

Note: Time allowed for section B and C is 2 hours and 40 minutes.

SECTION "B"

Marks: 32

II. Attempt any EIGHT Parts out of the following. Each Part carries equal marks.

- i. Write an equilibrium constant "K_c" and the unit of chemical equation

$$\text{N}_{2(g)} + 3\text{H}_{2(g)} \longrightarrow 2\text{NH}_{3(g)}$$
- ii. Differentiate between monoacides and poly acids with examples.
- iii. When a clear liquid is placed in a beaker, how can you identify it as an acid, base or neutral (water)?
- iv. Compare Aromatic compounds with hetrocyclic organic compounds.
- v. Why Alkanes are inert in nature?
- vi. Write any four physical properties of Monosaccharides.
- vii. Differentiate between primary and secondary air pollutants.
- viii. How chemistry helps to maintain clean swimming pool?
- ix. Give four uses of urea.
- x. What is Homologous series. Give three characteristics of homologous series?
- xi. What is ozone formation. Justify your answer with two steps of ozone formation?

SECTION "C"

Marks: 21

Note: Attempt any THREE questions of the following. Each question carries equal Marks.

- III. (a) Explain the Law of Mass Action with help of General reaction.

$$\rightleftharpoons \text{A} + \text{B} \rightleftharpoons \text{C} + \text{D}$$
 4
 (b) Write the names of any three salts along with their correct chemical formulas. 3
- IV. (a) How Friedrich wohler proved vital Force theory wrong. Discuss with proper example. 4
 (b) Write a balanced equation for the complete combustion of each of the following. 3
 (a) Methane (b) Ethane (c) Ethyne
- V. (a) Write the effect of Acid rain on (a) Plants & Trees (b) Materials. 4
 (b) Write the names of three vitamins and their importance. 3
- VI. (a) Describe the two methods i.e. Hand picking and hydraulic washing for the concentration of ore. 4
 (b) Give the balance reaction of water with 3
 i) K
 ii) Ca
 iii) Fe