Grade 8 - 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: Expansion Formulae (8 Marks)

1. Expand the following: **[4 marks]**

a) $(y + 7)^2$ = _____

b) $(b - 6)^2$ = _____

c) $(4x + 3)^2$ = _____

d) $(5m - 2)^2$ = _____

2. Expand the following: **[4 marks]**

a) $(p + 4)(p - 4)$ = _____

b) (2a + 3)(2a - 3) = _____

c) (x + 5)(x + 2) = _____

d) (b - 1)(b - 5) = _____

Section B: Factorisation of Algebraic Expressions (6 Marks)

3. Factorise the following: **[3 marks]**

a) 5y - 10 = _____

b) $7b^2 + 14b$ = _____

c) $6m^3n^2 - 12m^2n^3$ = _____

4. Factorise the following using identities: **[3 marks]**

a) $a^2 - 49$ = _____

b) $p^2 + 10p + 25$ = _____

c) $y^2 - 8y + 16$ = _____

Section C: Division of Algebraic Expressions and Statistics (6 Marks)

5. Divide the following: **[3 marks]**

a) $(8a^2 - 12a) \div 4a$ = _____

b) $(15x^4 + 20x^3) \div 5x^3$ = _____

c) $(p^2 - 9) \div (p + 3) =$ _____

6. Answer the following statistics questions: **[3 marks]**

a) Find the mean of the data: 5, 10, 15, 20, 25, 30. = _____

b) What is the mode of the data: 10, 12, 10, 15, 12, 10? = _____

c) Find the median of the data: 2, 4, 6, 8, 10, 12. = _____

End of Practice Paper 2