CBSE TEST PAPER-01

CLASS - IX Science (Atoms and Molecules)

1. Atomic radius is measured in nanometers and [1]
   (a) 1nm = 10^{-10}m (b) 1m = 10^{-10}nm
   (c) 1m = 10^{-9}nm (d) 1nm = 10^{-9}m

2. Symbol of Iron is :- (a) Ir (b) I (c) Fe (d) None of these [1]

3. Atomicity of chlorine and Argon is [1]
   (a) Diatomic and Monoatomic (b) Monoatomic and Diatomic
   (c) Monoatomic and Monoatomic (d) Diatomic and Diatomic

4. Molecular mass of water (H_2O) is (a) 18g (b) 8g (c) 33g (d) 34g [1]

5. State law of conservation of Mass? [2]

6. Define Valency? Find the Valency of oxygen and Aluminum. [2]

7. Calculate the molar mass of Na_2SO_4 and $CaCO_3$? [2]

8. Write the chemical formula for [2]
   a) Calcium Phosphate b) Magnesium Hydroxide c) Aluminum chloride.

9. State the Postulates of Dalton Theory? [3]

10. Find the percentage of water of crystallization in $feSO_4.7H_2O$. [3]

11. 2.42g of copper gave 3.025g of a black oxide of copper, 6. 49g of a black oxide, on reduction with hydrogen, gave 5.192g of copper. Show that these figures are in accordance with law of constant proportion? [3]

12. A compound was found to have the following percentage composition by mass Zn = 22.65%, S = 11.15%, H = 4.88%, O = 61.32%. The relative molecular mass is 287g/mol. Find the molecular formula of the compound, assuming that all the hydrogen in the compound is present in water of crystallizations. [3]