

MONTHLY TEST

Q. ID: ITISKILL00226F

January 2026

GOVT. ITI.AMMASANDRA,

Question Paper

Duration: 60 Mins

Total Marks: 25

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Student Name: _____

Roll No: _____

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

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

2. What is the ratio of change in length to original length?

- A) Volumetric strain
- B) Linear strain
- C) Poisson's ratio
- D) Lateral strain

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

13. Which affects the centre of gravity of the object

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

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

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

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

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

16. Which is thermo plastic material?

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

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

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

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

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

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

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

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

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

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

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

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

- A) Initial point
- C) Central point

- B) Centre of gravity
- D) Centroid

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

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

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

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

25. What is the maximum percentage of stretch of its original length is allowable for elastic materials?

- A) 100%
- C) 400%
- B) 300%
- D) 200%