Revision Test Paper-II

(Based on Chapters 5 to 9)

A. Multiple Choice Questions (MCQs).

Tick (✓) the correct option:

1. Natural numbers which can be expressed as the product of triplets of equal factors are called _____.

   (a) Perfect cubes ☐ (b) Unperfect cubes ☐

   (c) Perfect square ☐ (d) Unperfect squares ☐

2. Evaluating $\left(\frac{2}{3}\right)^4$ we get _____.

   (a) $\frac{15}{81}$ ☐ (b) $\frac{22}{81}$ ☐

   (c) $\frac{16}{81}$ ☐ (d) $\frac{7}{81}$ ☐

3. The degree of polynomials $2x^3+4x^2-9$ is _____.

   (a) –2 ☐ (b) 1 ☐

   (c) 4 ☐ (d) 3 ☐

4. $a^3-3a^2b+3ab^2-b^3$ is the expanded form of _____.

   (a) $(a-b)^3$ ☐ (b) $(x+a)(x+b)$ ☐

   (c) $(a-b)^2$ ☐ (d) $(a+b)^2$ ☐

5. Cubes of all even natural numbers are _____.

   (a) odd ☐ (b) even ☐

   (c) both of two ☐ (d) none of these ☐

6. Cubes of negative integers are _____.

   (a) negative ☐ (b) positive ☐

   (c) both of two ☐ (d) none of these ☐

7. The algebraic expressions having only three terms are called _____.

   (a) Binomials ☐ (b) Monomials ☐

   (c) Trinomials ☐ (d) Polynomials ☐

8. (a + b) (a– b) is equal to _____.

   (a) a^2+b^2 ☐ (b) a^2-b^2 ☐

   (c) $(a+b)^2$ ☐ (d) $(a-b)^2$ ☐

9. $(3a^3)^3 =$ _____.

(a) $27a^2$ (b) $27a^6$

(c) $27a^{3+3}$ (d) $27a^9$

10. A polynomial is said to be linear if its degree is _____ .

(a) 0 (b) 1

(c) 2 (d) 3

B. Fill in the blanks of the following :

1. _____ are product of triplet of equal factors.
2. The square of an odd number is always _____.
3. p is a _____.
4. $(a-5)(4a+3)$ is equal to _____.
5. The cube of number ending in 8 ends in _____.
6. A polynomial degree 4 is called a _____ polynomial.
7. $\sqrt{n}$ is a _____ if it is not a perfect square.
8. The process of writing an expression in the form of products of its _____ is called factorisation.
9. _____ inventor of zero (0).
10. A symbol which takes various numerical value is called _____.

C. Write 'T' for true statement and 'F' for false statement :

1. $a^2b, 3ab^2, 4xy, -2x^2y^2$ etc. are called like terms.
2. Cubes of positive integers are always negative.
3. There is no perfect cube which ends in 4.
4. For an integer a, a^2 is always greater than a^3.
5. Sign of positive (+) and negative (–) are called integers.
6. 5a, 6ab, and 8b can be added together.
7. If variables are same we add their powers is multiplication.
8. Dividend = Divisor × remainder + Quotient
9. $(a+b)(a-b) = a^2 - b^2$
10. Terms with the same variables and exponents are called like terms.