

Note: There are three sections in this paper i.e. A, B & C.

- Instructions:
- Please attempt Section-A on the MCQs Answer Sheet only.
 - Only black ball point or marker may be used for shading the relevant circle.
 - Please make sure that there is no cutting, over writing, erasing, or multiple circles shading.

Time Allowed: 20 Minutes

"Section-A"

Marks: 12

Q.1. Choose the correct option i.e. A, B, C, or D.

- 10^{-12} stands for
 (A) Micro (B) Pico (C) Femto (D) Nano
- Which of the following is a vector quantity?
 (A) Speed (B) Distance (C) Displacement (D) Power
- A train is moving at a speed of 36 kmh^{-1} . Its speed expressed in ms^{-1} is
 (A) 10 ms^{-1} (B) 20 ms^{-1} (C) 25 ms^{-1} (D) 30 ms^{-1}
- The centripetal acceleration for an object of mass 1 kg moving with 6 ms^{-1} in a circle of radius 3 m is
 (A) 18 ms^{-2} (B) 12 ms^{-2} (C) 10 ms^{-2} (D) 2 ms^{-2}
- Rolling friction is always the sliding friction.
 (A) Greater than (B) Equal to (C) Less than (D) Both A and C
- Conventionally clock-wise torque is taken as
 (A) Negative (B) Positive (C) Parallel (D) Zero
- The angle at which x and y components of force are equal is
 (A) 0° (B) 30° (C) 45° (D) 60°
- At Earth's surface, Earth pulls down on a 1 kg mass with a force of magnitude
 (A) 9.8 N (B) 98 N (C) 0.9 N (D) 0.09 N
- One horse power (hp) =
 (A) 74.6 Watt (B) 7.46 Watt (C) 0.746 Watt (D) 746 Watt
- The unit of Young's Modulus is same as that of
 (A) Strain (B) Power (C) Stress (D) Force
- The amount of heat required to raise the temperature of 1 kg of water by 1 K is
 (A) 1 J (B) 400 J (C) 310 J (D) 4190 J
- The mode of transfer of heat which does not require material medium is called
 (A) Convection (B) Conduction (C) Radiation (D) None