



# ST. LAWRENCE HIGH SCHOOL

A JESUIT CHRISTIAN MINORITY INSTITUTION

## WORKSHEET-03(CLASS-11)

### TOPIC- SOME BASIC CONCEPT OF CHEMISTRY

#### SUBTOPIC-LAWS OF CHEMICAL COMBINATION

SUBJECT – CHEMISTRY

DURATION – 30 mins



F.M. - 15

DATE -17.06.20

1.1 Ammonia contains 82.65 % N<sub>2</sub> and 17.65% H<sub>2</sub>. If the law of constant proportions is true, then the mass of zinc required to give 10 g Ammonia will be: B

(a) 8.265 g (b) 0.826 g (c) 82.65 g (d) 826.5 g

1.2 Irrespective of the source, pure sample of water always yields 88.89% mass of oxygen and 11.11% mass of hydrogen. This is explained by the law of: B

(a) Law of conservation of mass (b) Law of constant composition (c) Law of multiple proportion  
(d) law of constant volume

1.3 6.488 g of lead combine directly with 1.002 g of oxygen to form lead peroxide. Lead peroxide is also produced by heating lead nitrate and it was found that the percentage of oxygen present in lead peroxide is 13.38 percent. This is explained by the- a

(a) Law of conservation of mass (b) Law of constant composition (c) Law of multiple proportion  
(d) law of constant volume

1.4 The law of multiple proportions is illustrated by the pair of compounds: c

(a) sodium chloride and sodium bromide (b) water and heavy water (c) sulphur dioxide and sulphur trioxide (d) magnesium hydroxide and magnesium oxide

1.5 One part of an element A combines with two parts of B (another element). Six parts of element C combine with four parts of element B. If A and C combines together, the ratio of their masses will be governed by: c

(a) Law of conservation of mass (b) Law of constant composition (c) Law of reciprocal proportion (d) law of constant volume

**1.6 Copper sulphide contains 66.6% Cu, copper oxide contains 79.9% copper and sulphur trioxide contains 40% Sulphur. This is explained by the- d**

- (a) Law of conservation of mass
- (b) Law of constant composition
- (c) Law of multiple proportion
- (d) law of reciprocal proportion

**1.7 In the chemical reaction, the ratio of volumes of nitrogen, hydrogen and ammonia is 1 : 3 :**

**2. These figures illustrate the law of: d**

- (a) Law of conservation of mass
- (b) Law of constant composition
- (c) Law of multiple proportion
- (d) law of constant volume

**1.8 Which of the following laws states that *"For any chemical change total mass of active reactants are always equal to the mass of the product formed."*a**

- (a) Law of conservation of mass
- (b) Law of constant composition
- (c) Law of multiple proportion
- (d) law of reciprocal proportion

**1.9 What would be the mass of water formed by reaction of two gram hydrogen with 16 gram oxygen?c**

- (a) 16g
- (b) 32g
- (c) 18g
- (d) 20g

**1.10 The statement *"Chemical compound always contains same elements in definite proportion by mass and it does not depend on the source of compound"* belongs to- b**

- (a) Law of conservation of mass
- (b) Law of constant composition
- (c) Law of multiple proportion
- (d) law of reciprocal proportion

**1.11 Hydrogen combines with chlorine to form HCl. It also combines with sodium to form NaH. If sodium and chlorine also combine with each other, they will do so in the ratio of their masses as-a**

- a) 23 : 35.5
- b) 35.5 : 23
- c) 1 : 1
- d) 23 : 1

**1.12 An unbalanced chemical reaction represents a violation of which law? a**

- (a) Law of conservation of mass
- (b) Law of constant composition
- (c) Law of multiple proportion
- (d) law of reciprocal proportion

1.13 A water sample from a lake, ocean, rain or pond must have \_\_\_\_\_ proportions of hydrogen to oxygen- a

a) Identical b) Different c) Similar d) Reciprocal

1.14 Which is an example of the law of multiple proportions? A

a) CO and CO<sub>2</sub> b) CO and H<sub>2</sub>O c) CO and CH<sub>4</sub> d) CO and C<sub>2</sub>H<sub>4</sub>

1.15 Law of constant proportion was proposed by- a

a) Proust b) Lavoisier c) Dalton d) Richter

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