Factorisation of Polynomials Ex 6.1 Q1

Answer :

(i) $3x^2-4x+15$ is a polynomial of degree 2.i.e Quadratic polynomial.

(ii) $y^2+2\sqrt{3}$ is a polynomial of degree 2 in y variable. i.e. Quadratic polynomial.

(iii) $3\sqrt{x}+\sqrt{2}x$

It is not a polynomial because exponent of x is 1/2 which is not a positive integer.

(iv) $2-\frac{4}{x}$

It is not a polynomial because $\frac{4}{x}$ is fractional part.

(v) $x^{12}+y^2+t^{50}$

It is a polynomial in three variables x, y and t.

Factorisation of Polynomials Ex 6.1 Q2

Answer :

(i) $17-2x+7x^2$

Coefficient of $x^2=7$

(ii) $9-12x+x^3$

Coefficient of $x^2=0$

(iii) $\frac{\pi}{6}x^2-3x+4$

Coefficient of $x^2=\pi/6$

(iv) $\sqrt{3}x-7$

Coefficient of $x^2=0$

Factorisation of Polynomials Ex 6.1 Q3

Answer :

(i) $7x^3 + 4x^2 - 3x + 12$

Degree of the polynomial = 3

Because the highest power of x is 3.

(ii) $12 - 2 + 2x^3$

Degree of the polynomial = 3. Because the highest power of x is 3.

(iii) $5y - \sqrt{2}$

Degree of the polynomial = 1. Because the highest power of y is 1.

(iv) 7

Degree of the polynomial = 0. Because there is no variable term in the expression

(v) 0

Degree of the polynomial is not defined. As there is no variable or constant term

********** END **********