

4. Mass Weight Volume

Q. ID: ITISKILL5507UC

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Govt ITI Beerihundi

Question Paper

Duration: 30 Mins

Total Marks: 15

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Student Name: _____ Roll No: _____

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

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

2. What is the density of aluminium?

- A) 4.7 g/cm^3
B) 2.7 g/cm^3
C) 5.7 g/cm^3
D) 3.7 g/cm^3

3. What is the mass if the density of a body is 7.6 g/cm^3 and its volume is 25 cm^3 ?

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

4. What is the mass in gram, if a force of 15 dynes acting on a mass m producing an acceleration of 2.5 cm/sec^2 ?

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

5. 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) 6
C) 15
D) 10

6. What is the density (ρ) in g/cm^3 of an iron cube, if it weighs (W) 4.8 kg and volume (V) is 640 cm^3 ?

- A) 6.9 g/cm^3
B) 7.2 g/cm^3
C) 6.6 g/cm^3
D) 7.5 g/cm^3

7. What is the block weighs (W) in kg, if volume (V) is 320 cm^3 and density 8.9 g/cm^3 ?

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

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

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

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

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

10. What is the volume of mercury in cm^3 , if the mass (m) of mercury is 136 grams (g) and density (ρ) of mercury is 13.6 g/cm^3 ?

- A) 10.6 cm^3
B) 136 cm^3
C) 10.0 cm^3
D) 13.6 cm^3

11. 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) 7748 Newton
C) 7847 Newton
D) 7487 Newton

12. What is the specific gravity of the solid, if density of the solid is 19.5 g/cm^3 ?

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

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

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

14. What is the volume (V) of mercury in cm^3 , if mass (m) of mercury is 1 kg and density (ρ) is 13.6 g/cm^3 ?

- A) 73.23 cm^3
B) 73.33 cm^3
C) 73.43 cm^3
D) 73.53 cm^3

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

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