## CLASS XI(CHEMISTRY)

(A)Collect atleast 50 NDA chemistry syllabus related multiple choice questions by different sources

(B)Make project on 'Corrosion' for different material round you.(Atleast for 5 element/substance)

(C) Solve the Questions given below

1. How many moles of NaOH are contained in 27 ml of 0.15 M?

2. Calculate the number of atoms in each of the following:

- a 52 moles of He
- b 52 u of He

3. Calculate the molarity of of 1 L of solution of ethanol in water in which the mole fraction of ethanol is 0.040.

4. If ten volumes of dihydrogen gas reacts with five volumes of dioxygen gas, how many volumes of water vapour could be produced?

5. Calculate the molarity of NaOH in the solution prepared by dissolving its 4gms in enough water to form 250mL of the solution.

6. The density of 2 molal solution of NaOH is 1.10 g per ml. Calculate the molarity of the solution.

7. How many atoms and molecules of phosphorous are present in 124gms of phosphorous (P4)?

8. A 6.9M solution of KOH in water contains 20% by weight of KOH. Calculate the density of solution.

9. Calculate the molality and molarity of 1 L solution of 93% H2SO4(Wt. /Vol). The density of solution is 1.84g/ml.

10. Chlorophyll the green coloring matter of plants responsible for photosynthesis contains 2.68% of magnesium by weight. Calculate the number of magnesium atoms in 2.0 g of chlorophyll.

11. Calculate molality, Molarity and mole fraction of KI if the density of 20% aquoeus KI solution is 1.202 g/ml.

12. What volume of O2 at N.T.P is needed to cause the complete combustion of 200 ml of acetylene? Also calculate the volume of CO2 formed.

13. Butyric acid contains only C, H and O. A 4.24 mg sample of butyric acid is completely burned. It gives 8.45mg of CO2 and 3.46 mg of H2O.The molecular mass of butyric acid was determined by experiment to be 88amu.What is its molecular formula?

14. The density of water at room temperature is 1.0 g/ml. How many molecules are there in a drop of water if its volume is 0.05 ml?

15. Potassium Bromide contains 32.9% by mass of potassium. If 6.40 gm of bromine reacts with 3.60 gm of Potassium. Calculate the no. of moles of potassium which combines with bromine to form KBr.