

1. Choose the correct option. [3]

- (a) The intermolecular force is minimum in  
(i) solids (iii) gases  
(j) liquids (iv) none of the above
- (b) The density of water at 4°C is  
(i) 1000 g/cm<sup>3</sup> (iii) 1000 kg/m<sup>3</sup>  
(ii) 1 kg/m<sup>3</sup> (iv) 1 g/m<sup>3</sup>
- (c) The boiling point of a liquid \_\_\_\_\_, when impurities are added to it.  
(i) increases (iii) remains the same  
(ii) decreases (iv) none of the above

2. Answer the following.

- (a) Write 2 differences between evaporation and boiling. [2]
- (b) Define the term density of a substance. How its C.G.S unit related to its S.I. unit? [2]
- (c) Write any 2 properties which decide the state of a substance. [2]
- (d) Compare solid, liquid and gas as per [2]  
(I) Intermolecular Force of Attraction  
(II) Shape
- (e) A block of silver displace 200 ml of water in a measuring cylinder. If the density of the silver is 10300 kg/m<sup>3</sup>, find the mass of the block. [2]
- (f) What do you mean by freezing mixture? Write one use of it. [2]
- (g) State any 2 factors which affect the rate of evaporation of a liquid. How do they affect it? [2]

3. The mass of an empty density bottle is 30g, it is 75g when filled completely with water and 65g when filled completely with a liquid. Find : [3]

- (a) volume of density bottle  
(b) density of liquid  
(c) relative density of liquid