



1. Which of the following is a like term of  $3m^2$  ?

- (i)  $(-7mn^2o)$  (ii)  $(-4no)$  (iii)  $(-9m^2)$  (iv)  $(-7o)$  (v)  $2mno^2$

2. The value of  $(-2g+4) \times (8g^2-2g) \times (-2g^2-3)$  is

- (i)  $(32g^5-72g^4+64g^3-108g^2+24g)$  (ii)  $(30g^5-72g^4+64g^3-108g^2+24g)$   
(iii)  $(33g^5-72g^4+64g^3-108g^2+24g)$  (iv)  $(31g^5-72g^4+64g^3-108g^2+24g)$   
(v)  $(35g^5-72g^4+64g^3-108g^2+24g)$

3. The coefficient of term  $q$  in polynomial  $(7q-5)$  is

- (i) 8 (ii) 6 (iii) 7 (iv) 5 (v) 9

4. Which of the following is a factor of  $(10x^3+yz^2)$  ?

- (i) no factors (ii)  $10y$  (iii)  $10x^3$  (iv)  $yz^2$  (v)  $10x^2z^2$

5. The value of  $(4cd-7c-1) - (6c+8d-1)$  is

- (i)  $(4cd-13c-8d)$  (ii)  $(4cd-16c-8d)$  (iii)  $(3cd-13c-8d)$  (iv)  $(4cd-10c-8d)$  (v)  $(5cd-13c-8d)$

6. The value of  $(-7j^2-7j+6) \times (-2j^2-3j+3)$  is

- (i)  $(14j^4+35j^3-12j^2-39j+18)$  (ii)  $(16j^4+35j^3-12j^2-39j+18)$  (iii)  $(13j^4+35j^3-12j^2-39j+18)$   
(iv)  $(15j^4+35j^3-12j^2-39j+18)$  (v)  $(12j^4+35j^3-12j^2-39j+18)$

7. The value of  $3v^2 \times (-v^2) \times v$  is

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

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

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

9. Which of the following are polynomials?

a)  $x^2$

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

c)  $(x+y)$

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

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

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

10. The value of  $(2a-2) + (-6a+5)$  is

(i)  $(-6a+3)$  (ii)  $(-3a+3)$  (iii)  $(-2a+3)$  (iv)  $(-4a+3)$  (v)  $(-5a+3)$

11. The remainder when  $(-n)$  is divided by  $(-9)$  is

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

12. The value of  $2b - (-b)$  is

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

13. Which of the following terms is a like term of  $(-2s^4)$ ?

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

14. The remainder when  $(-9r+6)$  is divided by  $(r-9)$  is

(i)  $(-74)$  (ii)  $(-73)$  (iii)  $(-78)$  (iv)  $(-75)$  (v)  $(-76)$

15. The degree of the polynomial  $(w^5 + 9w^4 - 5w^3 + 8w - 7)$  is

(i)  $2$  (ii)  $5$  (iii)  $4$  (iv)  $8$  (v)  $6$

16. The value of  $\frac{1}{4}\sqrt{5} - \frac{3}{5}\sqrt{5} - \frac{1}{2}\sqrt{5}$  is

(i)  $(-\frac{3}{4}\sqrt{5})$  (ii)  $(-\frac{17}{20}\sqrt{5})$  (iii)  $(-\frac{19}{20}\sqrt{5})$  (iv)  $(-\frac{17}{18}\sqrt{5})$  (v)  $(-\frac{17}{22}\sqrt{5})$

17.  $(-18x^5 + 45x^4 - 4x^3 - 39x^2 + 24x - 4)$  divided by  $(-18x^3 + 27x^2 - 13x + 2) =$

(i)  $(x^2 - x + 2)$  (ii)  $(x^2 - 2x - 2)$  (iii)  $(x^2 + x - 2)$  (iv)  $(x^2 - x - 2)$  (v)  $(x^2 - 2)$

18. The value of  $2pr \times 9q \times (-5q) \times (-2)$  is

(i)  $179pq^2r$  (ii)  $183pq^2r$  (iii)  $181pq^2r$  (iv)  $180pq^2r$  (v)  $178pq^2r$

19. The value of  $\frac{1}{4}(\frac{2}{3}c^2 + \frac{3}{4}c)$  is

(i)  $(\frac{1}{6}c^2 + \frac{1}{16}c)$  (ii)  $(\frac{1}{6}c^2 + \frac{5}{16}c)$  (iii)  $(\frac{1}{8}c^2 + \frac{3}{16}c)$  (iv)  $(\frac{1}{4}c^2 + \frac{3}{16}c)$  (v)  $(\frac{1}{6}c^2 + \frac{3}{16}c)$

20. The coefficient of term  $f^3g^2h$  in polynomial  $(8f^3g^2h - 6f^3gh - 8f^3g - 2fg^3h^3 - 7fg^2 - 5fh - 3g^3h^3)$  is

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

21. The value of  $\frac{3}{5}s^2t^2 + \frac{1}{2}s^2t^2 + \frac{2}{3}s^2t^2 + \frac{1}{2}s^2t^2$  is

- (i)  $\frac{30}{13}s^2t^2$  (ii)  $\frac{32}{15}s^2t^2$  (iii)  $\frac{34}{15}s^2t^2$  (iv)  $\frac{38}{17}s^2t^2$  (v)  $\frac{12}{5}s^2t^2$

22. The constant term in polynomial  $(-11ab - 5a + 8b + 3)$  is

- (i) 1 (ii) 6 (iii) 4 (iv) 3 (v) 2

23. Which of the following terms can be added to  $(-9p^2o^2q^2)$ ?

- (i)  $6o^2p^2q^2$  (ii)  $2op^2q$  (iii)  $(-5op^2q^2)$  (iv)  $o^2p^2q$  (v)  $(-9o^2pq)$

24. The value of  $\frac{1}{2}p \times \frac{2}{3}pr \times \frac{1}{2}qr \times \frac{1}{2}pq$  is

- (i)  $\frac{1}{12}p^3q^2r^2$  (ii)  $\frac{1}{14}p^3q^2r^2$  (iii)  $\frac{1}{10}p^3q^2r^2$  (iv)  $(-\frac{1}{12}p^3q^2r^2)$  (v)  $\frac{1}{4}p^3q^2r^2$

25. The value of  $9cde + 6cde$  is

- (i)  $15cde$  (ii)  $14cde$  (iii)  $18cde$  (iv)  $16cde$  (v)  $12cde$

## Assignment Key

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