ST. LAWRENCE HIGH SCHOOL



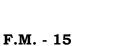
A JESUIT CHRISTIAN MINORITY INSTITUTION

SOLUTION-04(CLASS-11)

TOPIC- SOME BASIC CONCEPT OF CHEMISTRY

SUBTOPIC-LAWS OF CHEMICAL COMBINATION

SUBJECT – CHEMISTRY DURATION – 30 mins



DATE -18.06.20

1.1	The law of definite composition was proposed by-
	a) Lomonosov b) Antoine Lavoisier c) Joseph Proust d) Dalton
	Ans. c
	1.2 law of combining volumes states that "Whenever gases combine, they do so in simple ratio by volumes" -
	a) Avogadro's b) Gay Lussac's c) Dalton's d) Thomson's
	Ans. b
	1.3 The sum of the masses of reactants and products is equal in any physical or chemical reaction. This is in accordance with-
	a) Law of multiple proportion b) Law of definite composition c) Law of conservation of mass d) Law of reciprocal proportion
	Ans. c
	1.4 Pure water can be obtained from various sources, but it always contains hydrogen and oxygen, combined in a ratio of 1:8 by weight. This is an example of –
	a) Law of conservation of mass b) Avogadro's law c) Law of definite composition d) Gay Lussac's law
	Ans. c
	1.5 In SO_2 and SO_3 , the ratio of the masses of oxygen which combine with a fixed mass of Sulphur is 2:3. This is an example of the law of-
	a) Constant proportion b) Multiple proportion c) Reciprocal proportion d) Gay Lussac
	Ans. b
	1.6 Among the following pairs of compounds, the one that illustrates the law of multiple proportions is-

a) NH₃ and NCl₃ b) H₂S and SO₂ b) CuO and Cu₂O d) CS₂ and FeSO₄

Ans.c

- 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 The law of multiple proportions is illustrated by-
- a) Carbon monoxide and carbon dioxide b) Potassium bromide and potassium chloride c) Ordinary water and heavy water d) Calcium hydroxide and barium hydroxide.

Ans. a

- 1.9 Two elements, X (Atomic mass 16) and Y (Atomic mass 14) combine to form compounds A, B and C. The ratio of different masses of Y which combine with fixed mass of X in A, B and C is 1:3:5. If 32 parts by mass of X combine with 84 parts by mass of Y in B, then in C, 16 parts by mass of X will combine with-
- (A) 14 parts by mass of Y (B) 42 parts by mass of Y (C) 70 parts by mass of Y (D) 82 parts by mass of Y

Ans. c

1.10The volume of oxygen required for complete combustion of 0.25 cm³ of CH₄ at S.T.P is-(A) 0.25 cm³ (B) 0.5 cm³ (C) 0.75 cm³ (D) 1 cm³

Ans. b

- $1.11 \mbox{Hydrogen}$ and oxygen combine to form $\mbox{H}_2\mbox{O}_2$ and $\mbox{H}_2\mbox{O}$ containing 5.93% and 11.29% of hydrogen respectively. The data illustrates-
- (A) Law of conservation of mass (B) Law of constant proportions (C) Law of reciprocal proportions (D) Law of multiple proportions

Ans. d

- 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 How many litres of ammonia will be formed when 2 L of N₂ and 2 L of H₂ are allowed to react?
- (A) 0.665 (B) 1.0 (C) 4.00 (D) 1.33

Ans. d

- 1.14 1.0 g of an oxide of A contained 0.5 g of A. 4.0 g of another oxide of A contained 1.6 g of A. The data indicate the law of d
- (A) Reciprocal proportions (B) Constant proportions (C) Conservation of energy (D) Multiple proportions

Ans. d

- 1.15One unit volume of N₂ reacts with 3 unit volumes of H₂ to form 2 unit volumes of NH₃. This is in accordance with- d
- a) Avogadro's law b) Gay Lussac's law c) Law of conservation of mass d) Law of chemical combination

Ans. d

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