Grade 10 - Second Unit Test

Practice Paper 2

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)

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1. Find the discriminant (Δ) for the quadratic equation: $3x^2 + 5x - 2 = 0$ **[3 marks]**

Discriminant (Δ) = _____

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

$x^2 - 7x + 10 = 0$

Roots: x = _____, x = _____

Section B: Arithmetic Progression (6 Marks)

3. Find the sum of the first 8 terms of the AP: 3, 6, 9, 12, ...   **[2 marks]**

Sum (S_8) = _____

4. The first term of an AP is 10 and the common difference is -3. Find   **[4 marks]**
the sum of the first 15 terms.

Sum (S_{15}) = _____

Section C: Probability (6 Marks)

5. A die is rolled once. What is the probability of getting an even   **[2 marks]**
number?

Probability = _____

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

a) A red ball? = _____

b) A green ball? = _____

End of Practice Paper 2