EduSahara™ Assignment

Name : Polynomial Concepts

Chapter : Polynomials

Grade : SSC Grade X

1. The degree of the polynomial $(-5k-9)$ is

   (i) 1 (ii) 0 (iii) 2 (iv) (-1) (v) 3

2. The degree of the polynomial $(-8m^2+5m+7)$ is

   (i) 2 (ii) 1 (iii) 0 (iv) 5 (v) 3

3. The degree of the polynomial $(-6d^4+d^3+7d)$ is

   (i) 6 (ii) 5 (iii) 2 (iv) 4 (v) 3

4. The degree of the polynomial $(-s^5-4s^4+2s^3-2s+6)$ is

   (i) 8 (ii) 6 (iii) 5 (iv) 3 (v) 4

5. The constant term in polynomial $(-6y+3)$ is

   (i) 5 (ii) 3 (iii) 0 (iv) 4 (v) 2

6. The coefficient of term x in polynomial $(-6x^2+4x-9)$ is

   (i) 5 (ii) 2 (iii) 4 (iv) 3 (v) 6

7. The coefficient of term z^2 in polynomial $(-6z^3-7z^2+7z-5)$ is

   (i) -6 (ii) -5 (iii) -10 (iv) -8 (v) -7

8. The constant term in polynomial $(-6b^4+9b^3+9b^2+2b+2)$ is

   (i) 3 (ii) 1 (iii) -1 (iv) 4 (v) 2

9. Which of the following algebraic expressions is a monomial?

   (i) $(-7e^3+3e^2-8e)$ (ii) $(8e^4-9e^3+8e^2-e-8)$ (iii) $(-e^4+9e^3+9e^2-3e+6)$ (iv) $(-9e^4-3e^2)$

   (v) $7e^4$

10. Which of the following algebraic expressions is a binomial?

    (i) $(-5s^4-2s^2+7)$ (ii) $(4s^2+5s)$ (iii) $(-8s^4+s^3-7s^2+s+6)$ (iv) $(6s^4+5s^3+8s^2+2s-9)$ (v) $(-2s^2)$

11. Which of the following algebraic expressions is a trinomial?

    (i) $(-t^4-8t^3+4t^2-6t-8)$ (ii) $(-5t^4+3t^3-4t^2-4t+9)$ (iii) (t^3+4t^2) (iv) $(-t)$ (v) $(8t^3-8t^2-7t)$

12. Which of the following algebraic expressions is a constant polynomial?

    (i) $9v^4$ (ii) $(-9v^3-6v^2-8)$ (iii) $(5v^4-7v)$ (iv) $(9v^4+6v^3+4v^2-v-1)$ (v) 6

13. Which of the following algebraic expressions is a zero polynomial?

(i) $(4v^4+9v-9)$ (ii) 0 (iii) $(-v^4-4v^3-9v^2-9v-2)$ (iv) $(-9v^4-v^3)$ (v) $7v^2$

14. Which of the following algebraic expressions is a constant polynomial?

(i) $(6m+9)$ (ii) $(4m^2-4m+7)$ (iii) (-3) (iv) $(-2m^5-8m^4+8m^2-3m-4)$ (v) $(-9m^3-m^2+3m+6)$

15. Which of the following algebraic expressions is a linear polynomial?

(i) 1 (ii) $(8k^5+6k^4+6k^3-k-1)$ (iii) $(7k^3+3k^2+6k+9)$ (iv) $(-7k+3)$ (v) $(-7k^2+5k-5)$

16. Which of the following algebraic expressions is a quadratic polynomial?

(i) $(-g^4-7g^3+6g^2-2g-2)$ (ii) (g^3+4g^2+3g+1) (iii) $(-6g+4)$ (iv) $(-5g^2+8g-4)$ (v) (-8)

17. Which of the following algebraic expressions is a cubic polynomial?

(i) $(-5s^5+6s^4+3s^2+7s-4)$ (ii) $(-4s+6)$ (iii) $(9s^3+7s^2-2s-8)$ (iv) 9 (v) $(4s^2-7s+3)$

18. The degree of polynomial $(3fg+f-8g+1)$ is

(i) (-1) (ii) 3 (iii) 1 (iv) 4 (v) 2

19. The degree of polynomial $(6n^2o^2-n+9o-9)$ is

(i) 4 (ii) 5 (iii) 3 (iv) 7 (v) 2

20. The degree of polynomial $(q^2r^2s+3q^2r-7q^2s+5qr^2s-r^2)$ is

(i) 5 (ii) 2 (iii) 4 (iv) 6 (v) 7

21. The degree of polynomial $(4k^3l^2m^3-8k^2l^3m+9kl^3-4km+l^3+3m^2-6)$ is

(i) 5 (ii) 8 (iii) 9 (iv) 10 (v) 7

22. The coefficient of term f in polynomial $(9fg-f-3g-2)$ is

(i) -3 (ii) 1 (iii) 0 (iv) -1 (v) -2

23. The coefficient of term ij in polynomial $(-7ij^2-9ij-9i+j)$ is

(i) -11 (ii) -10 (iii) -7 (iv) -9 (v) -8

24. The coefficient of term fg in polynomial $(-6e^2f^2-7e^2g^2-8ef+5fg^2+4fg)$ is

(i) 4 (ii) 6 (iii) 5 (iv) 2 (v) 3

25. The coefficient of term c in polynomial $(-3a^3b+7a^3c^2+4a^2b^2+4ab^3c-2ac-6b^3c^2+c)$ is

(i) 1 (ii) 4 (iii) 2 (iv) 0 (v) -1

26. Which of the following algebraic expressions is a monomial?

(i) $(5d^3e^3f-d^2e^2f^2+9d^2ef^2+8d)$ (ii) $(-7d^2ef^3)$ (iii) $(9d^3e^3f^3+d^3f^2)$ (iv) $(3d^3e^3f+9de^3f-2de^2f^2)$

(v) $(7d^2e^3f+6d^2e^2f^3+6de^3+7ef^2)$

27. Which of the following algebraic expressions is a binomial?

(i) $(-5w^3xy+8w^2x^3y+3w^2x^2y^3-7x^3y^2)$ (ii) $(-9w^2x^2y)$ (iii) $(7w^3x^3y-5w^2xy^2-x^2y^3-9y)$

(iv) $(-3w^3x^3-5wx)$ (v) $(5w^3xy^2-9x^3y^3+3y)$

28. Which of the following algebraic expressions is a trinomial?

(i) $(7s^3t+8st^3-8st^2u^3+4t^3u)$ (ii) $(4s^3u-5st^3u^2+5st^3u+9t^3u)$ (iii) $5stu^2$ (iv) $(6s^2t^3u+3t^3)$

(v) $(6st^3-9stu^2+6t)$

29. Which of the following algebraic expressions is a constant polynomial?

(i) $(-8d^3e^2f-6d^2)$ (ii) $(-8d^3ef-4d^3e-d^2e^3)$ (iii) $(-6d^3ef^2+2d^3e+5d^3f^3+7d^2)$ (iv) (-3)

(v) $(-3d^3e^3f^3)$

30. Which of the following algebraic expressions is a zero polynomial?

(i) 0 (ii) $(7a^3+9bc^2)$ (iii) $(2a^3b^2c^3+6a^2b^2c-8ab^2-9b)$ (iv) $(6a^3b^2c+7a^3c-6ac^2)$ (v) $(-6a^2bc)$

31. Which of the following are true?

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

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

32. Which of the following are true?

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

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

33. Which of the following are polynomials?

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

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

c) $(x+y)$

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

e) x^2

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

34. Which of the following are not polynomials?

a) $100x^2$

b) $(10x+6y)$

c) $(20x^2-18xy-18y^2)$

d) $\frac{(10x+6y)}{(2x-3y)}$

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

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

35. Which of the following are not polynomials?

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

b) $(12x-6y)$

c) $16x^2$

d) $\sqrt{x}$

e) $(5x+9y)$

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

36. Which of the following are not polynomials?

a) $(12x-10y)$

b) $\sqrt{x}$

c) $64x^2$

d) $(84x^2+50xy-100y^2)$

e) $\frac{(7x+10y)}{(12x-10y)}$

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

Assignment Key

1) (i)	2) (i)	3) (iv)	4) (iii)	5) (ii)	6) (iii)
7) (v)	8) (v)	9) (v)	10) (ii)	11) (v)	12) (v)
13) (ii)	14) (iii)	15) (iv)	16) (iv)	17) (iii)	18) (v)
19) (i)	20) (i)	21) (ii)	22) (iv)	23) (iv)	24) (i)
25) (i)	26) (ii)	27) (iv)	28) (v)	29) (iv)	30) (i)
31) (i)	32) (ii)	33) (iv)	34) (iii)	35) (v)	36) (ii)