

SECTION-A

Note:

- 1) Attempting all MCQs is compulsory. This paper along with the OMR sheet must be returned to the superintendent after due time.
- 2) Fill the circle (A, B, C, D), which one is correct with blue or black ball point in separate OMR Sheet like 
- 3) If more than one circle in the OMR sheet is filled then no credit will be given to such answer.

I.i. The value we get after rounding 1.47 is.

- ☐ A 1.5
 ☐ B 1.4
 ☐ C 1.47
 ☐ D 1.46

ii. The slope of distance time curve only gives.

- ☐ A Acceleration
 ☒ B Speed
 ☐ C Displacement
 ☐ D Retardation

iii. The value of g " 9.8ms^{-2} " can be expressed in fts^{-2} as.

- ☐ A 3.22fts^{-2}
 ☐ B 322fts^{-2}
 ☐ C 0.322fts^{-2}
 ☐ D 32.2fts^{-2}

iv. The mass of a body of weight 9.8N on the surface of earth will be.

- ☐ A 9.8Kg
 ☐ B 0Kg
 ☒ C 1Kg
 ☐ D 98Kg

v. How many times the centripetal force will increase if the mass of a body moving with uniform speed in a circle is doubled?

- ☐ A Six times
 ☒ B Two times
 ☐ C Four times
 ☐ D Eight times

vi. S.I unit of torque is.

- ☒ A Nm
 ☐ B Nm^{-1}
 ☐ C Nm^2
 ☐ D Nm^{-2}

vii. A body in equilibrium must not be.

- ☐ A At rest
 ☐ B Moving
 ☐ C Rotating
 ☒ D Accelerating

viii. The magnitude of g on the moon's surface is about _____ of the value of g on the surface of Earth.

- ☐ A $1/2$
 ☐ B $1/4$
 ☒ C $1/6$
 ☐ D $1/8$

ix. If the mass of a body becomes half and velocity becomes double the K.E will increase by a factor of.

- ☒ A 2
 ☐ B 3
 ☐ C 4
 ☐ D Will remains same

x. KWh is unit for.

- ☒ A Energy
 ☐ B Power
 ☐ C Efficiency
 ☐ D Pressure

xi. A rock weighs 25.7N in air and 11.2N in water. What is the buoyant force of the water.

- ☐ A 4.1N
 ☒ B 1.9N
 ☐ C 1.18N
 ☐ D 0.84N

xii. Absolute zero temperature on Celsius scale is.

- ☐ A 273°C
 ☐ B 100°C
 ☐ C 0°C
 ☒ D -273°C