

Duration: 30 Mins

Total Marks: 10

Q.ID: ITISKILL6983PJ

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

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

Answer: D) Triangle

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

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

Answer: B) Mass

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

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

Answer: A) At the point of intersection of its diagonals

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

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

Answer: B) Unstable

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

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

Answer: C) 2.54 cm

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

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

Answer: A) Centre of gravity

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

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

Answer: B) Stable

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

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

Answer: A) At the centre

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

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

Answer: A) $\frac{h}{4}$

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

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

Answer: B) $\frac{3r}{8}$