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

**Max Time : 1 hr** **Class = 9th Science Test Max Marks : 20**

**Atoms and Molecules – 1**

1. Define Atomicity. [ 1 ]
2. What is an ion. Give one example. [ 1 ]
3. Define atomic mass unit. [ 1 ]
4. What are polyatomic ion. Give one example. [ 1 ]
5. How many atoms are present in : (a) H2S (b) [ 2 ]
6. Write cation and anion present in following compound: (a) CH3COONa (b) NH4NO3. [ 2 ]
7. An element ‘M’ shows a variable valency of 3 and 5. What are the formulae of the oxide formed by it? [ 2 ]
8. What are the limitations of Dalton’s theory? [ 2 ]
9. Write down the formulae of the following compounds : [ 3 ]

(a) Aluminium oxide (b) Hydrogen Sulphide (c) Potassium permanganate

1. Calculate Molar mass of the followings : [ 5 ]

(a) HNO3 (b) C2H2 (c) C12H22O11 (d) CaCl2 (e) Na2CO3.10 H2O

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**Atoms and Molecules**

1. Define Law of conservation of mass. [ 1 ]
2. Define Atomicity. [ 1 ]
3. Value of Avogadro’s number is \_\_\_\_\_\_\_\_\_\_\_. [ 1 ]
4. Phosphorus molecule has an atomicity of \_\_\_\_\_\_. [ 1 ]
5. Differentiate between Gram Atomic Mass and Gram Molecular Mass. [ 2 ]
6. Write 3 postulates of Dalton’s atomic theory. [ 3 ]
7. Write the example of the following : [ 3 ]

(a) Monoatomic molecule (b) Triatomic molecule (c) Polyatomic molecule

1. Calculate number of atoms present in each of the following : [ 3 ]

(a) 46 g of Na atom (b) 8 g of O2 molecule (c) 0.1 mole of carbon atom.

1. Calculate the mass of : [ 3 ]

(a) An atom of copper (b) A molecule of CO2.

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