**HRA INTERNATIONAL SCHOOL,GURDASPUR**

**CLASS:IX TIME:2HOUR**

**SUBJECT:CHEMISTRY M.M:80**

**PART-A**

**1.Define terms [5]**

**a)mass number b)ion c)cation d)anion**

**2.An atom has a three electrons more than the noble gas configuration.What type of ion will be form?Write the formula of its [5]**

**a)sulphate b)nitrate c)phosphate d)carbonate e)hydroxide**

**3.Give the electron dot diagram of the following.[5]**

**a)magnesium chloride b)nitrogen c)hydrogen d)methane e)hydrogen chloride**

**4.Write your observations and a balanced equation in the case of the following substance being heated [5]**

**a)ammonium dichromate b)copper nitrate c)copper carbonate**

**d)zinc carbonate e)ammonium chloride**

**5.Match column(A) and column(B) [5]**

**Column(A) Column(B)**

**a)Blue salt changes to white (i)Ammonium chloride**

**and then black**

**b)Orange coloured compound (ii)Iodine**

**changes to green**

**c)Red compound changes to (iii)zinc nitrate**

**brown and then yellow**

**d)Whiteto yellow when hot (iv)copper nitrate**

**and cold**

**e)Violet solid changes to (v)red lead**

**violet vapours**

**6.Name [5]**

**a)Two carbonate that do not produce carbondioxide on heating.**

**b)Two nitrate that do not produce nitrogenoxide on heating.**

**c)A brown gas**

**d)A greenish yellow gas.**

**e)A gas with rotten egg smell.**

**7.Define terms [5]**

**a)solution b)solute c)solvent d)homogenous mixture e)heterogenous mixture**

**8.Match the atomic number 4,14,8,15and19 with each of the following. [5]**

**a)A solid non metal of valancy 3.**

**b)A gas of valancy 2.**

**c)A metal with one electron in N shell.**

**d)A non metal of valancy 4.**

**e)An element with 6 electron in the valance shell**

**PART-B**

**9.(i)State the original colour of the following substance and the colour of residue obtained after heating. [4]**

**a)ammonium dichromate**

**b)copper carbonate**

**c)lead nitrate**

**d)zinc nitrate**

**(ii)What do you understand by [6]**

**a)temporary hardness**

**b)soft water**

**c)permanent hardness**

**10.(i)Hydrogen is obtained by displacement from [4]**

**a)dil.sulphuric acid**

**b)dil.hydrogen chloride**

**(ii)Hydrogen can be prepared with the help of cold water.Give a reaction of hydrogen with [4]**

**a)a monovalent metal**

**b)a divalent atom**

**(iii)A metal in the powered from the react very slowly with boiling water, but the decompose insteam. Namethe metal.[2]**

**11.(i)a)Name the three fundamental particles of the atom.Give the symbol and charge of each particle.**

**b)Draw the orbital diagram Ca(II)ion and the state of the number of three particles present in it. [4]**

**(ii)The atomic number and mass number of sodium 11 and 23 respectively.What information is conveyed by this statement.[2]**

**(iii)Write down the electronic configuration of the following. [4]**

**a)X(atomic no=13 and mol. Mass=27)**

**b)Y(atomic no=17 and molecular mass=35)**

**12.Explain why [10]**

**a)Water is an excellent liquid to use in cooling in system.**

**b)A solution is always in clear and transparent.**

**c)lakes and rivers do not suddenly freeze in the winters.**

**d)the solute cannot be separated from a solution by fileration.**

**e)fused Cacl2 or conc.sulphuric acid is used in dessicator.**