ALGEBRAIC EXPRESSIONS AND IDENTITIES

INTRODUCTION OF ALGEBRAIC EXPRESSION

EXERCISE

Q.1 Write the degree of the following algebraic expressions.

(a) $-7x^3 + 4x^2 - 3x + 9$

(b) $2x^4 - 4x + 11$

(c) $7x^5 - 4x^4 - 3x^3 + 13x - 2$

(d) $\frac{4}{3}x^3$

(e) 7

Q.2 Classify the following algebraic expressions as monomials, binomials or trinomials.

(a) $2x^5 + 7$ (b) $4x - 10$

(c) $-3x^4 + 2x^3 + 9x$ (d) $-2x^2 - 3x + 4$

(e) $7x^2$ (f) $4x^3$

(g) $3x^2 + 4x$ (h) $2x + 9y$

Q.3 Identify the terms, their coefficients for each of the following expressions:

(i) $5xyz^2 - 3zy$

(ii) $1 + x + x^2$

(iii) $4x^2y^2 - 4x^2y^2z^2 + z^2$

(iv) $3 - pq + qr - rp$

(v) $\frac{x}{2} + \frac{y}{2} - xy$

(vi) $0.3a - 0.6ab + 0.5\ b$

ANSWER KEY

1. (a) 3 (b) 4 (c) 5

(d) 3 (e) 0

2. (a) Binomial (b) Binomial

(c) Trinomial (d) Trinomial

(e) Monomial (f) Monomial

(g) Binomial (h) Binomial

3.

S.N.	EQUATION	TERMS	THEIR COEFFICIENTS
1	$5xyz^2 - 3zy$	$5xyz^2, -3zy$	5,–3
2	$1 + x + x^2$	$1, x, x^2$	1, 1, 1
3	$4x^2y^2 - 4x^2y^2z^2 + z^2$	$4x^2y^2, -4x^2y^2z^2, z^2$	4, – 4, 1
4	3 – pq + qr – rp	3, – pq, qr, – rp	3, – 1, 1, – 1
5	$\frac{x}{2} + \frac{y}{2} - xy$	$\frac{x}{2}, \frac{y}{2}, -xy$	$\frac{1}{2}, \frac{1}{2}$,-1
6	0.3a – 0.6ab + 0.5 b	0.3a, –0.6ab, 0.5b	0.3, –0.6, 0.5