

**Duration: 60 Mins**

**Total Marks: 11**

**ID: ITISKILL70776L**

Student Name: \_\_\_\_\_ Roll No: \_\_\_\_\_

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

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

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

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

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

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

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

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

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

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

**6.** Which affects the centre of gravity of the object?

- A) Weight                                      B) Shape

C) Mass

D) Density

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

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

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

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

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

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

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

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

**11.** Where the centre of gravity of a circle lies?

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