### (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 accepter 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 di-pole di-pole 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