

**Student: Reetham B.S**

**Score: 7/10 (70.00%)**

**Code: 8711**

1. Which affects the centre of gravity of the object

- |            |                          |
|------------|--------------------------|
| A) Weight  | <b>B) Mass (Correct)</b> |
| C) Density | D) Shape                 |

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

- |                  |                                       |
|------------------|---------------------------------------|
| A) Initial point | <b>B) Centre of gravity (Correct)</b> |
| C) Centroid      | D) Central point                      |

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

- |  |                              |
|--|------------------------------|
| <b>A) At its centre</b>                              | B) Any where on its radius   |
| <u>C) Any where on its circumference (Incorrect)</u> | D) Any where on its diameter |

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

- |                                      |          |
|--------------------------------------|----------|
| A) $h/2$                             | B) $h/3$ |
| <b>C) <math>h/4</math> (Correct)</b> | D) $h/5$ |

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

- |   |   |
|---|---|
| A) Longer side of rectangle                             | <u>B) Shorter side of rectangle (Incorrect)</u> |
| <b>C) At the point of intersection of its diagonals</b> | D) At the corners                               |

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

- |                         |  |
|-------------------------|--|
| <b>A) At the centre</b> | <u>B) On the circumference (Incorrect)</u> |
| C) At the diameter      | D) At the radius                           |

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

- |                              |               |
|------------------------------|---------------|
| A) Stable                    | B) Neutral    |
| <b>C) Unstable (Correct)</b> | D) Horizontal |

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

- |                              |            |
|------------------------------|------------|
| A) Square                    | B) Rhombus |
| <b>C) Triangle (Correct)</b> | D) Cone    |

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

- |                            |                  |
|----------------------------|------------------|
| A) Un-stable               | B) Neutral       |
| <b>C) Stable (Correct)</b> | D) Bothe A and B |

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

- |            |                             |
|------------|-----------------------------|
| A) 2.24 cm | <b>B) 2.54 cm (Correct)</b> |
| C) 3.25 cm | D) 2.75 cm                  |