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**Score: 9/11 (81.82%)**

**Code: 5451**

1. Which affects the centre of gravity of the object

- A) Weight  
 B) **Mass**  
 C) Density  
 D) Shape (Incorrect)

base?

- A)  $4r/5$   
 B)  **$3r/8$  (Correct)**  
 C)  $3r/4$   
 D)  $r/2$

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

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

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

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

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

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

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

- A) Stable  
 B) Neutral  
 C) **Unstable (Correct)**  
 D) Horizontal

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

- A)  $h/2$   
 B)  $h/3$   
 C)  **$h/4$  (Correct)**  
 D)  $h/5$

9. Which one of the following geometrical shape's centre of gravity lies from its base is  $1/3$  of its height?

- A) Square  
 B) Rhombus  
 C) **Triangle (Correct)**  
 D) Cone

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

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

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

- A) Un-stable  
 B) Neutral  
 C) **Stable (Correct)**  
 D) Bothe A and B

6. What is the centre of gravity of a solid hemisphere from its

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

- A) 2.24 cm  
 B) **2.54 cm (Correct)**  
 C) 3.25 cm  
 D) 2.75 cm