

Monthly Test workshop calculation and science December 2025

Q. ID: ITISKILL0532LF

December 2025

GOVT ITI VITTLA

Answer Key

Duration: 30 Mins

Total Marks: 10

Q.ID: ITISKILL0532LF

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

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

Answer: C) Stable

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

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

Answer: C) $h/4$

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

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

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

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

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

Answer: B) 2.54 cm

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

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

Answer: D) At its centre

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

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

Answer: C) $3r/8$

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

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

Answer: B) Triangle

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

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

Answer: A) At the centre

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

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

Answer: C) Unstable

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