

17/7/2020
FRIDAY

CHEMISTRY

STD - 8
class - 10

Assignment Or NOTES

Answers of Let us Assess 4 and 5 questions

4) a) calculate the mass of 112 L CO_2 gas kept at STP [molecular mass = 44].

b) How many molecules of CO_2 are present in it?

Ans) a)
$$\text{No. of mole} = \frac{112}{22.4} = 5$$
$$\therefore \text{Mass} = 5 \times 44 = \underline{\underline{220 \text{ g}}}$$

b)
$$\text{No. of molecules} = 5 \times 6.022 \times 10^{23}$$

5) a) calculate the volume of 170 g of ammonia at STP? [molecular mass = 17]

Ans) a)
$$\text{No. of moles} = \frac{170}{17} = 10$$

$$\therefore \text{Volume} = 10 \times 22.4 = \underline{\underline{224 \text{ L}}}$$

More Question

i. Calculate the number of moles of the following.

a) Number of moles of atoms in 320 g oxygen

b) Number of moles of oxygen molecules in 320 g oxygen.

c) Number of moles in 320 L of oxygen at STP.

Ans) a) No. of moles of atoms in 320 g oxygen

$$= \frac{320 \text{ g}}{16 \text{ g}} = \underline{\underline{20}}$$

b) No. of moles of molecules in 320 g of oxygen

$$= \frac{320 \text{ g}}{32 \text{ g}} = \underline{\underline{10}}$$

c) No. of moles in 320 L in STP

$$= \frac{320 \text{ L}}{22.4 \text{ L}} = \underline{\underline{\quad}}$$