

**Duration: 30 Mins**

**Total Marks: 15**

**Q.ID: ITISKILL6602QP**

1. What is the density ( $\rho$ ) in  $\text{g/cm}^3$  of an iron cube, if it weighs (W) 4.8 kg and volume (V) is  $640 \text{ cm}^3$ ?

- A)  $6.6 \text{ g/cm}^3$     B)  $6.9 \text{ g/cm}^3$   
 C)  $7.2 \text{ g/cm}^3$     D)  $7.5 \text{ g/cm}^3$

**Answer: D)  $7.5 \text{ g/cm}^3$**

2. What is the volume (V) of mercury in  $\text{cm}^3$ , if mass (m) of mercury is 1 kg and density ( $\rho$ ) is  $13.6 \text{ g/cm}^3$ ?

- A)  $73.53 \text{ cm}^3$     B)  $73.23 \text{ cm}^3$   
 C)  $73.43 \text{ cm}^3$     D)  $73.33 \text{ cm}^3$

**Answer: A)  $73.53 \text{ cm}^3$**

3. What is called mass per unit volume of a substances?

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

**Answer: A) Density**

4. What is the mass if the density of a body is  $7.6 \text{ g/cm}^3$  and its volume is  $25 \text{ cm}^3$ ?

- A) 220 grams                  B) 210 grams  
 C) 190 grams                 D) 200 grams

**Answer: C) 190 grams**

5. What is the mass in gram, if a force of 15 dynes acting on a mass m producing an acceleration of  $2 \text{ cm/sec}^2$ ?

- A) 8 grams                      B) 9 grams  
 C) 7 grams                      D) 6 grams

**Answer: D) 6 grams**

6. What is termed as the quantity of matter contained in a body?

- A) Mass                         B) Density  
 C) Volume                      D) Specific gravity

**Answer: A) Mass**

7. What is called the ratio between the density of a substances density of water at 4 Degree Centigrade?

- A) Weight                      B) Density  
 C) Specific gravity            D) Mass

**Answer: C) Specific gravity**

8. What is the specific gravity of the solid, if density of the solid is  $19.5 \text{ g/cm}^3$ ?

- A) 19.5                         B) 18.5

- C) 8                              D) 19

**Answer: A) 19.5**

9. What is the force with which a body is attracted by the earth towards its centre?

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

**Answer: B) Weight**

10. What is the block weighs (W) in kg, if volume (V) is  $320 \text{ cm}^3$  and density  $8.9 \text{ g/cm}^3$ ?

- A) 2.448                         B) 2.948 kg  
 C) 2.648 kg                    D) 2.848 kg

**Answer: D) 2.848 kg**

11. What is the volume of mercury in  $\text{cm}^3$ , if the mass (m) of mercury is 136 grams (g) and density ( $\rho$ ) of mercury is  $13.6 \text{ g/cm}^3$ ?

- A)  $10.0 \text{ cm}^3$                  B)  $13.6 \text{ cm}^3$   
 C)  $10.6 \text{ cm}^3$                  D)  $136 \text{ cm}^3$

**Answer: A)  $10.0 \text{ cm}^3$**

12. What is the weight force of a car has a mass of 800 kg?(Take  $g = 9.81 \text{ m/sec}^2$ )

- A) 7847 Newton                B) 7848 Newton  
 C) 7748 Newton                D) 7487 Newton

**Answer: B) 7848 Newton**

13. What is the specific gravity of the metal, if the piece of metal weighs 150 grams in air and 125 grams in water?

- A) 15                              B) 6  
 C) 25                              D) 10

**Answer: B) 6**

14. What is the density of aluminium?

- A)  $2.7 \text{ g/cm}^3$                  B)  $3.7 \text{ g/cm}^3$   
 C)  $4.7 \text{ g/cm}^3$                  D)  $5.7 \text{ g/cm}^3$

**Answer: A)  $2.7 \text{ g/cm}^3$**

15. What is the specific gravity of the metal, if the weighs 6.5 kgf in air and 3.5 kgf in water?

- A) 3.166                         B) 6.166  
 C) 1.166                         D) 2.166

**Answer: D) 2.166**