CHEMISTRY (NEW) 12th AAC

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 the electronic configuration of $_{10}Ne$ and $_{14}Si$ (silicon)?

ii. Why are the densities of gases lower than that of liquids?

iii. Define average atomic Mass? Write its formula.

iv. Why NaOH is strong but NH_4OH is weak electrolyte?

v. Define Modern periodic law? Distinguish between a period and a group in the periodic table.

vi. What happens during displacement reaction in halogens?

vii. Find out the number of proton, electron and neutron in the following elements.

(a) $^{23}_{11}Na$ (b) $^{16}_{8}O$

viii. Give the reason that why dative bond is always polar?

ix. Differentiate between condensation and evaporation?

x. Calculate the molarity of 50.0cm^3 of solution containing 7.50g of CH_3COH.

xi. What is the difference between saturated and super saturated solution?

SECTION "C" — Marks: 21

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

III. (a) Define chemistry? Write down the contribution of Ibne-Sina in chemistry. 3
(b) Write down at least four typical properties of solids? 4

IV. (a) What are the factors affecting Electronegativity? 3
(b) How many moles of H_2SO_4 are present in 0.500dm^3 of 0.150M H_2SO_4 solution. 4

V. (a) Draw the structure and shape of sub-shells. 3
(b) Differentiate between the process of oxidation and reduction. Write an equation to illustrate each. 4

VI. (a) What is the main distinction between ionic and covalent bonding? Explain your answer With suitable examples. 4
(b) Balance and complete the following equation of Halogens. 3
(i) $H_2 + Cl_2$
(ii) $O_2 + F_2$
(iii) $2P + 3Cl_2$