PUBLIC SCHOOL DARBHANGA
SESSION (2020-21)
CLASS-IX
MATHEMATICS
POLYNOMIALS

WORKSHEET NO.1

1. Which of the following expressions are polynomials in one variable and which are not? State reasons for your answer.

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

(ii) $y^2 + \sqrt{2}$

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

(iv) $y + \dfrac{2}{y}$

(v) $x^{10} + y^3 + t^{50}$

2. Write the coefficients of x^2 in each of the following:

(i) $2 + x^2 + x$

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

(iii)$\dfrac{\pi}{2}$ $x^2 + x$

(iv) $\sqrt{2}x - 1$

3. Give one example each of a binomial of degree 35, and of a monomial of degree 100.

4. Write the degree of each of the following polynomials:

(i) $5x^3 + 4x^2 + 7x$

(ii) $4 - y^2$

(iii) $5t - \sqrt{7}$ (iv) 3

5. Classify the following as linear, quadratic and cubic polynomials:

(i) $x^2 + x$

(ii) $x - x^3$

(iii)$y + y^2 + 4$

(iv)$1 + x$ (v) $3t$

(vi) r^2

(vii) $7x^3$