Grade 9 - 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: Polynomials (8 Marks)

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

a) Write the degree of the polynomial $9y^6 - 2y^3 + 5y - 1$. = _____

b) Is $x + 1/x$ a polynomial? (Yes/No) = _____

c) Write the coefficient of ab in the term 8abc. = _____

d) Add the polynomials: $(3p^2 + 2p - 1) + (p^2 - 5p + 4)$ = _____

2. Subtract the following polynomials: **[4 marks]**

a) (4a - 3) from (8a + 5) = _____

b) $(2x^2 + 5x - 7)$ from $(6x^2 - x + 2)$ = _____

c) Multiply: $3a(a^2 + 2a - 4)$ = _____

d) Multiply: $(b + 3)(b - 6)$ = _____

Section B: Congruence of Triangles (6 Marks)

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

a) State the ASA congruence criterion. = _____

b) If in ΔLMN and ΔXYZ, $LM=XY$, $\angle LMN=\angle XYZ$, and $MN=YZ$, then $\Delta LMN \cong \Delta XYZ$ by _____ criterion.

c) If in ΔPQR and ΔSTU, $\angle P=\angle S$, $\angle Q=\angle T$, and $PQ=ST$, then $\Delta PQR \cong \Delta STU$ by _____ criterion.

4. Answer the following: **[3 marks]**

a) If $\Delta XYZ \cong \Delta PQR$, then side YZ corresponds to side _____. = _____

b) State the RHS congruence criterion. = _____

c) Draw a rough sketch of two triangles congruent by SAS criterion and mark the equal parts.

Section C: Construction of Triangles (6 Marks)

[6 marks]

5. Construct the following triangles (Rough sketch is sufficient for the paper):

a) Construct ΔPQR such that PQ = 6 cm, QR = 7 cm, and PR = 8 cm.

b) Construct ΔLMN such that LM = 5 cm, ∠L = 70°, and LN = 6 cm.

c) Construct ΔSTU such that ST = 7 cm, ∠S = 60°, and ∠T = 80°.

End of Practice Paper 2