

Duration: 30 Mins

Total Marks: 10

ID: ITISKILL6983PJ

Student Name: _____

Roll No: _____

1. What is the centre of gravity of a rectangular body?

- A) At the corners
B) At the point of intersection of its diagonals
C) Shorter side of rectangle
D) Longer side of rectangle

2. What is the centre of gravity of a sphere?

- A) At the centre
B) On the circumference
C) At the diameter
D) At the radius

3. Which affects the centre of gravity of the object?

- A) Weight
B) Shape
C) Density
D) Mass

4. What is the centre of gravity of a semi circle of diameter 12 cm?

- A) 2.75 cm
B) 2.54 cm
C) 2.24 cm
D) 3.25 cm

5. Which one of the following geometrical shapes centre of gravity lies from its base is $\frac{1}{3}$ of its height?

- A) Rhombus
B) Square
C) Triangle
D) Cone

6. Which state of equilibrium's example is A cone resting on its tip?

- A) Horizontal
B) Neutral
C) Unstable
D) Stable

7. Which state of equilibrium's example is, A cone resting on its base?

- A) Neutral
B) Stable
C) Both A and B
D) Un-stable

8. What is the centre of gravity of a right circular cone from its base?

- A) $\frac{h}{3}$
B) $\frac{h}{4}$
C) $\frac{h}{2}$
D) $\frac{h}{5}$

9. What is the centre of gravity of a solid hemisphere from its base?

- A) $\frac{r}{2}$
B) $\frac{3r}{8}$
C) $\frac{4r}{5}$
D) $\frac{3r}{4}$

10. What is the name of the point at which all the weight of the body concentrated?

- A) Centre of gravity
B) Central point
C) Initial point
D) Centroid