CHEMISTRY ASSIGNMENT (2013-2014)

CLASS9_CHAPTER:ATOMS AND MOLECULES_ (TERM2)

Q1 What are polyatomic ions? Give examples.

Q2 Write the chemical formulae of the following compounds.
(a) Magnesium chloride
(b) Calcium oxide
(c) Copper nitrate (d) Aluminium chloride

Q3 Calculate the molar mass of the following substances

(a) Hydrogen molecule,H_2

(b)Sulphur molecule,S_8

(c)Phosphorus molecule,P_4

(d)Nitric acid,HNO_3

(e)Hydrochloric acid,HCl

Q4 What is the mass of

(a)1 mole of nitrogen atom

(b)4 moles of Aluminium atom

(c)10 moles of sulphuric acid

Q5 Convert into moles
(a) 12g of oxygen gas

(b) 20g of water

(c) 22g of carbon dioxide

Q6 Write the cations and anions in the following compounds
(a)CH3COONa

(b)NaCl

(c)HNO$_3$

(d)MgCl$_2$

Q7 Verify by calculating that

(a) 5 moles of carbon dioxide and 5 moles of water do not have the same mass.

(b) 240g of calcium and 240g of magnesium elements have a mole ratio3:5 .

Q8 Compute the number of ions present in 5.85g of sodium chloride.

Q9 What are ionic and molecular compounds? Give examples.

Q10 What do you understand by the term atomicity?

Q11 Write the formulae for the following and calculate the molecular mass for each one of them
(a)caustic potash

(b) Baking powder

(c)limestone

(d)Ethanol

(e) Common salt

Q12 Give the chemical formulae of the following compounds and compute the ratio by mass of the combining elements in each of them
(a) Ammonia

(b) Carbon monoxide

(c) Hydrogen chloride

(d) Aluminium fluoride

(e) Magnesium sulphide

Q13 Does the solubility of the substance cha nges with temperature? Explain with the help of an example.

Q14 Give the formulae of the compounds formed from the following sets of elements
(a) Calcium and fluorine

(b)Hydrogen and sulphur

(c) Nitrogen and hydrogen

(d) Carbon and chlorine

(e) Sodium and oxygen

(f) Carbon and Oxygen

Q15 Wrire all the postulates of Dalton's atomic theory.