

Note: Section I is compulsory. Attempt any TWO (2) questions from Section II.

SECTION - I

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

- i Define Atomic Mass Unit. Why it was needed?
- ii Differentiate between Molecular Mass and Formula Mas
- iii How are canal rays produced in discharge tube?
- iv - Write down the defects of Rutherford Model.
- v What is meant by Dobereiner Triads?
- vi What is meant by periodic function?
- Vii Write down the names of the elements of group-I with their symbols.
- viii Why is the trend of electron affinity and electronegativity same in a period?

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

- i Define Hydrogen bonding with an example.
- ii How does a Covalent Bond become polar?
- iii Why does ice float on water?
- iv Define pressure and also give its SI unit.
- v Why does H₂ diffuse rapidly than O₂?
- vi Differentiate between solute and solvent.?
- vii What is meant by %? Mass Mass
- viii Why do solutions not show tyndall effect?

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

- i What is meant by Galvanizing?
- ii What happens to iron in the rusting process?
- iii Find out the oxidation number of Nitrogen in HNO₃.
- iv Why is Calcium more electropositive than Magnesium?
- v Write down one difference between alkali metal and alkaline earth metal.
- vi HF is weak acid. Why?
- vii What are the functions of red blood cells?
- viii Write down two preventive measures to avoid Dengue fever.

SECTION-II

Q.5(a) Define Molecule. Describe its four types. 5
(b) What is meant by Ionic Bond? Explain it with an example 4

Q.6(a) Give any five differences between Rutherford and bohr atomic model 5

(b) How vapor pressure depends upon nature of temperature? 4

Q.7(a) Electrolytic Cell. Explain its working. 5

(b) Explain four characteristics of solution. 4