

Monthly test september

Q. ID: ITISKILL6650SC

September 2025

Govt ITI vitla

Question Paper

Duration: 30 Mins

Total Marks: 11

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Student Name: _____ Roll No: _____

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

11. Which affects the centre of gravity of the object

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