Date; 24.02.25

TENDER HEARTHIGH SCHOOL, SEC-33B, CHD

Subject:- PHYSICS

CLASS-IX (Ch-Force)

Practice Assignment (Revision) (M.C.Q's)

Q1:→ A moment of couple has a tendency to rotate the body in an anticlockwise direction. Then the moment of couple is taken as :—

(a) Positive (b) negative (c) maximum (d) Zero.

Ans (a) (Positive)

Q2:→ To open and shut the door, we apply a force normal to the door at its handle which is provided at the

(a) minimum distance from the hinges

(b) maximum distance from the hinges

(c) Any distance from the hinges

(d) None of these

Ans (b) maximum distance from the hinges.

Q3:→ The centre of gravity of a cricket ball is at:—

(a) its geometric centre (b) Its bottom touching the ground

(c) its top-most point (d) at any point on its surface.

Ans (a) its geometrical centre

Q4:→ The centrifugal force is

(a) a fictitious force

(b) A real force

(c) a force of reaction of centripetal force

(d) directed towards the centre of circular path

Ans (a) fictitious force

Q5 The moon revolving around the earth is is

(a) Static equilibrium

(b) dynamic equillibrium

(c) neutral equillibrium

(d) none of these

Ans (b) dynamic equillibrium

Q6:→ The moment of a force of 5N about a point X is 2Nm. Calculate the distance of point of application of the force from the point P.

(a) 0.2m (b) 0.3m (c) 0.4m (d) 0.5m

Ans moment of force = Force x distance

2Nm = 5N x distance

$0.4 = \frac{2}{5}$ = distance

0.4m Ans

Ans (c) = 0.4m

Q7:→ The C.G.S unit of moment of force is

(a) dyne-m (b) N-cm (c) N-m (d) dyne cm

Ans (d) dyne cm (∵ moment of force = F x d = dyne x cm)

Q8 :→ A physical balance works on the principle of:—

(a) masses (b) forces (c) moments (d) torques

Ans (c) moments

Q9 :→ According to principle of moments, in equilibrium

(a) Sum of anticlockwise moments = Sum of clockwise moments

(b) Sum of anticlockwise moments > Sum of clockwise moments

(c) Sum of anticlockwise moments < Sum of clockwise moments.

(d) None of these

Ans (a) Sum of anticlockwise moments = Sum of clockwise moments.

Q10 :→ In a uniform circular motion :—

(a) the velocity of the body is variable.

(b) The speed of the body is uniform.

(c) it is an accelerated motion.

(d) all of these

Ans (d) all of these ∵ In a circular motion ;
Speed is constant but
Velocity is variable and
motion is accelerated

Q11 it is necessary that the centre of gravity always be within the material of the body.

(a) True sentence (b) False sentence (c) none of these (d) no idea

Ans :→ (b) False statement

Q12 :→ A door lock is opened by turning the lever (handle) of length 0.2m. If the moment of force produced is 1Nm. Then the minimum force required is

(a) 5N (b) 10N (c) 20N (d) 0.2N

Ans moment of force = F x distance

$1Nm = F \times 0.2m$

$\frac{1}{0.2} = F$

$\Rightarrow \frac{10}{2} 5 = F$ or $F = 5N$

Ans (a) 5N

Q13 :→ Assertion :- A long spanner is used to loosen a tight nut

Reason :- A small force can produce a large turning effect

(a) Both Assertion and Reason are true

(b) Both Assertion and Reason are false

(c) Assertion is false but reason is true.

(d) Assertion is true and

Ans (a) Both assertion and Reason are true