

Chapter- 2

PHYSICAL QUANTITIES AND MEASUREMENT

WORKSHEET

MCQ

1. The relative density of alcohol is 0.8. Its density is
 - i. 0.8
 - ii. 800 kg m^{-3}
 - iii. 0.8 kg m^{-3}
 - iv. 800 g cm^{-3}
2. The density of aluminium is 2.7 g cm^{-3} and that of brass is 8.4 g cm^{-3} . The correct statement is
 - i. Equal masses of aluminium and brass have equal volumes.
 - ii. The mass of a certain volume of brass is more than the mass of equal volume of aluminium.
 - iii. The volume of certain mass of brass is more than the volume of equal mass of aluminium.
 - iv. Equal volumes of aluminium and brass have equal masses.
3. A density bottle has marking 25 mL on it. It means that
 - i. The mass of density bottle is 25 g
 - ii. The density bottle will store 25 ml of any liquid in it.
 - iii. The density bottle will store 25 mL of water but more volume of liquid denser than water.
 - iv. The density bottle will store 25 ml of water but more volume of liquid lighter than water.
4. The correct statement is
 - i. The buoyant force on a body is equal to the volume of liquid displaced by it.
 - ii. The buoyant force on a body is equal to the volume of the body.
 - iii. The buoyant force on a body is always equal to the weight of the body.
 - iv. The buoyant force on a body is equal to the weight of the liquid displaced by it.

1. The density of brass is 8.4 g cm^{-3} . What do you mean by this statement?
2. Arrange the following substances in order of their increasing density:
Iron, cork, Brass, Water, Mercury.
3. How does the density of a liquid or gas vary with temperature?
4. A given quantity of liquid is heated. Which of the following quantity will vary and how?

