

MAR THOMA RESIDENTIAL SCHOOL TIRUVALLA  
FIRST TERMINAL EXAMINATION AUGUST 2019- 20

CLASS:VIII

CHEMISTRY

[Time: Two hours]

[ Marks: 80 ]

*Answers to this paper must be written on the paper provided separately.*

*You will not be allowed to write during the first 15 minutes.*

*This time is to be spent in reading the question paper.*

*The time given at the head of this paper is the time allowed for writing the answers*

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**SECTION 1 is compulsory. Attempt all the four questions in SECTION II**

*The intended marks for questions or parts of questions are given in brackets [ ]*

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**SECTION I [ 40 Marks]**

Attempt all questions

**Question - 1**

(a) Fill in the blanks:

[6]

1. ----- is fundamental part of water cycle.
2. Collision between molecules in gases are ----- in nature.
3. The law of conservation of mass is applicable for ----- reactions.
4. The ability to resume the original shape after being stretched or pressed is called-----.
5. ----- is exerted when particles of the gas collide with the walls of the container.
6. In ----- the inter particle attraction is negligible.

[6]

(b) Match the following:

- (i) Gases
- (ii) Exothermic
- (iii) Pressure
- (iv) Melting
- (v) Rise in temperature
- (vi) Endothermic

- cooling
- number of collisions
- fusion
- particles loosely packed
- decrease in volume
- heating

[6]

(c) Name the following:

- (i) Motion of particles in all directions
- (ii) The fixed ratio in which atoms combine to form a given compound
- (iii) A chemical change in which a substance combines with oxygen at a high temperature releasing heat and light.
- (iv) A state of matter which has least kinetic energy.
- (v) The products released during respiration.

[6]

(d) Give reasons for the following:

- (i) Burning of candle is a chemical change.
- (ii) Fermentation of bread is desirable but fermentation of fruit juice is undesirable.
- (iii) Wet clothes dry faster in summer season and <sup>not</sup> during rainy season.
- (iv) Temperature remains steady during melting and boiling.
- (v) Growing of crops is manmade change though growth of plants is a natural change.
- (vi) Freezing is undesirable in cold countries.

(e) Give two difference between:

[6]

- (i) Physical and chemical change
- (ii) Reversible and irreversible change
- (iii) Desirable and undesirable change.

(f) State true or false. If false correct the statement

[6]

- (i) Addition of common salt to water releases heat.
- (ii) Evaporation produces cooling.
- (iii) Warmer the evaporating surface lower the rate of evaporation.
- (iv) Gas can never be converted to liquid by decreasing pressure.
- (v) Melting point of every solid remains the same.

(vi) Kinetic energy of particle of matter decrease with increase in temperature.

(g) Pick the odd one out [4]

(a) Melting ,digestion , formation of fog

(b) Weathering of rocks ,blooming of flowers , construction of roads.

(c) Movement of pendulum , day and night , flood

(d) Growth of humans, bursting of crackers ,germination of seeds

## SECTION II [ 40 MARKS]

[ Attempt all the questions ]

### QUESTION 2

(a) Define the following: [2]

(i) Digestion

(ii) freezing

(b) What are the conditions that affect evaporation. [2]

(c) What do you mean by exothermic change. Give an example [2]

(d) What is rusting? What are the conditions necessary for rusting [2]

(e) Give two examples each of

(i) Slow desirable chemical change

(ii) changes that takes place in the morning [2]

### QUESTION -3

(a) Define the following: [2]

(i) Curdling

(ii) respiration

(b) What do you mean by dissolving? How can we separate the components after dissolving? [2]

(c) What is the full form of LPG. What happens inside the cylinder when the cylinder containing LPG is opened? [2]

(d) What is fermentation? Name the gas released during fermentation [2]

- (e) Write balanced equation applying the law of conservation of mass [2]  
Potassium + water  $\rightarrow$  potassium hydroxide + hydrogen

#### QUESTION – 4

- (a) Define the following: [2]  
( i) Synthesis (ii) Condensation
- (b) Define natural change .Name a natural change that is desirable. [2]
- (c) Give two difference between steam and boiling [2]
- (d) What do you mean by melting point? What happens to the melting point of a solid as we move up the mountains ? [2]
- (e) Explain why [2]  
( i) ice floats on water  
(ii) Pressure increases with temperature if volume is kept constant

#### QUESTION -- 5

- (a) What do you mean by solute and solvent? Give an example [2]
- (b) What do you mean by sublimation? Name two sublimable solids [2]
- (c) Explain why [2]  
( i) Volume of liquid increase when heated  
(ii) Gases are compressible
- (d) Explain on the basis of kinetic theory condensation [2]
- (e) What is density? Give its SI units [2]