DPP –5 [Vapour density]

Chapter: Some Basic Concepts of Chemistry

"The difference between average and confident students is assignment completion"

TYPE : Vapour Density

Q.1 **At NTP, 5.6 L of a gas weighs 8 grams. The vapour density of gas is**

(1) 32 (2) 40 (3) 16 (4) 8

Q.2 **The atomic mass of an element is 27. If valency is 3, the vapour density of the volatile chloride will be**

(1) 66.75 (2) 6.675 (3) 667.5 (4) 81

Q.3 **Vapour density of gas is 11.2. Volume occupied by 2.4 g of this gas at STP will be**

(1) 11.2 L (2) 2.24 L (3) 22.4 L (4) 2.4 L

Q.4 **If V mL of the vapours of substance at NTP weigh W g, then the molecular weight of substance is**

(1) $(W/V) \times 22400$
(2) $\dfrac{V}{W} \times 22.4$
(3) $(W - V) \times 22400$
(4) $\dfrac{W \times 1}{V \times 22400}$

Q.5 **A gas is found to have the formula $(CO)_x$. Its VD is 70. The value of x must be**

(1) 7 (2) 4 (3) 5 (4) 6

Q.6 **Weight of 1 L gas is 2 g. The molecular mass of the gas is**

(1) 44.8 (2) 22.4 (3) 89.6 (4) 11.2

Q.7 **The vapour densities of two gases are in the ratio of 1 : 3. Their molecular masses are in the ratio of**

(1) 1 : 3 (2) 1 : 2 (3) 2 : 3 (4) 3 : 1

Q.8 **At NTP the density of a gas is 0.00445 g/mL. The molecular mass of the gas is**

(1) 100 (2) 50 (3) 200 (4) 25

Q.9 The vapour density of a mixture of NO_2 and N_2O_4 is 39 at 25°C. What is the mass of NO_2 present in 100 g of the mixture?

(1) 17.9 g (2) 8.4 g (3) 33.2 g (4) 66.4 g