

## CHAPTER-4 | QUADRATIC EQUATIONS

QUIZ  
PART-01

1. A quadratic equation is of the form:

- A.  $ax^2+bx+c=0$   
 B.  $ax^3+bx+c=0$   
 C.  $ax+b=0$   
 D.  $ax^2+b=0$  (A)

**Explanation :** The standard form of a quadratic equation is  $ax^2+bx+c=0$ .

2. The general form of a quadratic equation is:

- A.  $ax+b=0$   
 B.  $ax^2+by+c=0$   
 C.  $ax^2+bx+c=0$   
 D.  $ax+by+c=0$  (C)

**Explanation :** The general form is  $ax^2+bx+c=0$ .

3. Which of the following is a quadratic equation?

- A.  $(x+1)^2=x^2$                       B.  $(x+1)(x-1)=0$   
 C.  $x^3+(x-2)^2$                       D. None of these (B)

**Explanation :**  $(x+1)(x-1)=0$  is a quadratic equation.

4. The equation  $2x^3+3x^2+2=0$  is:

- A. Linear equation  
 B. Quadratic equation  
 C. Cubic equation  
 D. None of these (C)

**Explanation :** It's a cubic equation due to the  $x^3$  term.

5. The number of roots of a quadratic equation is determined by:

- A. Discriminant  
 B. Coefficients  
 C. Degree  
 D. None of these (A)

**Explanation :** The discriminant determines the number of roots.

6. The product of the number of marbles John and Jivanti lost is 124. The number of marbles they started with is:

- A. 20                                      B. 24  
 C. 25                                      D. 26 (B)

**Explanation :** The system gives 24 marbles.

7. The equation  $(x-2)^2+1=2x-3$  is a quadratic equation:

- A. True  
 B. False  
 C. Coefficients  
 D. Parallel (A)

**Explanation :** This is a quadratic equation after simplifying.

8. The equation  $x(x+1)+8=(x+2)(x-2)$  is a quadratic equation:

- A. True  
 B. False  
 C. Degree  
 D. Intersecting (A)

**Explanation :** It simplifies to a quadratic equation.

9. A quadratic equation can be solved by which method?

- A. Factorization                      B. Substitution  
 C. Graphical method                      D. All of these (D)

**Explanation :** All these methods can solve a quadratic equation.

10. The equation of the form  $ax^2+bx+c=0$  represents:

- A. Linear equation  
 B. Quadratic equation  
 C. Cubic equation  
 D. None of these (B)

**Explanation :** This is the standard form of a quadratic equation.