

FACTORISATION**FACTORISATION OF ALGEBRAIC EXPRESSION****EXERCISE**

Q.1 Factorise:

(i) $12x^3y^4 + 16x^2y^5 - 4x^5y^2$

(ii) $18a^3b^2 + 36ab^4 - 24a^2b^3$

Q.2 Factorise:

(i) $(x + y)(2x + 3y) - (2x + 3y) - (x + y)(x + 1)$

(ii) $(x + y)(2a + b) - (3x - 2y)(2a + b)$

Q.3 Factorise :

(i) $x^2 + xy + 8x + 8y$

(ii) $15xy - 6x + 10y - 4$

(iii) $n - 7 + 7lm - lmn$

Q.4 Factorise:

(i) $a^2 + 2a + ab + 2b$

(ii) $x^2 - xz + xy - xz$

Q.5 Factorise each of the following expressions:

(i) $a^2 - b + ab - a$

(ii) $xy - ab + bx - ay$

(iii) $6ab - b^2 + 12ac - 2bc$

(iv) $a(a + b - c) - bc$

$$(v) a^2x^2 + (ax^2 + 1)x + a$$

$$(vi) 3ax - 6ay - 8by + 4bx$$

ANSWER KEY

2. (i) $(x + y)(x + 3y - 1)$

(ii) $(-2x + 3y)(2a + b)$

4. (i) $(a + 2)(a + b)$

(ii) $(x + y)(x - z)$

5. (i) $(a + b)(a - 1)$

(ii) $(y + b)(x - a)$

(iii) $(b + 2c)(6a - b)$

(iv) $(a + b)(a - c)$

(v) $(x + a)(ax^2 + 1)$

(vi) $(3a + 4b)(x - 2y)$