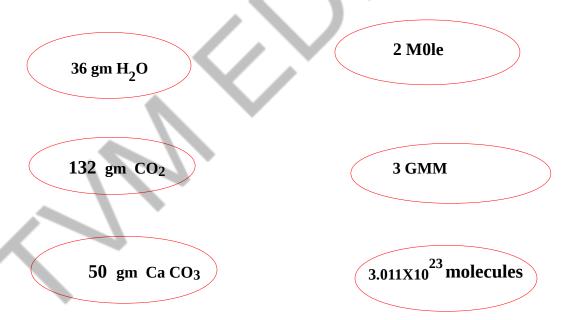
CHAPTER 2 MODULE 3

CHEMISTRY STANDARD X ANSWER KEY

- 1. 128 gm $O_2 = ...4.....GMM$ (Atomic mass of oxygen=16)
- 2. Find the molecular mass of the following compounds (Atomic mass of the elements are Na 23, O- 16, H- 1, Ca- 40, C- 12, N- 14)
- a) $NH_3 = 14 + 3 = 17$
- b) $CaCO_3 = 40 + 12 + (3X16) = 100$
- c) NaOH = 23+16+1=40
- 3. Find the pair (Atomic mass O-16, H-1, Ca-40, C-12)



4. Complete the Table

1 GMM = 1 Mole = 6.022×10^{23} molecules

Element/ Compound	Gram Molecular Mass	Mass in gram	No. of moles	No.of molecules
Hydrogen	2	6	3	3x6.022x10 ²³
Carbon di Oxide	44	88	2	2x6.022x10 ²³
Sulphuric acid	98	490	5	5x6.022x10 ²³
Calcium Carbonate	100	500	5	5x6.022x10 ²³

5. Volume of 1 mole of any gas at STP = 22.4 L

Gas at STP	Gram Molecular Mass	Mass in gram	Moles	Volume at STP
CO ₂	44	220	5	5x22.4L
\mathbf{H}_2	2	12	6	6x22.4L
NH ₃	17	170	10	10x22.4L
N_2	28	112	4	4x22.4L

6 Complete the DIAGRAM

