Chapter- 1

MATTER

WORKSHEET **SECTION-A**

Q.1 When a teaspoon of solid sugar is dissolved in a glass of liquid water, what phase or phases are present aftermixing–
(A) liquid only (B) still solid and liquid (C) solid only (D) None of these

Q.2 Volume of a gas at a particular temperature and on atmosphere pressure is 200 ml. Keeping the temperatureconstant if pressure is increased 5 atmosphere, then volume of the gas will be –
(A) 100 ml. (B) 40 ml. (C) 200 ml. (D) 205 ml.

Q.3 The value of gas constant R in SI unit in ideal gas equation is –
(A) Newton meter per kelvin per mole (B) Joule per kelvin per mole
(C) Dyne cm per degree per mole (D) Litre per mole

Q.4 Gases can be liquified either by lowering the temperature, applying pressure to lowering the temperatureand simultaneously applying pressure. This shows that –
(A) molecules of a gas repel each other
(B) there exists a kind of intermolecular attraction between molecules of a gas
(C) molecules of a gas are in a state of random motion
(D) None of these

Q.5 All liquids have same – Density
(B) Viscosity (C) Solubility (D) None of the Above

Q.6 Which of these choices will not change the state of matter?
(A) Temperature (B) Crushing a Crystal (C) Pressure (D) Electricity

Q.7 Which of these choices will not change the state of matter?
(A) Temperature (B) Crushing a Crystal (C) Pressure (D) Electricity

Q.8 **ASSERTION & REASON TYPE**

Each question contains STATEMENT-1 (Assertion) and STATEMENT-2 (Reason). Each question has 5 choices (A), (B), (C), (D) and (E) out of which ONLY ONE is correct.

(A) Statement-1 is True, Statement-2 is True; Statement-2 is a correct explanation for Statement-1.
(B) Statement-1 is True, Statement-2 is True; Statement-2 is not a correct explanation for Statement-1.
(C) Statement -1 is True, Statement-2 is False.
(D) Statement -1 is False, Statement-2 is True.

(E) Statement -1 is False, Statement-2 is False.

Statement 1 : It is difficult to cook food at hill

Statement 2 : The boiling point of water increases at hill.

Q.9 A bottle of ammonia and a bottle of dry hydrogen chloride connected through a long tube are opened simultaneously at both ends, the white ammonium chloride ring first formed will be –

(A) At the centre of the tube
(B) Near the hydrogen chloride bottle
(C) Near the ammonia bottle
(D) Throughout the length of the tube

SECTION-B

Q.10 2mL of dettol is added to a beaker containing 500mL of water and stirred. State four observations that you make.

Q.11 With the help of labelled diagram describe an activity to show that the particles of matter are very small. Use the following material that has been provided to you : Four beakers, spatula, four test tubes, distilled water and a few crystals of potassium permanganate.

Q.12. Give reasons for the following :

(a) Gases fill completely the vessel in which they are kept.
(b) Gases exert pressure on the walls of the containing vessel.

Q.13. A gas jar containing air is placed upside down on a gas jar of bromine vapour. It is observed that after sometime, the gas jar containing air also becomes completely reddish brown.

(a) Explain why this happens.
(b) Name the process involved.

Q.14. The molecules of water have more energy as compared to molecules of ice at same temperature. Justify this statement.

Q.15. A rubber band can change its shape on stretching. Will you classify it as solid or not ? Justify your answer.

Q.16. A spoonful of sugar when added to a glass of milk and stirred disappears after some time. State the characteristic of matter which explains this observation.