

Note: Time allowed 2:45 hours.

SECTION - B

Marks: 32

Q2: Answer any EIGHT parts. Each part carries equal marks.

- Differentiate between Analytical and Bio Chemistry.
- Calculate the molecular mass of glucose ($C_6H_{12}O_6$), the atomic mass of C, H and O to be 12, 1, 16 respectively.
- Write two de-merits of Rutherford Atomic Model.
- Why atom is a neutral particle?
- Define Shielding effect. Does it vary in a period?
- What is metallic bond?
- Differentiate between Crystalline solids and Amorphous solid.
- It takes long time to cook at high altitude. Why?
- Define saturated and unsaturated solutions.
- Define Oxidation and Reduction.
- What is aqua regia?

SECTION - C

Marks: 21

Note: Attempt any THREE of the following. All questions carry equal marks.

- How many grams are there in 3.5 moles of water?
 - Give the electronic configuration of elements having atomic number 5 to 10.
- Define the electronegativity of an element. Discuss its periodic variation in a period and in a group in the periodic table.
 - Define covalent bond and explain its types in detail.
- What is vapour pressure? What are the factors, which effect vapour pressure?
 - Define and explain the following with examples:
 - Suspension
 - Colloidal solution
- Describe Daniel cell.
 - Write down chemical properties of Halogens.