

(Group - I)

2. Write short answers to any FIVE (5) questions: (10)

- i Write down the empirical formula of glucose and silica.
- ii Define mole and give example.
- iii Define element. Write the name of element that occurs in liquid state.
- iv How nucleus was discovered by Rutherford?
- v Define electronic configuration.
- vi State modern periodic law. Who put forward this law?
- vii Write the trend of shielding effect in the periodic table.
- viii Why elements of group 1st and 2nd are called "S" block elements?

3. Write short answers to any FIVE (5) questions: (10)

- i Write down the name of four types of chemical bonds.
- ii Differentiate between donor and acceptor in coordinate covalent bond.
- iii How is polar covalent bond formed?
- iv How does intermolecular forces affect the evaporation of a liquid?
- v How does temperature affect vapour pressure of a liquid?
- vi What is difference between saturated and unsaturated solution?
- vii What is meant by volume/mass % (v/m%)?
- viii How can you distinguish between solution and a pure liquid?

4. Write short answers to any FIVE (5) questions: (10)

- i What do you mean by oxidizing agent? Give an example.
- ii What do you mean by rust? Write its equation.
- iii Define oxidation number.
- iv What do you mean by redox reaction? Give an example.
- v Name four moderately reactive metals.
- vi Give the trend of electropositivity in a group and a period.
- vii Write any two uses of platinum.
- viii What do you mean by non-metals?

PART - II

Note: Attempt any Two questions.

5. (a) Write down any five differences between Rutherford's atomic theory and Bohr's atomic theory. (4)

(b) Explain compound and give its classification. 5

6. (a) Define dipole-dipole interaction and explain it with an example. (4)

(b) Explain that evaporation is a continuous and cooling process. 5

7. (a) Define electroplating and explain the electroplating of chromium. (4)

(b) How much NaOH is required to prepare its 500 cm³ of 0.4M solution. 5