Quarterly Examination 2018-2019
CHEMISTRY

Class : VIII

Time : 2 hrs + 15 min. **Full Marks : 80**

Section A [40 marks]
Attempt all questions.

Question - 1

(a) Fill in the blanks :— **[5]**

(i) Soluble bases are called _____ .

(ii) Non-metallic oxides are called _____ .

(iii) A candle burns to form _____ and _____ with liberation of heat and light energy.

(iv) Solution containing copper ions are _____ in colour.

(b) Write the chemical name of the followings :— **[5]**

(i) $FeSO_4$ (ii) $Cu(OH)_2$ (iii) $ZnCl_2$

(iv) Cu_2S (v) Na_2SO_3.

(c) Balance the following chemical equations :- **[5]**

(i) $Al_4C_3 + H_2O \longrightarrow Al(OH)_3 + CH_4$

(ii) $Fe_3O_4 + H_2 \longrightarrow Fe + H_2O$

(iii) $Ba(OH)_2 + HNO_3 \longrightarrow Ba(NO_3)_2 + H_2O$

(iv) $KI + Pb(NO_3)_2 \longrightarrow KNO_3 + PbI_2$

(v) $N_2 + H_2 \longrightarrow NH_3$

{Turn Over}

(d) Write the chemical formulae of the following compounds :- [5]

(i) Aluminium sulphate (ii) Sodium Carbonate

(iii) Zince Phosphate (iv) Silver Bromide

(v) Potassium Chloride

(e) What do you observe when : [5]

(i) Hydrochloric acid is added to the solution of silver nitrate.

(ii) Hydrochloric acid is added to Calcium Carbonate.

(iii) A rod dipped in ammonia solution is brought near hydrochloric acid.

(iv) Mercury (II) oxide is heated.

(v) Sugar crystals are heated.

(f) State the type of reactions :- [5]

(i) $2\ SO_2 + O_2 \longrightarrow 2\ SO_3$

(ii) $2HgO \longrightarrow 2Hg + O_2$

(iii) $Mg + ZnCl_2 \longrightarrow MgCl_2 + Zn$

(iv) $FeCl_2 + 2\ NaOH \longrightarrow Fe\ (OH)_2 + 2NaCl.$

(v) $PCl_5 \longrightarrow PCl_3 + Cl_2.$

(g) State the original colour of the following substance and colour of residue obtained after heating :- [6]

(i) Trilead tetraoxide (ii) Copper carbonate

(iii) Zinc Carbonate

(iii) A gas which turns lime water milky.

Question - 6

(a) What do you observe when sodium Hydroxide is added to the following solutions slowly until in excess :- [4]

(i) Ferrous sulphate (ii) Calcium Chloride

Also give balanced equations for the reactions taking place between sodium hydroxide and the above named substance.

(b) Name the solvents for the following substances : [2]

(i) Sulphur (ii) paint

(c) Give one example for each of the followings :- [4]

(i) Solid Solid Heterogeneous mixture.

(ii) Solid Solid Homogeneous mixture.

(iii) Solid liquid Homogeneous mixture.

(iv) Liquid Liquid Homogeneous mixture.

(h) Name the following :- **[4]**

(i) Two colourless gases that react to form a white solid.

(ii) A carbonate that does not decompose on heating.

(iii) A very inactive element.

Section B [40 marks]
Attempt any four questions.

Question - 2

(a) Calculate the relative molecular mass of the following compounds :- **[4]**

(i) $(NH_4)_2\ SO_4$ (ii) Mg_3N_2

Given atomic mass N=14, H=1, S=32, O=16, Mg=24.

(b) Give reasons :— **[3]**

(i) Silver turns black when exposed to air.

(ii) Reaction between Hydrogen and chlorine occurs in diffused sunlight.

(iii) Copper does not react with water or steam.

(c) Write the valency of underlined radical in the following compounds :- **[3]**

(i) $\underline{Ca}O$ (ii) $\underline{NH_4}Cl$ (iii) $Al\underline{N}$

Question - 3

(a) Define **[2]**

(i) Sublimation (ii) Distillation

(b) Classify the following under elements, compounds and mixtures :- **[5]**

(i) Honey (ii) Aluminium (iii) Bread (iv) Blood

{Turn Over}

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3

(v) Nitrogen (vi) Ammonia (vii) Sulphur dioxide

(viii) Smoke (ix) Glucose (x) Silver coin.

(c) Differentiate between mixtures and compounds on the basis of [3]

(i) composition (ii) energy change (iii) separating.

Question - 4

(a) Give the chemical name and chemical formulae of the following : [4+4]

(i) Sal ammoniac (ii) Litharge

(iii) Blue vitriol (iv) Washing soda

(b) Give the balanced equation for the action of heat on potassium nitrate. [2]

Question - 5

(a) Classify the followings as examples of a physical change, chemical change or both kinds of change. [2]

(i) Iron rusts (ii) Wood rots

(ii) Burning of candles (iv) Ice melts.

(b) Name the technique used to separate the following mixtures : [5]

(i) alcohol + water (ii) iodine + salt

(iii) sawdust + water (iv) carbondioxide + water

(v) Kerosene oil + water

(c) Identify and name the gas evolved in the followings :- [3]

(i) A reddish brown gas.

(ii) A pungent smelling gas which turns red litmus blue.

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