

SUMMATIVE – II WORKSHEET (2015-16)

CHAPTER – ATOMS & MOLECULES

1. State - a) the law of conservation of mass.
b) the law of definite/constant proportion.
2. Who proposed the modern Atomic theory? State six postulates of the theory.
3. Define the following – a) Atom
b) Molecule
c) One atomic mass unit
d) The relative atomic mass
e) Chemical formula
f) Atomicity
g) Ion
h) Cation
i) Anion
j) Valency
k) Polyatomic Ion
l) Molar Mass
m) Molecular Mass
4. Write the chemical formula for –
a) Magnesium Oxide
b) Sodium Hydroxide
c) Potassium sulphate

- d) Calcium Carbonate
- e) Copper Oxide
- f) Aluminium Phosphate
- g) Ammonium Chloride
- h) Hydrogen Bromide
- i) Barium Chloride
- j) Aluminium Nitride
- k) Silver Sulphide
- l) Aluminium Oxide

5. Calculate the Molecular Mass of –

- a) PCl_2
- b) NH_3
- c) S_8
- d) HCl
- e) CaCO_3
- f) AlCl_3

6. Calculate the Molar Mass of –

- a) Ethene (C_2H_4)
- b) Phosphorus molecular (P_4)
- c) Sulphuric acid (H_2SO_4)
- d) Sulphur molecule (S_8)
- e) Calcium Carbonate (CaCO_3)
- f) Ammonium Carbonate [$(\text{NH}_4)_2\text{CO}_3$]

7. Calculate the no. of atoms in 11.5 g of Sodium.

8. Calculate the no. of atoms in 120 g of Ca and 120 g of iron. Which has more no. of atoms and how?

9. What is the mass of – a) 0.2 mole of oxygen atom

b) 0.5 mole of water molecule

10. 2.8 g of nitrogen gas was allowed to react with 0.6 g of hydrogen gas to produce 3.4 g of ammonia. Show that these observations are in agreement with the law of conservation of mass. State the law of conservation of mass.

11. Give one word answer for –

a) Positively charged ion

b) A group of atoms carrying a charge

c) Negatively charged ion

PREPARED BY –

MRS. KAUSER ARSHED

(IX – X GIRLS SECTION)