

8. Friction

Q. ID: ITISKILL4521US

May 2026

Govt ITI Beerihundi

Question Paper

Duration: 30 Mins

Total Marks: 11

ID: ITISKILL4521US

Student Name: _____	Roll No: _____
---------------------	----------------

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

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

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

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

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

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

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

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

5. Which affects the centre of gravity of the object

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

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

- A) Any where on its diameter
- B) At its centre

C) Any where on its radius

D) Any where on its circumference

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

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

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

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

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

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

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

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

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

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