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Score: 10/25 (40.00%)

Code: 4835

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

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

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

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

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

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

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) $h/5$

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 (Correct)**
 D) At the corners

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

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

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

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

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

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

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

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

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

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

12. Which is thermo plastic material?

- A) Butyl rubber (Incorrect)
 B) Nylon
 C) Neoprene
 D) **Vinyl polymers**

13. What is the ratio between the change in dimension to its original dimension of the substance?

- A) Stress (Incorrect)
 B) **Strain**
 C) Poisson's ratio
 D) Factor of safety

14. What is the ratio of shear stress to shear strain?

- A) Modulus of elasticity (Incorrect)
 B) **Modulus of rigidity**
 C) Bulk modulus
 D) Yield point

15. What is the ratio between stress and strain?

- A) Yield point
 B) Factor of safety (Incorrect)
 C) **Youngs Modulus**
 D) Poisson's ratio

16. Which force acts on crank shaft?

- A) Shear stress
 B) **Torsional stress**
 C) Tensile stress
 D) Compressive stress (Incorrect)

17. 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
 D) Central point (Incorrect)

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

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

19. 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) $h/5$
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- 20.** 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 (Correct) D) At the corners
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- 21.** What is the centre of gravity of a solid hemisphere from its base?
- A) $4r/5$ **B) $3r/8$**
C) $3r/4$ (Incorrect) D) $r/2$
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- 22.** 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
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- 23.** Which state of equilibrium's example is A cone resting on its tip?
- A) Stable B) Neutral
C) Unstable D) Horizontal (Incorrect)
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- 24.** Which state of equilibrium's example is, A cone resting on its base?
- A) Un-stable B) Neutral
C) Stable D) Bothe A and B (Incorrect)
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- 25.** 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
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