SRMJEEE 2025 Question Paper - Memory Based

Time Allowed :2 hours 30 minutesMaximum Marks :125Total Questions :125

General Instructions for SRMJEEE 2025

Read the following instructions carefully and follow them strictly:

- The SRMJEEE 2025 question paper consists of multiple-choice questions (MCQs) covering topics from Physics, Chemistry, Mathematics/Biology, English, and Aptitude.
- 2. The question paper is divided into five sections:
 - Section A: Physics
 - Section B: Chemistry
 - Section C: Mathematics (or Biology for Biotechnology aspirants)
 - Section D: English
 - Section E: Aptitude
- 3. There are a total of 125 questions in the paper.
- 4. Each question carries 1 mark. There is no negative marking for incorrect answers.
- 5. All questions are compulsory.
- 6. Write your Roll Number, Name, and Signature in the designated spaces on the OMR sheet.
- 7. The duration of the examination is 2 hours and 30 minutes.
- 8. No additional time will be provided for filling out personal details on the OMR sheet.

1. The molar conductivities at infinite dilution for NaSO, KSO, KCl, HCl, and HCOONa at 300 K are 260, 308, 150, 426, and 105 S·cm²·mol¹, respectively. What will be the molar conductivity at infinite dilution () for formic acid in the same unit?

- (a) 480
- (b) 429
- (c) 430
- (d) 405

2. Markovnikov's rule is applicable to which of the following reactions?

- (a) Addition of HBr to propene
- (b) Addition of HBr to propene in the presence of peroxides
- (c) Addition of Br to ethene
- (d) Hydroboration-oxidation of alkenes

3. A current of 2 A passes through a coil of 100 turns, producing a magnetic flux of 5 × 10 Wb per turn. What is the magnetic energy associated with the coil?

- (a) $5 \times 10^{-3} \,\mathrm{J}$
- (b) $6 \times 10^{-3} \text{ J}$
- (c) $5 \times 10^{-6} \text{ J}$
- (d) 7×10^{-3} J

4. Calculate the Reynolds number for a liquid with density 1 g/cm³ and viscosity 8 × 10 Pa·s, flowing at 0.5 m/s through a pipe of diameter 4 cm.

- (a) 40,000
- (b) 25,000
- (c) 30,000
- (d) 28,000

5. A box contains 5 red balls and 7 blue balls. Two balls are drawn at random without replacement. What is the probability that both balls are red?

- (a) ¹¹/₃₃
 (b) ¹⁰/₃₅
 (c) ¹²/₃₃
 (d) ⁵/₃₃
 6. If 'APPLE' is written as 'ELPPA', how is 'ORANGE' written in that language?
 (a) EGNAGO
- (b) FGNARO
- (c) EGNARO
- (d) EGGARO

7. A company's sales increased by 20% in 2022 compared to 2021 and by 25% in 2023 compared to 2022. If the sales in 2021 were 10 lakhs, what were the sales in 2023?

- (a) 15 lakhs
- (b) 18 lakhs
- (c) 20 lakhs
- (d) 25 lakhs

8. Choose the word most similar in meaning to 'Ubiquitous':

- (a) Rare
- (b) Omnipresent
- (c) Unique
- (d) Obsolete

9. Identify the grammatically correct sentence:

- (a) She don't like to play tennis.
- (b) He doesn't likes to read books.
- (c) They doesn't go to school on Sundays.
- (d) He doesn't like to read books.