

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. How many moles of H_2O are present in 36 gm of H_2O ?
- ii. Define isotopes; Draw the structure of carbon isotopes.
- iii. What do you mean by the term Electronic configuration?
- iv. Write brief note on the Atomic Size.
- v. Write note on the Coordinate Covalent bond with example.
- vi. A 530 dm^3 sample of hydrogen gas was collected in a container of 800 mm of Hg pressure, at room temperature. What volume will the gas occupy at 400 mm of Hg?
- vii. What is percentage composition?
- viii. Write note on the Electrolytic cell.
- ix. Define oxidation state.
- x. Describe the characteristic of metals.
- xi. Write the chemical reaction of Mg with
 - (i) H_2
 - (ii) H_2O

SECTION "C"

Marks: 21

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

- III. (a) Write note on the "Mole" and "Avogadro's Numbers". 4
 (b) Define Energy level and Energy sub-level. 3
- IV. (a) What is Shielding Effect? How it affect the ionization potential in periodic table. 3
 (b) Define boiling point. How does it depend on the nature of liquid? 4
- V. (a) Write the properties of covalent compounds. 4
 (b) Write the factor affecting solubility. 3
- VI. (a) Define the oxidation number of S in K_2SO_4 and Nitrogen in HNO_3 . 3
 (b) Write down chemical properties of Halogens. 4