., Johads, Baolis, Tankas)<br>2.2 Traditional irrigation Systems<br>2.3 Cultural and environmental significance of these systems<br>2.4 Case studies of traditional water systems | 15           | 01     |

#### Suggested Readings:

1. Danino, M. (n.d.). Water management in ancient India. INFLIBNET Centre. Retrieved from <https://ebooks.inflibnet.ac.in/icp02/chapter/water-management-in-ancient-india/>
2. Tamrakar, P. C. (2024). Ancient water management planning, tradition and techniques of India: An overview. International Journal of Architectural Heritage, 7(1), 59-63. Retrieved from [https://journalspub.com/wp-content/uploads/2024/06/59-63-Ancient\\_Water\\_Management\\_Planning.pdf](https://journalspub.com/wp-content/uploads/2024/06/59-63-Ancient_Water_Management_Planning.pdf)
3. Kumar Swamy, D. M. (n.d.), Water Management Systems of Ancient Indian Empires, IJRAR, Retrieved form <https://ijrar.org/papers/IJRAR19D6145.pdf>