TEST PAPER: CHEMISTRY

Time: 50 Minutes **Class:** ICSE 8th

Max. Marks: 30 Marks **Date:** 26th September, 2018

Marking Scheme: *Questions carry 10 marks each. Questions have 3 subparts each. Subparts (a) and (b) carry 3 marks each and subpart (c) carries 4 marks.*

Question 1:

A. Name the following:

a. Sum of number of protons and neutrons in an atom.
b. Discoverer of atomic nucleus
c. Number of electrons donated or accepted by an atom

B. If the mass number of an atom is 35 and atomic number is 17, state the number of electrons, protons and neutrons in an atom.

C. State the postulates of Dalton's Atomic theory.

Question 2:

A. State the electronic configuration of the following elements.

a. Nitrogen (Z=7)
b. Chlorine (Z=17)
c. Aluminium (Z=13)

B. Give the formulae of following compounds:

a. Aluminium sulphate b. Magnesium nitride c. Iron (II) oxide

C. Write the balanced molecular equations for the following word equations:

a. Calcium + water → calcium hydroxide + hydrogen
b. Lead (II) sulphate + ammonium hydroxide → ammonium sulphate + lead (II) hydroxide

Question 3:

A. Define the following terms:

a. Isotopes
b. Atomic number
c. Stable electronic configuration

B. Give the atomic diagrams of the following elements showing electrons, protons and neutrons

a. Oxygen (Z=6, A=12)
b. Phosphorus (Z=15, A=31)

C. Balance the following equations:

a. $P + O_2 \rightarrow P_2O_5$
b. $Al + H_2SO_4 \rightarrow Al(SO_4)_3 + H_2$
c. $NO + O_2 \rightarrow NO_2$