



1. The value of  $9c + (-9c)$  is

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

2. The value of  $(-s) + (-8s) + (-6s) + (-4s)$  is

- (i)  $(-20s)$  (ii)  $(-22s)$  (iii)  $(-19s)$  (iv)  $(-18s)$  (v)  $(-16s)$

3. The value of  $7g^2 + (-3g^2) + (-9g^2)$  is

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

4. The value of  $7s^4 + 8s^4 + 5s^4 + (-5s^4)$  is

- (i)  $16s^4$  (ii)  $12s^4$  (iii)  $14s^4$  (iv)  $15s^4$  (v)  $18s^4$

5. The value of  $(-6r+2) + (8r-2)$  is

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

6. The value of  $(7z^2 - 8z - 7) + (-4z^2 - 4z + 3)$  is

- (i)  $(4z^2 - 12z - 4)$  (ii)  $(-12z - 4)$  (iii)  $(5z^2 - 12z - 4)$  (iv)  $(3z^2 - 12z - 4)$  (v)  $(2z^2 - 12z - 4)$

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

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

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

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

9. The value of  $\frac{3}{4}y + \frac{2}{3}y$  is

- (i)  $\frac{19}{12}y$  (ii)  $\frac{5}{4}y$  (iii)  $\frac{17}{12}y$  (iv)  $\frac{17}{14}y$  (v)  $\frac{17}{10}y$

10. The value of  $\frac{3}{5}m + \frac{1}{2}m + \frac{1}{3}m + \frac{3}{4}m$  is

- (i)  $\frac{135}{62}m$  (ii)  $\frac{43}{20}m$  (iii)  $\frac{133}{60}m$  (iv)  $\frac{131}{60}m$  (v)  $\frac{127}{58}m$

11. The value of  $\frac{1}{2}b^2 + \frac{1}{2}b^2 + \frac{2}{5}b^2$  is

- (i)  $\frac{9}{7}b^2$  (ii)  $\frac{9}{5}b^2$  (iii)  $\frac{7}{5}b^2$  (iv)  $b^2$  (v)  $\frac{5}{3}b^2$

12. The value of  $\frac{2}{3}d^4 + \frac{3}{4}d^4 + \frac{1}{2}d^4 + \frac{1}{2}d^4$  is

- (i)  $\frac{33}{14}d^4$  (ii)  $\frac{9}{4}d^4$  (iii)  $\frac{5}{2}d^4$  (iv)  $\frac{31}{12}d^4$  (v)  $\frac{29}{12}d^4$

13. The value of  $(-9a) - 9a$  is

- (i)  $(-19a)$  (ii)  $(-17a)$  (iii)  $(-18a)$  (iv)  $(-15a)$  (v)  $(-20a)$

14. The value of  $(-n^2) - n^2 - 2n^2$  is

- (i)  $(-4n^2)$  (ii)  $(-3n^2)$  (iii)  $(-2n^2)$  (iv)  $(-6n^2)$  (v)  $(-5n^2)$

15. The value of  $6b^3 - 6b^3$  is

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

16. The value of  $(-5w^5) - w^5 - (-2w^5)$  is

- (i)  $(-4w^5)$  (ii)  $(-6w^5)$  (iii)  $(-5w^5)$  (iv)  $(-3w^5)$  (v)  $(-2w^5)$

17. The value of  $(3e-3) - (6e+2)$  is

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

18. The value of  $(6v^2 - 3v - 2) - (5v^2 - 3v + 4)$  is

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

19. The value of  $(2u^5 + 7u^4 - 6u) - (8u^5 - u^4 - 1)$  is

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

20. The value of  $(4p^4 + 2p^3 + p) - (3p^5 - 6p^4 + 2p^2) - (3p^3 - p^2 - 1)$  is

- (i)  $(-2p^5 + 10p^4 - p^3 - p^2 + p + 1)$  (ii)  $(10p^4 - p^3 - p^2 + p + 1)$  (iii)  $(-6p^5 + 10p^4 - p^3 - p^2 + p + 1)$   
(iv)  $(-4p^5 + 10p^4 - p^3 - p^2 + p + 1)$  (v)  $(-3p^5 + 10p^4 - p^3 - p^2 + p + 1)$

21. The value of  $\frac{1}{5}q - \frac{1}{2}q$  is

- (i)  $(-\frac{3}{10}q)$  (ii)  $(-\frac{1}{4}q)$  (iii)  $(-\frac{1}{10}q)$  (iv)  $(-\frac{1}{2}q)$  (v)  $(-\frac{3}{8}q)$

22. The value of  $\frac{4}{5}i^2 - \frac{3}{4}i^2 - \frac{2}{3}i^2$  is

- (i)  $(-\frac{37}{58}i^2)$  (ii)  $(-\frac{7}{12}i^2)$  (iii)  $(-\frac{37}{60}i^2)$  (iv)  $(-\frac{13}{20}i^2)$  (v)  $(-\frac{37}{62}i^2)$

23. The value of  $\frac{3}{5}b^3 - \frac{1}{2}b^3$  is

- (i)  $\frac{1}{10}b^3$  (ii)  $\frac{1}{8}b^3$  (iii)  $\frac{3}{10}b^3$  (iv)  $(-\frac{1}{10}b^3)$  (v)  $\frac{1}{12}b^3$

24. The value of  $\frac{3}{4}t^5 - \frac{1}{2}t^5 - \frac{1}{2}t^5$  is

- (i)  $\frac{1}{4}t^5$  (ii)  $(-\frac{1}{4}t^5)$  (iii)  $(-\frac{1}{2}t^5)$  (iv)  $(-\frac{3}{4}t^5)$  (v)  $(-\frac{1}{6}t^5)$

25. The sum of the terms  $7, (-8s), (-6), 2s, (-4)$  is

- (i)  $(-6s-6)$  (ii)  $(-6s)$  (iii)  $(-7s-3)$  (iv)  $(-5s-3)$  (v)  $(-6s-3)$

26. The sum of the terms  $8k, 8, (-8), 5jk, (-1)$  is

- (i)  $(5jk+8k-1)$  (ii)  $(6jk+8k-1)$  (iii)  $(4jk+8k-1)$  (iv)  $(5jk+10k-1)$  (v)  $(5jk+5k-1)$

27. The sum of the terms  $6jl, (-6k), 4, 5jk, 5jl$  is

- (i)  $(5jk+8jl-6k+4)$  (ii)  $(5jk+13jl-6k+4)$  (iii)  $(4jk+11jl-6k+4)$  (iv)  $(5jk+11jl-6k+4)$   
(v)  $(6jk+11jl-6k+4)$

28. The sum of the expressions  $(5m-20), (-m-1), (-5m+1), (m+5), (8m-5)$  is

- (i)  $(7m-20)$  (ii)  $(8m-22)$  (iii)  $(8m-17)$  (iv)  $(9m-20)$  (v)  $(8m-20)$

29. The sum of the expressions  $(8ef-3f), (9e-f), (9ef-7), (3ef-3f), (-3ef+3e)$  is

- (i)  $(17ef+14e-7f-7)$  (ii)  $(17ef+10e-7f-7)$  (iii)  $(18ef+12e-7f-7)$  (iv)  $(16ef+12e-7f-7)$   
(v)  $(17ef+12e-7f-7)$

30. The sum of the expressions  $(4g-8), (-4g+9), (3g+9), (-7g-8), (7g+4)$  is

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

31. The sum of the expressions  $(-4vw-9v-5), (-3vw+3v-4w), (3vw-3v-7w), (2vw+3v-8), (5v-4w+3)$  is

- (i)  $(-2vw+2v-15w-10)$  (ii)  $(-vw-v-15w-10)$  (iii)  $(-2vw-4v-15w-10)$   
(iv)  $(-2vw-v-15w-10)$  (v)  $(-3vw-v-15w-10)$

32. The value of  $no + (-5no)$  is

- (i)  $(-3no)$  (ii)  $(-6no)$  (iii)  $(-5no)$  (iv)  $(-4no)$  (v)  $(-no)$

33. The value of  $(-2o^2p^2) + (-5o^2p^2) + 4o^2p^2 + 6o^2p^2$  is

- (i)  $3o^2p^2$  (ii)  $2o^2p^2$  (iii)  $6o^2p^2$  (iv)  $0$  (v)  $4o^2p^2$

34. The value of  $8/mn + 6/mn$  is

- (i)  $11/mn$  (ii)  $15/mn$  (iii)  $14/mn$  (iv)  $13/mn$  (v)  $16/mn$

35. The value of  $7a^3b^3c^3 + (-5a^3b^3c^3) + 5a^3b^3c^3 + (-3a^3b^3c^3)$  is

- (i)  $5a^3b^3c^3$  (ii)  $4a^3b^3c^3$  (iii)  $a^3b^3c^3$  (iv)  $7a^3b^3c^3$  (v)  $3a^3b^3c^3$

36. The value of  $(-7cd - 3c - 4d) + (6cd - 6d + 2)$  is

- (i)  $(-cd - 6c - 10d + 2)$  (ii)  $(-3c - 10d + 2)$  (iii)  $(-cd - 3c - 10d + 2)$  (iv)  $(-cd - c - 10d + 2)$   
(v)  $(-2cd - 3c - 10d + 2)$

37. The value of  $(3m^2 - 8mn^2 + 6m - 9n) + (-2m^2 - 7mn + n^2 + 5n)$  is

- (i)  $(m^2 - 6mn^2 - 7mn + 6m + n^2 - 4n)$  (ii)  $(m^2 - 8mn^2 - 7mn + 6m + n^2 - 4n)$   
(iii)  $(m^2 - 10mn^2 - 7mn + 6m + n^2 - 4n)$  (iv)  $(-8mn^2 - 7mn + 6m + n^2 - 4n)$   
(v)  $(2m^2 - 8mn^2 - 7mn + 6m + n^2 - 4n)$

38. The value of  $(8abc - 5bc - 8b) + (-2a + 5b + 6)$  is

- (i)  $(8abc - 5a - 5bc - 3b + 6)$  (ii)  $(8abc + a - 5bc - 3b + 6)$  (iii)  $(9abc - 2a - 5bc - 3b + 6)$   
(iv)  $(7abc - 2a - 5bc - 3b + 6)$  (v)  $(8abc - 2a - 5bc - 3b + 6)$

39. The value of  $\frac{2}{5}jk + \frac{1}{3}jk$  is

- (i)  $\frac{11}{13}jk$  (ii)  $\frac{13}{15}jk$  (iii)  $\frac{3}{5}jk$  (iv)  $\frac{11}{17}jk$  (v)  $\frac{11}{15}jk$

40. The value of  $\frac{1}{2}a^2b^2 + \frac{3}{5}a^2b^2 + \frac{1}{4}a^2b^2 + \frac{1}{5}a^2b^2$  is

- (i)  $\frac{3}{2}a^2b^2$  (ii)  $\frac{29}{20}a^2b^2$  (iii)  $\frac{29}{18}a^2b^2$  (iv)  $\frac{31}{20}a^2b^2$  (v)  $\frac{33}{20}a^2b^2$

41. The value of  $\frac{4}{5}pqr + \frac{2}{3}pqr$  is

- (i)  $\frac{4}{3}pqr$  (ii)  $\frac{8}{5}pqr$  (iii)  $\frac{22}{13}pqr$  (iv)  $\frac{22}{17}pqr$  (v)  $\frac{22}{15}pqr$

42. The value of  $7ef - 7ef$  is

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

43. The value of  $4op - 6op - (-9op) - 6op$  is

- (i) 0 (ii)  $2op$  (iii)  $3op$  (iv)  $op$  (v)  $(-2op)$

44. The value of  $6k^2l^2m^2 - 4k^2l^2m^2$  is

- (i)  $k^2l^2m^2$  (ii)  $5k^2l^2m^2$  (iii) 0 (iv)  $3k^2l^2m^2$  (v)  $2k^2l^2m^2$

45. The value of  $(-6s^2t^2u^2) - (-9s^2t^2u^2) - (-5s^2t^2u^2) - 3s^2t^2u^2$  is

- (i)  $7s^2t^2u^2$  (ii)  $5s^2t^2u^2$  (iii)  $2s^2t^2u^2$  (iv)  $4s^2t^2u^2$  (v)  $6s^2t^2u^2$

46. The value of  $(-p+q-8) - (7p-5q-5)$  is

- (i)  $(-8p+4q-3)$  (ii)  $(-8p+6q-3)$  (iii)  $(-7p+6q-3)$  (iv)  $(-9p+6q-3)$  (v)  $(-8p+8q-3)$

47. The value of  $(-2xy+yz+2z) - (9y+8z-4)$  is

- (i)  $(-2xy+4yz-9y-6z+4)$  (ii)  $(-2xy-yz-9y-6z+4)$  (iii)  $(-xy+yz-9y-6z+4)$   
(iv)  $(-2xy+yz-9y-6z+4)$  (v)  $(-3xy+yz-9y-6z+4)$

48. The value of  $\frac{1}{2}qr - \frac{3}{4}qr$  is

- (i)  $(-\frac{1}{4}qr)$  (ii)  $\frac{1}{4}qr$  (iii)  $(-\frac{1}{2}qr)$  (iv)  $(-\frac{1}{6}qr)$  (v)  $(-\frac{3}{4}qr)$

49. The value of  $\frac{1}{3}no - \frac{2}{3}no - \frac{1}{3}no - \frac{1}{2}no$  is

- (i)  $(-\frac{3}{2}no)$  (ii)  $(-\frac{7}{8}no)$  (iii)  $(-\frac{7}{6}no)$  (iv)  $(-\frac{7}{4}no)$  (v)  $(-\frac{5}{6}no)$

50. The value of  $\frac{1}{2}w^2x^2y^2 - \frac{1}{5}w^2x^2y^2$  is

- (i)  $\frac{1}{10}w^2x^2y^2$  (ii)  $\frac{3}{10}w^2x^2y^2$  (iii)  $\frac{1}{4}w^2x^2y^2$  (iv)  $\frac{1}{2}w^2x^2y^2$  (v)  $\frac{3}{8}w^2x^2y^2$

## Assignment Key

1) (i)	2) (iii)	3) (v)	4) (iv)	5) (ii)	6) (iv)
7) (iv)	8) (iv)	9) (iii)	10) (iv)	11) (iii)	12) (v)
13) (iii)	14) (i)	15) (i)	16) (i)	17) (iv)	18) (iii)
19) (iii)	20) (v)	21) (i)	22) (iii)	23) (i)	24) (ii)
25) (v)	26) (i)	27) (iv)	28) (v)	29) (v)	30) (i)
31) (iv)	32) (iv)	33) (i)	34) (iii)	35) (ii)	36) (iii)
37) (ii)	38) (v)	39) (v)	40) (iv)	41) (v)	42) (i)
43) (iv)	44) (v)	45) (ii)	46) (ii)	47) (iv)	48) (i)
49) (iii)	50) (ii)				