**Karan Arora**  **R.L. Institute M: 9416974837**

**Class = 11th Chemistry Test**

**Topic : Mole Concept**

1. Multiple choice questions :
2. Number of atoms of oxygen present in 10.6 gm of Na2CO3.

|  |  |  |  |
| --- | --- | --- | --- |
| a) 12.04 x 1022 | b) 6.35 x 1020 | c) 6.02 x 1022 | d) 1.806 x 1023 |

1. Total number of electron present in 18 mL of H2O.

|  |  |  |  |
| --- | --- | --- | --- |
| a) 6.02 x 1025 | b) 6.02 x 1024 | c) 6.02 x 1022 | d) 6.02 x 1023 |

1. What is total number of atoms in 25 mg in camphor (C10H16O).

|  |  |  |  |
| --- | --- | --- | --- |
| a) 6.02 x 1020 | b) 2.67 x 1021 | c) 9.89 x 1020 | d) 9.89 x 1019 |

1. What is the mass in grams of 0.5 mol copper? Cu = 63.5 amu.
2. What is the mass in grams of 0.4 mol of nitrogen dioxide (NO2)? N = 14; O = 16
3. How many moles are there in one atom?
4. Calculate the number of moles in the following:

a) 7.85 gm of iron b) 4.68 mg of silicon c) 65.6 μg of carbon

1. A sample of sodium hydroxide contains 2.5 x 1010 molecules. What is the mass of this sample?
2. Calculate the number of atoms present in 11.2 litres of a :

a) monoatomic and b) diatomic gas at NTP

1. The volume of a gas is 1.12 x 10-7 cm3 at NTP. Calculate the number of molecules of the gas.