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**Score: 6/11 (54.55%)**

**Code: 4784**

1. Which affects the centre of gravity of the object

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

A)  $4r/5$

C)  $3r/4$

**B)  $3r/8$  (Correct)**

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**  
 C) Centroid (Incorrect)  
 D) Central point

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

**A) At the centre**

C) At the diameter

B) On the circumference (Incorrect)

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  
**C) Unstable**

- B) Neutral  
D) Horizontal (Incorrect)

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

- A)  $h/2$   
**C)  $h/4$  (Correct)**  
 B)  $h/3$   
 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  
**C) Triangle**  
 B) Rhombus (Incorrect)  
 D) Cone

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

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

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

- A) Un-stable  
**C) Stable (Correct)**

- B) Neutral  
 D) Bothe A and B

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

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

- A) 2.24 cm  
 C) 3.25 cm

- B) 2.54 cm (Correct)**  
 D) 2.75 cm