

SAINIK SCHOOL GOPALGANJ
SUB - SCIENCE
Class-IX

ASSIGNMENT - 2

Matter in Our surrounding

Choose the Correct Option from the given choices.

1. Multiple Choice Questions:

i. The quantity of matter present in an object is called its:

- (a)Weight
- (b)Gram
- (c)Mass
- (d)Density

ii. At higher altitudes:

- (a)Boiling point of a liquid decreases
- (b)Boiling point of a liquid increases
- (c)No change in boiling point
- (d)Melting point of solid increases

iii. The boiling point of alcohol is 78°C What is this temperature in Kelvin scale:

- (a)373 K
- (b)351 K
- (c)375 K
- (d)78 K

iv. In which phenomena water changes into water vapour below its B.P.?

- (a) Evaporation
- (b) Condensation
- (c) Boiling
- (d) No such phenomena exist

v. When we put some crystals of potassium permanganate in a beaker containing water, we observe that after sometime whole water has turned pink. This is due to:

- (a)Boiling
- (b)Melting of potassium permanganate crystals
- (c)Sublimation of crystals
- (d)Diffusion

2. Fill in the blanks with suitable words

- a) Water droplets are collected on the outer surface of a glass container containing ice because of _____
- b) Gases can be liquefied by applying _____ and lowering _____
- c) When steam condenses to form water, heat is _____
- d) The smell of perfume spreads across a room due to _____
- e) The rate of evaporation _____ on increasing the surface area of the liquid
- f) Chemical name of dry ice is _____

3. Answer the following question (Short Answer Type):

- a) With the help of an example, explain how diffusion of gases in water is essential?
- b) On a hot sunny day, why do people sprinkle water on the roof or open ground?
- c) A balloon when kept in sun, bursts after some time. Why?
- d) Define Latent Heat of Fusion. What is the value of latent heat of fusion of ice?
- e) Why steam causes more severe burns than boiling water?

4. Answer the following questions (Long Answer Type):

- a) Define evaporation. Explain the factors responsible to affect the rate of evaporation.
- b) What is sublimation? Name four substances that show sublimation. Diagrammatically represent how you will carry out sublimation in laboratory.
- c) Convert the following temperature to Kelvin: 270°C , 78°C , -- 40°C
- d) Draw the States of matter triangle to show the inter conversion of states of matter
- e) Explain briefly how gases can be liquefied.
- f) Differentiate between evaporation and boiling

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