IX Class

POLYNOMIALS

Exercises 1 to 3

I. One mark questions:

1. Find the value of $\frac{2}{3}x^3$ when $x=-1.5$

2. If $A=3x^3-x+4x^2-1,\ B=5-3x^2+4x^3+4x$, find A+B.

3. If $A=5x^3-3x^2+2x-5,\ B=3x^3-x^2-x+2$, find A-B

4. Find the product of $\left(3x^2-5x+6\right)$and$\left(4x-3\right)$

5. $A=3x^2-4x+5,\ B=x^2-2x-1$, find B × A

6. Divide : $\left(x^2-5x+6\right)\div\left(x-2\right)$

7. Simplify : $\left(-5x^2\right)+\left(5.2x^2\right)+\left(1.5x^2\right)-\left(0.7x^2\right)$.

8. Write the additive inverse of the polynomial x^2+3x-1

II. Choose the correct answer :

9. The degree of the monomial $-2x^4$ is [ ]

   a) 1 b) -2 c) -1 d) 4

10. The co-efficient of the monomial -1.2 x^3 is [ ]

    a) 3 b) -1.2 c) 0 d) none

11. The co-efficient of $\sqrt{3x^2}$ is [ ]

    a) $\sqrt{3}$ b) 1 c) 3 d) 2

12. Degree of the monomial $\sqrt{\frac{2}{3}x^3}$ is [ ]

    a) $\frac{2}{3}$ b) 3 c) $\frac{3}{2}$ d) 1

13. Simplified form of $\left(0.5x^2\right)+\left(1.3x^2\right)+\left(-5.1x^2\right)-\left(-2.8x^2\right)$ is [ ]

    a) $4.6x^2$ b) $-0.5x^2$ c) $0.5x^2$ d) $0.6x^2$

14. The additive inverse of x^2-x+2 is [ ]

    a) $-x^2+x-2$ b) x^2+x+2 c) x^2+x-2 d) $-x^2-x-2$

15. The additive identity of polynomials is [ ]

a) 1 b) x c) 0 d) none

16. Addition of polynomials is [ ]

a) Closure b) Commutative c) Associate d) All the above

17. $A = 2x + 3,\ B = x^3 - 1$ then $A \times B$ [ ]

a) $2x^3 - 2x - 3$ b) $2x^3 + 3x^2 - 2x - 3$ c) $3x^2 - 2x + 3$ d) none

18. The value of $7x^2$ when $x = 0.7$ is [ ]

a) 4.33 b) 34.3 c) 3.43 d) 43.3

III. Fill in the blanks:

19. The degree of -2.7 is _____

20. If $A = 3x - 1,\ B = -2x + 5$ then B-A = _____

21. Co-efficient of -3.1 x^3 is _____

22. The value of -2.3 x^3 when x = -1 is _____

23. $\left(0.6x^3\right) + \left(0.25x^3\right) - \left(1.7x^3\right) =$ _____

24. $A = 4x^2 - 1,\ B = 3x^3$ then $A \times B$ = _____

25. $\left(3x^3 - x + 4x^2 - 1\right) + \left(x^3 + 5x + 5\right)$ = _____

26. Multiplicative identity of polynomials is _____