

Duration: 60 Mins

Total Marks: 11

ID: ITISKILL70776L

Student Name: _____	Roll No: _____
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1. Which affects the centre of gravity of the object?

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

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

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

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

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

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

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

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

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

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

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

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

9. Where the centre of gravity of a circle lies?

- A) At its centre B) Any where on its circumference
C) Any where on its diameter D) Any where on its radius

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

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

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

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

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

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

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