

Udaan 2025

Chemistry

DHA: 2

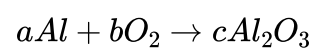
Time Taken = 2 Minutes
Score = 16/16

Chemical Reactions and Equations

Q 1 We balance the chemical equations so that they obey the:

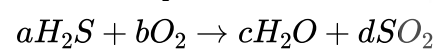
- (A) law of constant proportion
(B) law of conservation of mass
(C) law of multiple proportion
(D) law of reciprocal proportion

Q 2 Find the stoichiometric coefficients for the given chemical equation.



- (A) $a = 3, b = 2, c = 4$
(B) $a = 2, b = 4, c = 3$
(C) $a = 4, b = 3, c = 2$
(D) $a = 2, b = 3, c = 4$

Q 3 Find the stoichiometric coefficients for the given chemical equation.



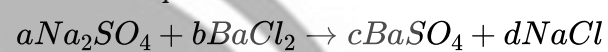
- (A) $a = 2, b = 1, c = 2, d = 3$

- (B) $a = 2, b = 1, c = 1, d = 3$

- (C) $a = 3, b = 2, c = 3, d = 2$

- (D) $a = 2, b = 3, c = 2, d = 2$

Q 4 Find the stoichiometric coefficients for the given chemical equation.



- (A) $a = 1, b = 1, c = 1, d = 1$

- (B) $a = 2, b = 1, c = 1, d = 2$

- (C) $a = 1, b = 2, c = 1, d = 2$

- (D) $a = 1, b = 1, c = 1, d = 2$

Answer Key

Q1 B
Q2 C
Q3 D

Q4 D



Hints & Solutions

Q 1 Text Solution:

Mass is neither created nor destroyed in simple chemical reactions.

Video Solution:



Q 2 Text Solution:

- (i) Use hit-and-trial method to balance the chemical equation.
- (ii) Start balancing the compound (reactant or product) that contains the maximum number of atoms. In that compound, balance the element with the maximum number of atoms.

Video Solution:



Q 3 Text Solution:

- (i) Use hit-and-trial method to balance the chemical equation.

- (ii) Start balancing the compound (reactant or product) that contains the maximum number of atoms. In that compound, balance the element with the maximum number of atoms.

Video Solution:



Q 4 Text Solution:

- (i) Use the hit-and-trial method to balance the chemical equation.
- (ii) Balance the polyatomic ion first and then balance the other elements.

Video Solution:



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