

2025

M.Sc. 1st Semester Examination

PHYSICS

Paper : PHSO406VC

[Indian Science Studies in Ancient India]

Full Marks : 25

Time : One Hour

The figures in the margin indicate full marks.

*Candidates are required to give their answers
in their own words as far as practicable.*

Group - A

Answer any two questions : $2 \times 2 = 4$

1. Write the atomic theory of the Buddhists.
2. What do you mean by the Nyaya-Vaisesika chemical theory?
3. Calculate the value of $\sqrt{2}$ using the Baudhāyana theorem.
4. What are the major works of Kapila Vatsyayan?

P.T.O.

(2)

Group - B

Answer any *two* questions :

4×2=8

5. What materials were used by the Sage Agastya for generating electricity? How electricity is generated in the Agastya's battery?
2+2
6. (i) Write three ancient books which are considered the main texts on Ayurvedic medicine.
(ii) Highlight the role of chemical knowledge and practices in the daily life of ancient Indian society.
2+2
7. Write a brief note on the ancient Indian agriculture practices.
8. (i) What was the ancient Indian concept of gravity?
(ii) Transform a rectangle into a square using the Sulba Sutras.
2+2

Group - C

Answer any *one* question :

8×1=8

9. (i) Write the differences between Vais'eṣika atomism and Jaina atomism.
(ii) Give the name of three medicinal plants as mentioned in the 'Atharvaveda Samhita' and their use in various health treatments.
2+6

(3)

10. (i) Describe the ancient downward Drift Distillation Process used for zinc extraction.
- (ii) What is the main concept of Arthashastra?
- (iii) What was the concept of space and time in ancient India? 4+2+2

Internal Assessment : 5 marks
