TS EAMCET 2025 May 2 Question Paper

Time Allowed :3 Hours	**Maximum Marks : 160**	**Total Questions :**160

General Instructions

Read the following instructions very carefully and strictly follow them:

1. This question paper comprises 160 questions.
2. The Paper is divided into three parts- Biology, Physics and Chemistry.
3. There are 40 questions in Physics, 40 questions in Chemistry and 80 questions in Biology.
4. For each correct response, candidates are awarded 1 marks.

1. If the charge Q is given to a conductor, then

(1) Total charge resides on its centre

(2) Total charge distributes its infinite volume

(3) Total charge always resides on its outer surface

(4) Charge will travel between the centre and surface of the conductor

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2. A drop of water of radius 0.0015 mm is falling in air. The coefficient of viscosity of air is 1.8×10^5 kgm^{-1} s^{-1}. If the density of the air is neglected, then what will be the terminal velocity of the drop?

(1) 2.72×10^{-5} m/s

(2) 1.35×10^{-5} m/s

(3) 2.72×10^{-4} m/s

(4) 3.45×10^{-4} m/s

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3. The thermo emf of a thermocouple varies with temperature as $E = A\theta + B\theta^2$. If the cold junction is kept at $0°C$, the neutral temperature is:

(1) $0°C$

(2) $600°C$

(3) $150°C$

(4) No neutral temperature is possible

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4. A charged particle enters a magnetic field with velocity v at an angle of $60°$ with the field. If the time period of the helical path is 2 seconds, the pitch of the helical path is:

(1) $2v$

(2) $\frac{v}{2}$

(3) v

(4) $\frac{v}{8}$

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5. The ratio of the average value of kinetic energy to that of potential energy for an SHM is:

(1) 2:1

(2) 1:1

(3) 1:2

(4) 1:4

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6. If $g \circ f$ is a bijective function, then:

(1) f is one-one and f is onto

(2) f is many-one and g is onto

(3) f is one-one and g is onto

(4) g is one-one and g is onto

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7. If the sum of two vectors is a unit vector, then the magnitude of their difference is:

(1) $\sqrt{2}$

(2) $\sqrt{3}$

(3) $\frac{1}{\sqrt{3}}$

(4) 1
