

# Grade 10 - Second Unit Test

## Practice Paper 1

Mathematics

Based on Maharashtra Board Syllabus (NEP 2025-26) - 2nd Quarter

### Instructions:

- Duration: 1 hour
- Maximum marks: 20
- All questions are compulsory
- Show all your working clearly

### Section A: Quadratic Equations (8 Marks)

1. Find the discriminant ( $\Delta$ ) for the quadratic equation:  $2x^2 - 4x + 3 = 0$  [3 marks]

Discriminant ( $\Delta$ ) = \_\_\_\_\_

2. Find the roots of the quadratic equation using the quadratic formula: [5 marks]

$$x^2 + 6x + 5 = 0$$

Roots:  $x =$  \_\_\_\_\_,  $x =$  \_\_\_\_\_

## Section B: Arithmetic Progression (6 Marks)

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3. Find the sum of the first 10 terms of the AP: 2, 4, 6, 8, ...

**[2 marks]**

Sum ( $S_{10}$ ) = \_\_\_\_\_

4. The first term of an AP is 7 and the common difference is 4. Find the sum of the first 12 terms. **[4 marks]**

Sum ( $S_{12}$ ) = \_\_\_\_\_

## Section C: Probability (6 Marks)

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5. A coin is tossed once. What is the probability of getting a tail?

**[2 marks]**

Probability = \_\_\_\_\_

6. A bag contains 3 red balls and 5 blue balls. A ball is drawn at random. **[4 marks]**  
What is the probability of drawing:

a) A red ball? = \_\_\_\_\_

b) A blue ball? = \_\_\_\_\_

*End of Practice Paper 1*

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