Note: (1) Think and Answer (2) Read the questions properly

(3) Attempt objective questions on test paper (4) Avoid gel/ink pen on test paper

Name: **Date:**

Objective: To examine the level of knowledge implementation.

Areas of improvement:

Maximum Marks Objective	**10**
Marks Obtained	
%	
Maximum Marks Subjective	**12**
Marks Obtained	
%	
Maximum Marks	**22**
Marks Obtained	
%	

Parent's Signature	**Parent's Signature**

I. Objective Questions

A. Multiple Choice Questions: [0.5 x 13 = 6.5]

1: A few substances are grouped in increasing order of their particle's 'forces of attraction.' Which of the following is the correct order?

A. Water, oxygen, chalk
B. Salt, juice, wind
C. Nitrogen, water, sugar
D. Air, salt, oil

2. 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

3. Combustibility is a

A. Physical property
B. Reactive Property
C. Chemical Property
D. Not a property

4. CO_2 can be easily liquefied and even solidified because
A. It has weak forces of attraction
B. It has comparatively more force of attraction than other gases
C. It has more intermolecular space
D. It is present in atmosphere

5. Under which of the following conditions we can boil water at room temperature?
A. At low pressure
B. At high pressure
C. At very high pressure
D. At atmospheric pressure

6. Which of the following is a characteristic of a liquid?

A. Has a definite shape and volume

B. Takes the shape of its container
C. Neither has a definite shape nor a definite volume
D. Has a definite shape but no definite volume

7. What is the state of matter characterized by having no definite shape or volume?

A. Solid
B. Liquid
C. Gas
D. Plasma

8. What is the freezing point of water in Celsius?

a) 0°C b) 100°C c) -273°C d) 373°C

9. Which state of matter has the least kinetic energy?

a) Solid b) Liquid c) Gas d) Plasma

10. Which of the following is a characteristic of a solid?

a) Takes the shape of its container

b) Has a definite volume but no definite shape

c) Has neither a definite shape nor a definite volume

d) Has a definite shape and volume

11. What happens to the volume of a substance when it changes from a solid to a liquid?

A. It decreases
B. It increases
C. It remains the same
D. It cannot be determined

12. Which of the following is NOT a state of matter?

a) Solid b) Gas c) Plasma d) Energy

13. Which of the following is a chemical property of matter?

a) Boiling point b) Melting point c) Density d) Reactivity with acid

B. Fill in the blanks: [0.5 x 6 = 3]

(a) _____ properties can be measured or observed without changing the identity or the composition of the substance.

(b) Diffusion of solids are _____ than liquids.

(c) Molecules in a _____ are packed very closely.

(d) A gas on cooling liquefies to the_____.

(e) The three states of matter are interconvertible by changing the conditions of _____ and _____.

(f) When a gas is cooled, its molecules _____ energy.

II. Short Answer Questions: (Attempt any 3 questions only) [2 x 3 = 6]

Q1. Give two examples for each of the following:

a) The substances which sublime.
b) The substances which do not change their state on heating.

Q2. State which of the three states of matter i.e. solids, liquids or gases - have

I. No definite volume
II. A definite shape
III. High density
IV. No free surfaces
V. Particles which diffuse very easily.

Q3. State in which of the following examples i.e. a piece of wood, water, a light gas is the -

(a) Inter-particle space maximum

(b) Inter-particle attraction maximum

(c) Energy possessed by particles of matter, very large.

Q4. Why can a piece of chalk be broken easily into smaller pieces while a coal piece cannot be broken easily?

III. Long Answer Questions: (Attempt any 2 questions only) [3 x 2 = 6]

Q1. State the main postulates of the kinetic theory with special reference to -

(a) Inter-particle space

(b) Inter-particle attraction

(c) Energy possessed by particles of matter.

Q2. Draw a labelled schematic diagram representing the terms - (a) to (e) involved in the inter-conversion of matter.

Q3. Give reasons for the following:

1. Particles of matter possess energy called kinetic energy.
2. Solids cannot be compressed, but gases are highly compressible.
3. Kinetic energy of molecules of gases is very large & of solids, the least.
4. On heating a sublimable solid, the molecules break free & escape from surface of the solid directly into vapour.
5. Particles of matter move more rapidly on application of heat.