Sig. of Supdt.

KT-XII-14(A)

CHEMISTRY - (Part-II)

Roll No.

Fic. No.....

Fic. No.....

Time Allowed : 3 Hrs. **Total Marks : 85**

Note: There are three sections of this paper, A, B, & C. Carefully read the instructions for each section and attempt accordingly.

Time Allowed : 20 Mins. **SECTION – A** **Total Marks : 18**

Note: Use this sheet for this section. No. mark will be awarded for cutting, erasing or over writing.

Q. 1 Insert the correct option (a, b, c, d) in the empty box opposite to each part. Each part carries one mark. Any kind of Mark Left / Written is strictly prohibited. Mobile Phone is strictly prohibited in Examination Hall.

i) Which one does not form its oxy acids
(a) Bromine (b) Iodine (c) Fluorine (d) Chlorine

ii) Secondary alcohol on oxidation gives.....
(a) Ketone (b) Ether (c) Aldehyde (d) None

iii) Epoxy resins are basically.....
(a) Polyethers (b) Polyamides (c) Polyamine (d) Polyester

iv) Metal oxides are ..... in nature
(a) Amphoteric (b) Neutral (c) Acidic (d) Basic

v) ..... is used for preparation of plaster of paris
(a) Feldspar (b) Nacl (c) Lime (d) Gypsum

vi) Quarz is crystalline form of .....
(a) Silicate (b) Silicon dioxide (c) Silicon (d) Silicone

vii) BOD is used as index of .....Pollution.
(a) Solid (b) Noise (c) Air (d) Water

viii) Fuel valve of gasoline is expressed ..... number
(a) Octane (b) Decane (c) Butane (d) Hexane

ix) ..... of the following is called sondhur.
(a) PbO (b) $PbCO_3$ (c) Pb_2O (d) Pb_3O_4

x) Which of the following involve same intermediate step?
(a) SN_1 and E_1 (b) SN_2 and E_2 (c) E_1 and E_2 (d) SN_1 and SN_2

xi) ..... Process is used to locate the double bond in Alkene.
(a) Ozonolysis (b) Hydration (c) Bayear's reagent (d) Hydroxylation

xii) Methyl alcohol is also known as .....
(a) Wood spirit (b) Simple spirit (c) Rectified spirit (d) None

xiii) ..... is used for ripening of fruits
(a) Methane (b) Alkane (c) Acetylene (d) Ethane

xiv) Self addition reaction is known as .....
(a) Polymerization (b) Isomerization (c) Substitution (d) None

xv) Benzene is consider polymer of .....
(a) Ethylene (b) Ethane (c) Acetylene (d) None

xvi) Urea is .....
(a) Amino acid (b) Acidhalide (c) Amide (d) Ester

xvii) Tollen test is used for identification of
(a) Ketone (b) Ethene (c) Alcohol (d) Aldehyde

xviii) According to Lewis concept ether behaves as .....
(a) Base (b) Amphoteric (c) Acid (d) Both "A" & "B"

KT-XII-14(A)

CHEMISTRY - (Part-ii)

Time Allowed : 2:40 Hrs. Total Marks : 67

Section – B

Marks : 40

Note : Mobile Phone is strictly banned in Examination Hall.

Q. 2 Write a short answer of any TEN of the following parts. Each part carries equal marks.

(i) What are hydrides?
(ii) What do you know about semi conductors?
(iii) What is peculiar behavior of beryllium?
(iv) Explain acid rain and smog.
(v) Discuss the properties of transition elements?
(vi) What are ligands?
(vii) Explain Markowni koff's rule by giving example.
(viii) How aldehydes and ketons are differentiated ?
(ix) Explain acidic properties of phenol.
(x) Write industrial preparation of acetic acid.
(xi) Explain cis-trans isomerism?
(xii) What do you know about nucleic acids?
(xiii) Explain elimination reaction in alkyl halide.

Section – C

Marks : 27

NOTE : Attempt any three questions of the following each question carries equal marks.

Q. 3 a) Explain contact process for the preparation of sulphuric acid.

b) Write down the reaction of Cl_2 with the following.

i) P ii). H_2S iii) NH_3 iv) NaOH (cold)

Q. 4 a) Explain working and function of Downs cell?.

b) How and under what conditions does aluminium react with?

i) Oxygen ii). Chlorine iii). Hydrochloric acid iv). NaOH

Q. 5 a) What do you know about Nuclophilic substitution reaction.Explain SN^1 and SN^2 reaction by giving mechanisms ?

b) Write the reaction of acetylene with following.

i). HCl ii). H_2O iii). Cl_2 iv). H_2

Q. 6 a) Explain effect of substituent on further substitution on benzene.

b) Write down the chemical properties of aldehydes.