

Sub-physics

Homework

chap-1

Date _____

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Sec: 'C'

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A. Objective Questions.

1. Write true or false for each statement.

a) The molecules of each substance are identical.

Ans:- False

b) The inter-molecular forces are effective at all distance between the two molecules.

Ans:- False

c) The molecules in a substance are in random motion.

Ans:- True

d) In a gas, the molecules can move anywhere in space.

Ans:- True

e) The liquids are less viscous than the gases.

Ans:- False

2. Fill in the blanks.

a) All the molecules of a substance are identical.

b) The inter-molecular spacing is least in solids more in liquids and still more in gases.

- c) The molecular motion in liquid and gas is Zig-Zag path.
- d) In a solid, the molecules vibrates to and fro but they remain at their fixed positions.
- e) The inter-molecular forces are the weakest in gases.
- f) A solid exerts pressure downwards on its base.
- g) The gases are least dense.
- h) A solid is most rigid.

3. Select the correct alternative.

a) The diameter of a molecule is approximately.

B. Short/long answer questions.

Question 1.

Define matter. What is its composition?

Ans:- Matter is defined as anything which occupies space and has mass. It can be perceived by our sense of smell, touch, sight, hearing and taste.

Matter is composed of tiny particles known as atoms.

Question-2.

Name the three states of matter.

Ans:- The three states of matter

are solids, liquids and gases.

Solids - A solid has a definite shape and definite volume.

Ex:- wood, stone, iron, ice etc.

Liquids - A liquid has a definite volume but not definite shape.

Ex:- water, juice, milk, oil etc.

Gases - A gas neither has definite shape nor a definite volume.

Example: air, hydrogen, oxygen, water vapour etc.

Questions

What do you mean by inter-molecular spacing?

Ans - Intermolecular Space → The space between any two consecutive molecules of a substance is called intermolecular space.