ST. LAWRENCE HIGH SCHOOL

A JESUIT CHRISTIAN MINORITY INSTITUTION

SOLUTION-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 % N2 and 17.65% H2. If the law of constant proportions is true, then the mass of zinc required to give 10 g Ammonia will be:**
(a) 8.265 g (b) 0.826 g (c) 82.65 g (d) 826.5 g

Ans. b

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**:

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

Ans. b

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

Ans. a

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

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

Ans. c

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**:

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

Ans. c

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-

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

Ans. d

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

Ans. d

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

Ans. a

1.9 What would be the mass of water formed by reaction of two gram hydrogen with 16 gram oxygen?
(a)16g (b)32g (c) 18g(d)20g

Ans. c

1.10The statement *"Chemical compound always contains same elements in definite proportion by mass and it does not depend on the source of compound" belongs to-*
(a) Law of conservation of mass (b) Law of constant composition (c) Law of multiple proportion
(d) law of reciprocal proportion

Ans. b

1.11Hydrogen 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) 23 : 35.5b) 35.5 : 23c) 1 : 1d) 23 : 1

Ans. a

1.12An unbalanced chemical reaction represents a violation of which law?
(a) Law of conservation of mass (b) Law of constant composition (c) Law of multiple proportion
(d) law of reciprocal proportion

Ans. a

1.13 **A water sample from a lake, ocean, rain or pond must have _____ proportions of hydrogen to oxygen**-
a)Identical b)Differentc)Similard)Reciprocal

Ans. a

1.14 **Which is an example of the law of multiple proportions?**
a) CO and CO_2b) CO and H_2Oc) CO and CH_4d) CO and C_2H_4

Ans. a

1.15**Law of constant proportion was proposed by**-
a)Proust b)Lavoisierc)Daltond)Richter

Ans. a

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