

GREENLAWNS HIGH SCHOOL
TERMINAL EXAMINATION

STD 9

CHEMISTRY

60 marks

QUESTION 1

A) Name the following (5)

- i) Solvent for rubber
- ii) Halogen in period 2
- iii) Radioactive element in group IA
- iv) Type of bond in nitrogen molecule
- v) Compound formed when sulphur dioxide dissolves in water

B) Give one difference between the following (5)

- i) atom and ion
- ii) electrovalent and covalent compounds(2points)
- iii) Group IA and Group VIIA (2 points)

QUESTION 2

A) Write the formula of the following (5)

- i) Sodium nitrite
- ii) Ammonium chloride
- iii) Zinc sulphite
- iv) Calcium nitride
- v) Aluminium phosphate

B) Find (5)

- i) the percentage of aluminium in aluminium oxide $Al=27,O=16$
- ii) the MW of sulphur dioxide $S=32,O=16$

QUESTION 3

A) Solve the following numericals (5)

- i) Find the volume of a gas at S.T.P. if it occupies 600ml at $-23^{\circ}C$ and pressure of 190 mm of mercury
- ii) A gas occupies 500ml at 400 mm of mercury .Find the pressure if the volume needs to be halved. Temperature remains constant

B) Identify the following as hygroscopic, deliquescent, efflorescent (5)

- i) washing soda
- ii) Ferric chloride

- iii) Quicklime
- iv) Phosphorous pentoxide
- v) Sodium hydroxide

QUESTION 4

A) Give reason for the following (5)

- i) Gases and liquids are fluid in nature but not solids.
- ii) Helium is unreactive
- iii) Most atoms tend to form compounds
- iv) Cation is smaller than its atom
- v) Size of an atom decreases as you go across a period

B) What would you observe when (5)

- i) Blue vitriol is heated
- ii) a piece of sodium is placed in a trough containing cold water
- iii) chlorine is dissolved in water
- iv) Lead nitrate is heated
- v) sodium is placed in cold water

QUESTION 5

A) Define (5)

- i) Bridge elements
- ii) promoter
- iii) atom
- iv) deliquescent substances
- v) Isotopes

B) State the following laws (2)

- i) Boyle's law
- ii) Charles's law

C) Write the formula of (3)

- i) Epsom salt
- ii) Glauber's salt
- iii) Washing soda

QUESTION 6

a) Draw the electron dot diagram of (4)

- i) ammonia N=14, H=1

ii) Methane C=12 H=1

B) With respect to periodic table answer the following questions (6)

i) Name the elements of period 2

ii) Why are elements of group IA known as alkali metals

iii) Define lanthanides

iv) How many periods and groups in the periodic table

v) Are metals good reducing agents or oxidizing agents? Give a reason for your answer