

Monthly Test

workshop calculation and science December 2025

Q. ID: ITISKILL8158WW

December 2025

GOVT ITI VITTLA

Answer Key

Duration: 30 Mins

Total Marks: 10

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

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

Answer: C) At its centre

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

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

Answer: B) Triangle

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

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

Answer: C) $\frac{3r}{8}$

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

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

Answer: C) 2.54 cm

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

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

Answer: B) Unstable

6. 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

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

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

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

Answer: A) Centre of gravity

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

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

Answer: B) At the centre

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

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

Answer: A) $\frac{h}{4}$

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

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

Answer: A) Stable