



Laying the foundation of lifelong success

CHAPTER 4

Quadratic Equations

(Previous Years' Questions)

Assertion - Reason

Two statements are given, one labelled as Assertion (A) and the other is labelled as Reason (R). Select the correct answer to these questions from the codes (A), (B), (C) and (D) as given below. (A) (B) (C) (D)

- (A) Both Assertion (A) and Reason (R) are true and Reason (R) is the correct explanation of the Assertion (A).
- (B) Both Assertion (A) and Reason (R) are true, but Reason (R) is not the correct explanation of the Assertion (A).
- (C) Assertion (A) is true, but Reason (R) is false.
- (D) Assertion (A) is false, but Reason (R) is true.

1. Assertion (A): The quadratic equation $x^2 + 4x + 5 = 0$ has real roots.

Reason (R) : The quadratic equation $ax^2 + bx + c = 0$, $a \neq 0$ has real roots if $b^2 - 4ac \geq 0$.

(Comptt., 2025)

2. Statement A (Assertion) : If $5 + \sqrt{7}$ is a root of a quadratic equation with rational coefficients, then its other root is $5 - \sqrt{7}$

Statement R (Reason): Surd roots of a quadratic equation with rational co-efficients occur in conjugate pairs. **(2023)**



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