

**Inter-disciplinary Course in Ancient Indian Knowledge Systems
for SEM IV**

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:

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| 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