

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