

SECTION -B

Marks: 32

Q1: Attempt any eight of the following. All carry equal marks.

- i: Differentiate between gram atomic mass and gram molecular mass with example.
- ii: How many moles are there in 8.9×10^{23} hydrogen atom?
- iii: Write down any four points of Rutherford atomic model?
- iv: Draw electronic configuration of (a) Ne^{10} , (b) Cl^{17}
- v: What is shielding effect? Give its trends in periodic table.
- vi: Make a general sketch of the periodic table without showing s, p, d and f-block elements.
- vii: Explain coordinate covalent bond with at least one example?
- viii: Diamond is crystalline allotropic form of carbon, example.
- ix: Why we stir paints before use it?
- x: What is electroplating? Give two purposes of electroplating.
- xi: Write at least four uses of sodium.

SECTION -C

Marks: 21

Note: Attempt any Three questions.

- Q2) a: What is chemistry? Discuss the contribution of Jabber-ibn-Hayan in the field of chemistry.
- b: Why Dalton atomic theory is considered as a base for modern atomic concepts?
- Q3) a: Discuss ionization potential. Give its trends in periodic table.
- b: Explain hydrogen bonding support your answer with suitable example.
- Q4) a: Define vapour pressure. What are the factors affecting the vapour pressure?
- b: Calculate the molarity of 5.00 cm^3 of solution containing 7.50 grams of CH_3OH .
- Q5) a: Discuss the preparation of sodium hydroxide (NaOH) from brine along with its important reactions.
- b: Give the reactions of magnesium (Mg) with
- (i) HCl (ii) Cl_2 (iii) O_2 .