

**Duration: 30 Mins**

**Total Marks: 15**

**Q.ID: ITISKILL6602QP**

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

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

**Answer: B) Specific gravity**

2. 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)  $136 \text{ cm}^3$
- B)  $10.0 \text{ cm}^3$
- C)  $10.6 \text{ cm}^3$
- D)  $13.6 \text{ cm}^3$

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

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

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

**Answer: A) 19.5**

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

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

**Answer: D) Weight**

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

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

**Answer: B) 6 grams**

6. 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)  $7.2 \text{ g/cm}^3$
- B)  $6.6 \text{ g/cm}^3$
- C)  $6.9 \text{ g/cm}^3$
- D)  $7.5 \text{ g/cm}^3$

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

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

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

**Answer: C) 6**

8. What is the weight force of a car has a mass of 800

kg?(Take  $g = 9.81 \text{ m/sec}$ )

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

**Answer: D) 7848 Newton**

9. 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) 2.648 kg
- C) 2.848 kg
- D) 2.948 kg

**Answer: C) 2.848 kg**

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

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

**Answer: B) 2.166**

11. 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)  $73.33 \text{ cm}^3$
- B)  $73.43 \text{ cm}^3$
- C)  $73.23 \text{ cm}^3$
- D)  $73.53 \text{ cm}^3$

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

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

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

**Answer: C) Density**

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

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

**Answer: B) Mass**

14. What is the density of aluminium?

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

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

15. Wha 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) 210 grams
- B) 200 grams
- C) 220 grams
- D) 190 grams

**Answer: D) 190 grams**