**FORMATIVE ASSESSMENT-IV (2024-25)**

**MATHEMATICS Model Paper**

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**Class: VII** **Max. Marks: 35** **Time: 60 Min.**

Name of the student: ……Roll No.: ……

**I. Solve the following problems.** **2 x 10 = 20**

1. Write the coefficient of 'x' in the expression $12xy^2 + 25$.
2. The distance from the Sun to Earth is 149,600,000,000m. Convert this into standard form.
3. $(-1)^{2023} + (-1)^{2024}$ = _____
4. The terms 5pq and $-9qp$ are like terms (True/False)
5. The number of lines of symmetry of a square is_____. [ ]

   A) 2 B) 3 C) 4 D) infinite
6. Simplify: $2^3 \times 2^4$.
7. Write an example of a binomial algebraic expression.
8. Express $\frac{1}{81}$ in exponential form using base 3.
9. Arjun says that 3xyz is a trinomial. Is he right? Give the reason.
10. Find the degree of the polynomial: $4x^3 - 2x^2 + 5x - 7$.

**II. Solve the following problems.** **2 x 3 = 6**

11. Identify the greater number $5^4 or\ 4^5$.
12. Add the algebraic expressions: $3x^2 + 2x - 5$ and $4x^2 - x + 7$.
13. Name any two letters of the English alphabet that have both line and rotational symmetry.

**III. Solve the following problem.** **1 x 4 = 4**

14. Draw a figure showing the lines of symmetry for a regular pentagon and explain how many lines of symmetry it has.

**IV. Solve the following problem.** **1 x 5 = 5**

15. Simplify the expression and find its value at x = 3, a = -1, b = - 2

$$10 - 3b - 4 + 3a - a + 3x - 8x + 4b$$