

MONTHLY TEST

Q. ID: ITISKILL00226F

GOVT. ITI.AMMASANDRA,

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Answer Key

Duration: 60 Mins

Total Marks: 25

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

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

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

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

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

Answer: A) 2.54 cm

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

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

Answer: C) At its centre

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

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

Answer: B) Mass

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

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

Answer: B) 300%

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

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

Answer: D) Stable

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

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

Answer: B) $h/4$

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

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

Answer: C) Triangle

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

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

Answer: B) 2.54 cm

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

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

Answer: B) Centre of gravity

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

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

Answer: D) Unstable

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

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

Answer: C) Linear strain

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

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

Answer: D) $3r/8$

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

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

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

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

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

Answer: D) At its centre

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

- A) At the diameter
B) On the circumference

- C) At the centre D) At the radius

Answer: C) At the centre

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

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

Answer: A) $h/4$

18. Which affects the centre of gravity of the object

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

Answer: C) Mass

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

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

Answer: B) Centre of gravity

20. Which is thermo plastic material?

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

Answer: C) Vinyl polymers

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

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

Answer: A) Triangle

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

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

Answer: B) Unstable

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

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

Answer: B) At the centre

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

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

Answer: A) $3r/8$

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

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

Answer: A) Stable