WORK SHEET 1

Std: IX (FA3, FA4 and SA II)

Sub: CHEMISTRY

Answer the following questions.

1. State i) The law of Conservation of mass.
   ii) The law of Constant proportions.
2. Define i) atomic mass unit ii) molecule. iii) an ion
3. Write the Symbols for the following
   i) Cobalt ii) Zinc iii) Potassium iv) Bromine v) Iron.
   vi) Boron vii) Tin viii) Lithium ix) Lead x) Silver
4. Construct the formulae for the following.
   i) Calcium phosphate ii) Ammonium Nitrate
   iii) Aluminium Chloride iv) potassium Sulphite
   v) Baking Powder vi) Iron iii Chloride.
5. Calculate the molecular mass of the following.
   i) Calcium Carbonate ii) Zinc Chloride
   iii) Ethyl alcohol (C_2H_5OH) iv) Lime water $Ca(OH)_2$.
   Ca = 40, C = 12, O = 16, H = 1, Zn = 65, Cl = 35.5, C =
6. Calculate the number of moles in 20g of Calcium oxide.
7. What is the mass of 0.5 moles of oxygen gas.
8. What are Canal rays?
9. Draw a diagram for Thomson's model of an atom. And write two proposels of Thomson.
10. Write two postulates of Bohr's model of an atom.
11. Write the features of Rutherford from α-Scatering experiment.
12. How will you find the valency of
    i) Chlorine ii) Calcium iii) Sulphur iv) Sodium
13. Define valency by taking examples of Carbon and oxygen.
14. Define i) Isotopes ii) Isobars. Give 2 examples for each.
15. Define i) Atomic number ii) Mass number.
16. Write any two uses of isotopes.
17. Write the distribution of electrons in Magnesium with the help of energy shells diagram.
18. What are the limitations of J.J. Thomson's model of an atom.
19. If bromine atom is available in the form of two isotopes $^{79}_{35}Br$ (49.7%) and $^{81}_{35}Br$ (50.3%). Calculate the average atomic mass of bromine atom.
20. How does the atmosphere act as a blanket?