

AC \_\_\_\_\_  
Item No. \_\_\_\_\_

## UNIVERSITY OF MUMBAI



### Syllabus for Approval

Sr. No.	Heading	Particulars
1	Title of the Course	Interdisciplinary Course in Ancient Indian Knowledge Systems
2	Eligibility Admission for	As per university rules
3	Passing Marks	24 for theory and 16 for internal marks for each paper
4	Ordinances Regulations ( if any) /	As per university rules
5	No. of Years / Semesters	1 Semester
6	Level	P.G. / U.G./ Diploma / Certificate
7	Pattern	<del>Yearly</del> / Semester
8	Status	New / <del>Revised</del>
9	To be implemented from Academic Year	From Academic Year 2017-18

Date:  
Name

of

BOS

Signature:  
Chairperson

/

Dean:

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# **UNIVERSITY OF MUMBAI**



## **Essentials Elements of the Syllabus**

1	Title of the Course	Interdisciplinary Course in Ancient Indian Knowledge Systems
2	Course Code	UDSKTIAIKS
3	Preamble / Scope	Enclosed
4	Objective of Course	Enclosed
5	Eligibility	As per university rules
6	Fee Structure	As per university rules
7	No. of Lectures	As per university rules
8	No. of Practical	NA
9	Duration of the Course	One Semester
10	Notional hours	As per university rules
11	No. of Students per Batch	As per university rules
12	Selection	As per university rules
13	Assessment	As per university rules
14	Syllabus Details	Enclosed
15	Title of the Unit	Enclosed
16	Title of the Sub-Unit	Enclosed
17	Semester wise Theory	Enclosed
18	Semester wise List of Practical	NA
19	Question Paper Pattern	Enclosed
20	Pattern of Practical Exam	NA
21	Scheme of Evaluation of Project / Internship	As per university rules
22	List of Suggested Reading	Enclosed
23	List of Websites	NA
24	List of You-Tube Videos	NA
25	List of MOOCs	NA

### **Preamble and Objectives –**

This course is one of the interdisciplinary courses offered for MA – SEM IV.

India has a vast tradition of Sanskrit texts dealing with various scientific thoughts.

Number of treatises on the topics like Agriculture, Animal Husbandry, Chemistry, Astronomy, Mathematics, Botany, etc. focus on the development of thoughts in the concerned area.

This course aims at introducing a student with various treatises on physical as well as social sciences and their contribution to modern branches of sciences. Taking into consideration the vast scope of these sciences, major treatises will be introduced in the course thereby making a student to ponder over the ancient knowledge systems of India.

### **Inter-disciplinary Course in Ancient Indian Knowledge Systems**

#### **Unit I – Review of Scientific Literature in Sanskrit**

15 Marks

(References of sciences/scientific knowledge through different textual sources etc.)

#### **Unit II – Chemistry and Mathematics**

15 Marks

(Various treatises on Chemistry, Use of chemistry in medicines, Metallurgy, Use of chemistry for occult practices, Mathematical concepts through Shulbasutras, Development of different mathematical branches and treatises based on that, Development of astronomy, etc.)

#### **Unit III – Dietetics**

15 Marks

(Study of different texts based on culinary art Nalapakadarpana, Bhojanakutuhalam, Supashastra, Modes of preservation of food, Dietary guidelines through branches of Ayurveda, Food and diseases, etc.)

#### **Unit IV – Agriculture and Zoology**

15 Marks

Study of krishisuktas, Krishiparashara, Brihatsamhita, Types of crops, Manures, Types of land- devamatruka, nadimatruka, Use of animals in warfare, Animal husbandry, Animals for medicines, etc.)

**Paper Pattern:**

Q. 1. Essay Type (1/2) OR Short Notes (2/3)	15 Marks
Q. 2. Essay Type (1/2) OR Short Notes (2/3)	15 Marks
Q. 3. Essay Type (1/2) OR Short Notes (2/3)	15 Marks
Q. 4. Essay Type (1/2) OR Short Notes (2/3)	15 Marks

**Internal Assignment:**

PPT on any one science (Outside of the syllabus) with reference to Sanskrit Texts  
20 Marks

**Bibliography:**

1. Scientific Knowledge in Sanskrit Literature – Nirmal Trikha
2. Indian Astronomy: An Introduction – S. Balachandra Rao
3. Ancient Indian Sciences – B. Seal
4. Science in Ancient India (Science of the Past) – Melissa Stewart
5. India's Contribution to World Culture – Sudheer Birodkar
6. Ancient India – R. C. Majumdar
7. Ancient Indian Sciences – Swami Chidatman Jee Maharaj
8. Krishi Parashara – Agriculture by Parashara – Asian Agri-History Foundation
9. The Art of India through the Ages – Stella Kramrisch
10. Early Indian Secular Architecture – K. Krishna Murthy
11. The Asian Elephant: Ecology and Management" Cambridge Univ. Press