

WCS friction and center of gravity questions

Q. ID: ITISKILL1523UM

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Question Paper

Duration: 30 Mins

Total Marks: 22

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Student Name: _____ Roll No: _____

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

16. Which affects the centre of gravity of the object

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

17. 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

18. 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

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

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

20. Which affects the centre of gravity of the object?

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

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

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

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

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