

Note: Time allowed 2:45 hours.

## SECTION - B

Marks: 32

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

- i. Difference between Analytical and Bio Chemistry.
- ii. 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.
- iii. Write two de-merits of Rutherford Atomic Model.
- iv. Why atom is a neutral particle?
- v. Define Shielding effect. Does it vary in a period?
- vi. What is metallic bond?
- vii. Differentiate between Crystalline solids and Amorphous solid.
- viii. It takes long time to cook at high altitude. Why?
- ix. Define saturated and unsaturated solutions.
- x. Define Oxidation and Reduction.
- xi. What is aqua regia?

## SECTION - C

Marks: 20

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

- Q3. (a) How many grams are there in 3.5 moles of water?
- (b) Give the electronic configuration of elements having atomic number 5 to 10.
- Q4. (a) Define the electronegativity of an element. Discuss its periodic variation in a period and in a group in the periodic table.
- (b) Define covalent bond and explain its types in detail.
- Q5. (a) What is vapour pressure? What are the factors, which effect vapour pressure?
- (b) Define and explain the following with examples:  
(i) Suspension (ii) Colloidal solution
- Q6. (a) Describe Daniel cell.
- (b) Write down chemical properties of Halogens.

