

# 4. Mass Weight Volume

Q. ID: ITISKILL5507UC

May 2026

Govt ITI Beerihundi

Answer Key

Duration: 30 Mins

Total Marks: 15

Q.ID: ITISKILL5507UC

1. What is the density of aluminium?

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

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

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

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

Answer: B) Specific gravity

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

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

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

4. 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) 25  
C) 6    D) 10

Answer: C) 6

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

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

Answer: B) Weight

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

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

Answer: A) 7848 Newton

7. 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) 190 grams                                B) 220 grams  
C) 210 grams                                D) 200 grams

Answer: A) 190 grams

8. What is the density (r) 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)  $7.5 \text{ g/cm}^3$

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

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

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

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

Answer: D) 2.166

10. What is the mass in gram, if a force of 15 dynes acting on a mass m producing an acceleration of  $2.5 \text{ cm/sec}^2$ ?

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

Answer: B) 6 grams

11. 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) 2.848 kg                                    B) 2.648 kg  
C) 2.448                                      D) 2.948 kg

Answer: A) 2.848 kg

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

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

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

13. What is called mass per unit volume of a substance?

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

Answer: B) Density

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

- A) 18.5                                        B) 19.5  
C) 8    D) 19

Answer: B) 19.5

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

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

Answer: A) Mass