



1. The value of  $2mno + (-4mno)$  is

- (i)  $(-3mno)$  (ii)  $(-5mno)$  (iii)  $(-2mno)$  (iv)  $mno$  (v)  $(-mno)$

2. The value of  $\frac{1}{2}v - \frac{1}{2}v$  is

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

3. The coefficient of term  $q^2r^2s$  in polynomial  $(-q^2r^2s - 8qr^2 - 4qs^2 + 5r^2s^2 + 9rs)$  is

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

4. The value of  $\frac{1}{2}y(\frac{3}{4}x^2yz + \frac{3}{5}xz)$  is

- (i)  $(\frac{3}{8}x^2y^2z + \frac{3}{10}xyz)$  (ii)  $(\frac{3}{8}x^2y^2z + \frac{1}{10}xyz)$  (iii)  $(\frac{3}{10}x^2y^2z + \frac{3}{10}xyz)$  (iv)  $(\frac{3}{8}x^2y^2z + \frac{1}{2}xyz)$

- (v)  $(\frac{1}{2}x^2y^2z + \frac{3}{10}xyz)$

5. Which of the following terms can be added to  $(-6i)$ ?

- (i)  $(-3j)$  (ii)  $6h$  (iii)  $5ij$  (iv)  $5hi$  (v)  $8i$

6. The sum of the expressions  $(-14vw + 7v - 7)$ ,  $(-7vw + w + 7)$ ,  $(-3vw - 3w - 8)$ ,  $(9vw + 2v - 9)$ ,  $(-14vw - 8v + 6w)$  is

- (i)  $(-29vw - 2v + 4w - 17)$  (ii)  $(-29vw + v + 4w - 17)$  (iii)  $(-30vw + v + 4w - 17)$  (iv)  $(-28vw + v + 4w - 17)$   
(v)  $(-29vw + 3v + 4w - 17)$

7. The value of  $5q^4 + (-6q^4) + (-9q^4) + (-8q^4)$  is

- (i)  $(-17q^4)$  (ii)  $(-15q^4)$  (iii)  $(-18q^4)$  (iv)  $(-19q^4)$  (v)  $(-20q^4)$

8. The value of  $(-k^4 - 9k - 8) + (-k^5 - 7k^4 + 5k) + (2k^4 - 3k^3 - k^2) + (9k^5 - 2k^4 + 2k^2)$  is

- (i)  $(9k^5 - 8k^4 - 3k^3 + k^2 - 4k - 8)$  (ii)  $(10k^5 - 8k^4 - 3k^3 + k^2 - 4k - 8)$  (iii)  $(6k^5 - 8k^4 - 3k^3 + k^2 - 4k - 8)$   
(iv)  $(8k^5 - 8k^4 - 3k^3 + k^2 - 4k - 8)$  (v)  $(7k^5 - 8k^4 - 3k^3 + k^2 - 4k - 8)$

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

- (i)  $0$  (ii)  $(-9d^3e^3 - 8d^2e^2 + 2df^3 + 8e^2f)$  (iii)  $3d^3e^2f^3$  (iv)  $(7d^3e^3 + 6d^2e^3f - de^2f^2)$  (v)  $(d^3e^3 - 9e^3f^2)$

10. The value of  $(-5st) + (-5st)$  is

- (i)  $(-12st)$  (ii)  $(-8st)$  (iii)  $(-11st)$  (iv)  $(-10st)$  (v)  $(-9st)$

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

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

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

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

13. The value of  $1(-3vw - 3v)$  is

- (i)  $(-3vw - 6v)$  (ii)  $(-4vw - 3v)$  (iii)  $(-3vw)$  (iv)  $(-2vw - 3v)$  (v)  $(-3vw - 3v)$

14. The value of  $3d^2 - (-8d^2) - (-d^2)$  is

- (i)  $11d^2$  (ii)  $12d^2$  (iii)  $15d^2$  (iv)  $9d^2$  (v)  $13d^2$

15. The value of  $2o^2q^2 \times 7o^2p$  is

- (i)  $11o^4pq^2$  (ii)  $13o^4pq^2$  (iii)  $14o^4pq^2$  (iv)  $17o^4pq^2$  (v)  $15o^4pq^2$

16. The quotient when  $(-6r^4 + 9r^3 - r^2 + 3r + 5)$  is divided by  $(r + 2)$  is

- (i)  $(-8r^3 + 21r^2 - 43r + 89)$  (ii)  $(-6r^3 + 21r^2 - 43r + 89)$  (iii)  $(-5r^3 + 21r^2 - 43r + 89)$   
(iv)  $(-4r^3 + 21r^2 - 43r + 89)$  (v)  $(-7r^3 + 21r^2 - 43r + 89)$

17. Which of the following are not polynomials?

a)  $\frac{(7x+4y)}{(12x-9y)}$

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

c)  $9x^2$

d)  $(7x+4y)$

e)  $(84x^2 - 15xy - 36y^2)$

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

18. Which of the following terms can be added to  $(-5x^2wy)$ ?

- (i)  $(-3wx^2y^2)$  (ii)  $(-6wx^2y)$  (iii)  $(-8wxy)$  (iv)  $5wxy^2$  (v)  $(-6w^2xy^2)$

19. The sum of the terms  $(-9i), (-i), 8, (-5), 7$  is

- (i)  $(-10i + 10)$  (ii)  $(-10i + 7)$  (iii)  $(-9i + 10)$  (iv)  $(-10i + 13)$  (v)  $(-11i + 10)$

20. The quotient when  $(-4h^2 - h + 7)$  is divided by  $(h - 8)$  is

- (i)  $(-2h - 33)$  (ii)  $(-3h - 33)$  (iii)  $(-5h - 33)$  (iv)  $(-7h - 33)$  (v)  $(-4h - 33)$

21. The product of the terms  $4m, 2m, n, 5, (-2)$  is

- (i)  $(-80m^2no)$  (ii)  $(-77m^2no)$  (iii)  $(-79m^2no)$  (iv)  $(-83m^2no)$  (v)  $(-81m^2no)$

22. The value of  $(-3x-y+2) - (-3xy-x-9)$  is

- (i)  $(4xy-2x-y+11)$  (ii)  $(3xy-2x-y+11)$  (iii)  $(2xy-2x-y+11)$  (iv)  $(3xy-4x-y+11)$   
(v)  $(3xy+x-y+11)$

23. The value of  $(-3t^3+9t^2+6) + (8t^5-5t^4+6)$  is

- (i)  $(5t^5-5t^4-3t^3+9t^2+12)$  (ii)  $(10t^5-5t^4-3t^3+9t^2+12)$  (iii)  $(9t^5-5t^4-3t^3+9t^2+12)$   
(iv)  $(8t^5-5t^4-3t^3+9t^2+12)$  (v)  $(7t^5-5t^4-3t^3+9t^2+12)$

24. The coefficient of term  $n$  in polynomial  $(5n^4-n^3+5n^2+5n-2)$  is

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

25. Which of the following terms can be subtracted from  $(-9v^4)$ ?

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

## Assignment Key

1) (iii)	2) (ii)	3) (iii)	4) (i)	5) (v)	6) (ii)
7) (iii)	8) (iv)	9) (i)	10) (iv)	11) (iii)	12) (iv)
13) (v)	14) (ii)	15) (iii)	16) (ii)	17) (iii)	18) (ii)
19) (i)	20) (v)	21) (i)	22) (ii)	23) (iv)	24) (iii)
25) (iii)					