

PHYSICS

Choose the correct answers to the questions from the given options. (Do not copy the question, write the correct answer)

Question 1

7 x 1 = 7

1. A form of matter has no fixed shape and no fixed volume. An example of this form of matter is
A) petrol B) Iron C) Krypton D) carbon steel
2. A teabag immersed in a cup of hot water changes its colour. The property responsible for this is
A) melting B) diffusion C) déposition D) vaporisation
3. A solid object when placed inside a graduated cylinder with water shows increase in its level. The difference in level of water is used to determine
A) mass B) density C) volume D) weight
4. Which of the following does not undergo sublimation?
A) Iodine crystals B) sodium chloride
C) camphor D) solid carbon dioxide
5. The density of mercury is 13.6g/cm^3 in C.G.S system. Its density in S.I system is
A) 13.6kg/m^3 B) 1360kg/m^3 C) 13600 kg/m^3 D) 0.0136 kg/m^3
6. A piece of wood floats on water. The buoyant force on wood will be
A) zero
B) more than weight of the wood piece
C) equal to the weight of the wood piece
D) less than the weight of the wood piece
7. **Assertion:** When a ship enters from river to sea, ship will rise a little.

Reason : The sea water is denser than river water

- A) Both A and R are correct, and R is the correct explanation for A
 B) Both A and R are correct, and R is not the correct explanation for A
 C) A is true, R is false
 D) A is false, R is true

viii) Give reasons for the following

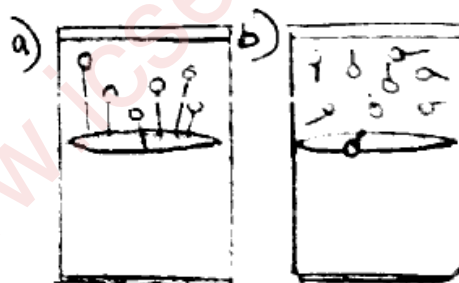
- a) A balloon filled with hydrogen rises in air.
 b) It is easier to lift a stone under water than in air.
 c) A piece of ice floats on water

[3]

Question 2

- i) Observe the diagram given and write the phenomenon that takes place in A and B.

[2]



- ii) What is a density bottle? Draw a neat labeled diagram.

[2]

- iii) A patient suffering from high fever is advised to put wet cloth strips on his forehead. Give reason for your answer.

[2]

- iv) Write the properties which decides the state of matter?

[2]

- v) Distinguish between density and relative density.

[2]

Question 3

- i) Draw a neat labeled diagram to show the change of state of matter. [3]

- ii) An empty density bottle weighs 28g when completely filled with water

at 4°C , it weighs 60g and when completely filled with a liquid, it weighs 48g. Find the relative density of the liquid. [3]

- iii) a) Relative density of Aluminum is 2.7. Explain the meaning of the statement.

- b) The dimensions of a block of glass is 30cm long 25cm wide and has a thickness of 2cm. Find the density if its mass is 7.5 kg. [4]

Question 4

- i) Distinguish between evaporation and boiling. [3]
- ii) Write any three properties of liquids. [3]
- iii) 1) State the law of floatation.

2) What are the forces that act on a floating body?

3) From the adjacent diagram identify

- a) liquid with maximum density.
- b) liquid with minimum density. [4]

