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PG/1st Sem/PHS/25

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 : $4 \times 2 = 8$

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 : $8 \times 1 = 8$

9. (i) Write the differences between Vais'eshika 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
