



- The degree of the polynomial  $(-6z+6)$  is  
(i) (-2) (ii) 4 (iii) 2 (iv) 0 (v) 1
- The degree of the polynomial  $(-4m^2+5m-6)$  is  
(i) 2 (ii) 1 (iii) 4 (iv) (-1) (v) 3
- The degree of the polynomial  $(-7r^4-4r^2+9)$  is  
(i) 3 (ii) 2 (iii) 6 (iv) 4 (v) 5
- The degree of the polynomial  $(7r^5-5r^3+3r^2-5r-2)$  is  
(i) 7 (ii) 6 (iii) 4 (iv) 2 (v) 5
- Which of the following algebraic expressions is a constant polynomial?  
(i) 3 (ii)  $(-6q^3+6q^2+4q+9)$  (iii)  $(-6q-3)$  (iv)  $(-q^2+q-4)$  (v)  $(3q^5+q^4+7q^3-3q^2+6)$
- Which of the following algebraic expressions is a linear polynomial?  
(i)  $(-2z^3+7z^2-z-6)$  (ii) 3 (iii)  $(-5z^2-3z-2)$  (iv)  $(4z+8)$  (v)  $(2z^5-4z^4+5z^3+8z^2-6)$
- Which of the following algebraic expressions is a quadratic polynomial?  
(i)  $(g^3-4g^2+5g+3)$  (ii)  $(9g^5-9g^4+6g^2-3g-3)$  (iii) 4 (iv)  $(9g^2+8g+8)$  (v)  $(8g+3)$
- Which of the following algebraic expressions is a cubic polynomial?  
(i) (-9) (ii)  $(-8f^5-7f^4+5f^3-7f-7)$  (iii)  $(-6f+1)$  (iv)  $(-3f^2-3f+8)$  (v)  $(-2f^3-7f^2-5f+4)$
- The value of the polynomial  $(-8u-6)$  at  $u=1$  is  
(i) -13 (ii) -11 (iii) -14 (iv) -16 (v) -15
- The value of the polynomial  $(-3h^2-9h-3)$  at  $h=0$  is  
(i) -5 (ii) -2 (iii) -4 (iv) 0 (v) -3
- The value of the polynomial  $(8q^3-5q^2-6q)$  at  $q=(-1)$  is  
(i) -4 (ii) -9 (iii) -6 (iv) -7 (v) -8
- The value of the polynomial  $(-4s^4+5s^3-8s^2-6s+4)$  at  $s=0$  is  
(i) 6 (ii) 4 (iii) 5 (iv) 1 (v) 3

13. Which of the following are true?

- a) Zero of a polynomial and zero polynomial are synonymous
- b) If  $(x + a)$  is a factor of  $f(x)$ , then  $f(a) = 0$
- c) A polynomial of degree  $n$  has at most  $n$  zeros
- d) If  $(x - a)$  is a factor of  $f(x)$ , then  $f(a) = 0$
- e) Zero of a polynomial and root of the polynomial are synonymous
- f) Zero of a polynomial is the value of the variable for which the polynomial value is zero
- g) A linear polynomial in one variable has only one root

(i)  $\{a,f,g\}$  (ii)  $\{a,c\}$  (iii)  $\{c,d,e,f,g\}$  (iv)  $\{a,b,e\}$  (v)  $\{b,d\}$

14. Which of the following are true?

- a) A binomial has two and only two terms
- b) Degree of zero polynomial is zero
- c)  $\pi r^2$  is a monomial
- d) Every polynomial is a binomial
- e) A binomial may have degree 3

(i)  $\{d,c\}$  (ii)  $\{b,a,c\}$  (iii)  $\{b,d,e\}$  (iv)  $\{b,a\}$  (v)  $\{a,c,e\}$

15. Which of the following are polynomials?

a)  $\frac{(x+y)}{(x-y)}$

b)  $x^2 + \frac{1}{x^2}$

c)  $x^2$

d)  $(x+y)$

e)  $x + \frac{1}{x}$

(i)  $\{b,d\}$  (ii)  $\{c,d\}$  (iii)  $\{a,c\}$  (iv)  $\{e,a,c\}$  (v)  $\{b,d,c\}$

16. Which of the following are not polynomials?

a)  $\frac{(2x+11y)}{(8x-10y)}$

b)  $(2x+11y)$

c)  $100x^2$

d)  $(16x^2 + 68xy - 110y^2)$

e)  $x + \frac{1}{x}$

(i)  $\{d,b,a\}$  (ii)  $\{b,a\}$  (iii)  $\{c,e,a\}$  (iv)  $\{c,e\}$  (v)  $\{a,e\}$

17. Which of the following are not polynomials?

a)  $16x^2 + \frac{1}{16x^2}$

b)  $\sqrt{x}$

c)  $(7x-10y)$

d)  $(3x+2y)$

e)  $16x^2$

(i) {d,b,a} (ii) {c,a} (iii) {a,b} (iv) {e,c,a} (v) {d,b}

18. Which of the following are not polynomials?

a)  $4x^2$

b)  $\frac{(4x+10y)}{(7x-4y)}$

c)  $(7x-4y)$

d)  $(28x^2+54xy-40y^2)$

e)  $\sqrt{x}$

(i) {d,a,b} (ii) {c,e} (iii) {b,e} (iv) {c,e,b} (v) {a,b}

19. Given  $f(q)=(5q-9)$ , find  $f((-3))$

(i) -22 (ii) -23 (iii) -24 (iv) -25 (v) -27

20. Given  $f(t)=(-4t^2+5t+4)$ , find  $f((-4))$

(i) -80 (ii) -82 (iii) -81 (iv) -77 (v) -79

21. Given  $f(t)=(2t^3-6t^2+3)$ , find  $f((-2))$

(i) -37 (ii) -36 (iii) -38 (iv) -34 (v) -39

22. Given  $f(y)=(5y^4+y^3+9y^2-7y+8)$ , find  $f((-1))$

(i) 30 (ii) 27 (iii) 25 (iv) 28 (v) 29

## Assignment Key

1) (v)	2) (i)	3) (iv)	4) (v)	5) (i)	6) (iv)
7) (iv)	8) (v)	9) (iii)	10) (v)	11) (iv)	12) (ii)
13) (iii)	14) (v)	15) (ii)	16) (v)	17) (iii)	18) (iii)
19) (iii)	20) (i)	21) (i)	22) (iv)		