

# LORVEN PUBLIC SCHOOL

(Affiliated to CISCE, New Delhi)  
Anekal Road, Chandapura, Bangalore - 99

Annual Exam – 2020

Class: VII

CHEMISTRY

Time: 2 hrs 15 Minutes

Total Marks: 100

(Written: 80 + Assignment: 20)

## SECTION I (40 MARKS)

### I. Choose the correct answer

[5]

- Force of attraction between the atoms is very strong in  
a) Liquids                      b) solids                      c) gases                      d) plasma
- An example of a heterogeneous mixture  
a) Oil + water                      b) sand + stone                      c) iron + sulphur                      d) all
- The tabular arrangement of elements is called  
a) Periodic table                      b) group                      c) period                      d) none
- A metal which is used in Barometer and Thermometer  
a) Gold                      b) silver                      c) mercury                      d) copper
- An element used in skin grafting  
a) Liquid oxygen                      b) liquid carbon dioxide                      c) liquid hydrogen                      d) liquid nitrogen

### II. Name the following

[5]

- Substance which change the rate of chemical reaction without itself changing.
- Property of metals to be hammered into sheets.
- Number of atoms present in the molecule of an element.
- Collection of substances on the surface of another substance.
- Change of state of matter from solid to liquid on heating.

### III. State true or false. Rewrite the false statement.

[5]

- Hydrogen is the lightest gas.
- Gases are highly compressible.
- Heat is absorbed in exothermic reactions.
- Reactants are written on the left-hand side in a chemical equation.
- Liquids have definite shape.

### IV. Classify the following as directed.

[5]

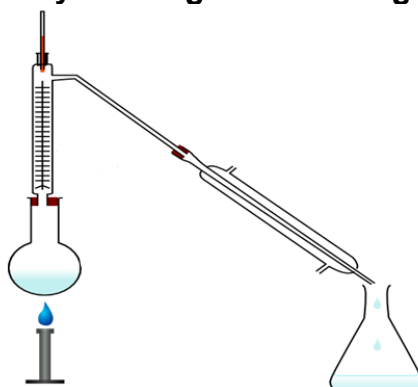
- Growth of a baby                      (physical / chemical)
- Burning of paper                      (slow / fast)
- Rotation of planets                      (periodic / non periodic)
- Train accident                      (desirable / undesirable)
- Melting of wax                      (reversible / irreversible)

### V. Match the following columns.

[5]

	Column A		Column B
1	Catalyst	A	Air
2	Mixture	B	Oxygen is released
3	Inert gas	C	Solid carbon dioxide
4	Dry ice	D	Argon
5	Photosynthesis	E	Manganese dioxide (Mn O 2)

VI. Identify and label the parts by drawing the following diagram again. [5]



VII. Fill in the blanks with a suitable word given in the bracket. [5]

1. Formation of rust on bicycle is a \_\_\_\_\_ change.
2. Properties of a compound are different from its constituent \_\_\_\_\_.
3. Potassium and calcium belong to \_\_\_\_ period.
4. An example of metalloid is \_\_\_\_\_.
5. The gas present in largest percentage in our atmosphere is \_\_\_\_\_.

VIII. Complete the following table and rewrite the complete table. [5]

	Mass	Charge	Scientist
Electron			
Proton			
Neutron			

**Section II (40 Marks)**  
**Answer any four questions**

**Question 1**

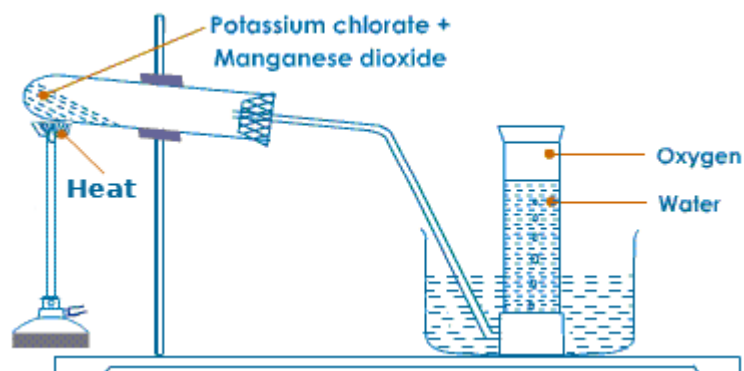
1. Classify the following materials according to the state as solids, liquids and gases [3]  
a) Carbon dioxide b) sponge c) key chain d) milk shake e) smoke f) oil
2. What is condensation? [1]
3. What are desirable changes? [1]
4. State any three physical changes observed by you? [3]
5. Changes involve energy. Explain? [2]

**Question 2**

1. Classify as elements, compounds and mixtures. [2]  
a) Honey b) butter c) aluminium d) distilled water
2. Name the correct technique to separate the following mixtures? [3]  
a) Iodine + alcohol  
b) Mud + water  
c) Oil + water
3. Differentiate homogeneous and heterogeneous mixtures? [2]
4. Draw a neat labelled diagram of sublimation of ammonium chloride. [3]

### Question 3

1. Observe the following diagram and answer the questions that follow.



- Name the gas X evolved in the following experimental set up? [1]
  - Write the equation for the above reaction? [1]
  - How is the gas collected? [1]
  - Write any two uses of the gas X? [2]
  - Mention the physical properties of the gas X? [2]
2. Complete the following equations? [3]
- $4 \text{Na} + \text{O}_2 \rightarrow \text{-----}$
  - $\text{P}_4 + 5 \text{O}_2 \rightarrow \text{-----}$
  - $\text{C} + \text{O}_2 \rightarrow \text{-----}$

### Question 4

- What is meant by burning? [1]
- Write any three characteristics of chemical change? [3]
- What is chromatography? Give two applications of chromatography? [3]
- Define a) molecule of element b) radical [2]
- Who invented the Modern periodic table? [1]

### Question 5

- Write a note on periodic table? [3]
- Identify the reactants and products in the following reactions? [3]
  - $\text{Pb}(\text{NO}_3)_2 \rightarrow 2 \text{PbO} + 4 \text{NO}_2 + \text{O}_2$
  - $\text{NH}_3 + \text{HCl} \rightarrow \text{NH}_4 \text{Cl}$
  - $\text{Fe} + \text{CuSO}_4 \rightarrow \text{FeSO}_4 + \text{Cu}$
- Balance the following reactions [2]
  - $\text{Ca} + \text{H}_2\text{O} \rightarrow \text{Ca}(\text{OH})_2$
  - $\text{P} + \text{Cl}_2 \rightarrow \text{PCl}_3$
- Write the characteristics of a chemical reaction [2]

### Question 6

- Why is tincture applied on wounds? [1]
- Give two uses of the following [6]
  - Aluminium
  - Copper
  - nitrogen
- List the inert gases? [2]
- What is acid rain? [1]