GREENLAWNS HIGH SCHOOL

STD 10 CHEMISTRY PRELIM 1 60 MARKS

Answers to this paper must be written on the paper provided separately

Attempt all questions

Qs 1

a) Name the following(5)

i) Compound used as a refrigerant

ii) A charged particle

iii) Smallest element in group IIA

iv) Colour of copper hydroxide

v) Residue formed when copper nitrate is heated

b) Give the common name for the following compound (5)

i) Hydrochloric acid

ii)Ammonia

iii)Sulphuric acid

iv)Methane

v)Nitric acid

Qs 2

a)Give an equation for the laboratory preparation for the following compounds(3)

i)Ammonia

ii)Hydrogen chloride

iii) Nitric acid

b)With respect to the periodic table ,answer the questions that follow(5)

i) What are bridge elements?

ii) Name the elements of period 2

iii)Explain electronegativity

iv)Name the element having 8 electrons in the 3^{rd} shell

v)Name the element in period 3group IIA

c)Draw an electron dot diagram of an ammonium ion(2)

Qs 3

a)Give reasons(5)

i)Caustic soda is used to concentrate bauxite

ii)During electroplating of an article the article is always kept at the cathode

iii) The atomic size of elements decreases across a period

iv) Metallic character increases as you go down a group IA

v) Ammonia when dissolved in water conducts electricity

b) Give chemical test to differentiate between the following(5)

i)Manganese dioxide and copper oxide

ii) Dilute and concentrated sulphuric acid

iii) ethane and ethyne

iv) ethane and ethane

v)dilute and concentrated nitric acid

Qs 4

a)Define (5)

i)Catenation

ii)ore

iii)Basicity of an acid

iv)Neutralization

v)Ionisation potential

b)Give one difference between(2)

i)electrovalent and covalent compound

ii)Atom and ion

c)Give an equation to convert(3)

i)methane to methyl chloride

ii) ethene to ethane

iii)ethyne to ethane

Qs 5

a) Give an equation for the following catalytic reactions taking place in the large scale production of(2)

i) Ammonia

ii) Nitric acid

b) Give equations for the dissociation reaction and the cathode and anode reactions for the following (8)

i)sodium argento cyanide using silver electrodes

ii)lead bromide using graphite electrodes

iii)copper sulphate solution using copper electrodes

iv)acidified water using copper electrodes

Qs 6

a)Explain briefly(10)

i)How is sulphuric acid diluted? Why?

ii)How is hydrogen chloride converted into an acid? Why?

iii)What is the basicity of acetic acid? Justify with the help of an equation.

Iv)What is the aim of the fountain experiment with respect to ammonia?

v)Why is aqua regia used in the purification of gold