## CHOOSE THE CORRECT ONE

1. A cubic polynomial is a polynomial with degree
(A) 1
(B) 3
(C) 0
(D) 2
2. A polynomial of degree 5 in $x$ has at most
(A) 5 terms
(B) 4 terms
(C) 6 terms
(D) 10 terms
3. The coefficient of $x^{3}$ in the polynomial $5+2 x+3 x^{2}-7 x^{3}$ is
(A) 5
(B) 2
(C) 7
(D) -7
4. The value of $P(x)=x^{2}-7 x+12$ at $x=3$ is :-
(A) 42
(B) 0
(C) 8
(D) -6
5. A linear polynomial :-
(A) may have no zero
(B) may have one zero
(C) has one and only one zero always
(D) may have more than one zero
6. The zeroes of the polynomial $\mathrm{p}(\mathrm{x})=\mathrm{x}(\mathrm{x}-1)(\mathrm{x}-2)$ are :-
(A) 0
(B) $0,-1,-2$
(C) $0,1,-2$
(D) $0,1,2$
7. When the polynomial $x^{3}+3 x^{2}+3 x+1$ is divided by $x+1$, the remainder is :-
(A) 1
(B) 8
(C) 0
(D) -6
8. If the polynomial $2 x^{3}-3 x^{2}+2 x-4$ is divided by $x-2$, then the remainder is :-
(A) -4
(B) 4
(C) -40
(D) 2
9. The value of $k$ for which $x-1$ is a factor of the polynomial $4 x^{3}+3 x^{2}-4 x+k$ is :-
(A) 3
(B) 0
(C) 1
(D) -3
10. The value of $k$ for which $x+1$ is a factor of the polynomial $x^{3}+x^{2}+x+k$ is :-
(A) 0
(B) 2
(C) 1
(D) -1
11. The value of $m$ for which $x-2$ is a factor of the polynomial $x^{4}-x^{3}+2 x^{2}-m x+4$ is :-
(A) 10
(B) -10
(C) 4
(D) 9
12. The factors of $2 x^{2}-3 x-2$ are :-
(A) $(2 x-1)(x+2)$
(B) $(2 x+1)(x-2)$
(C) $(x+1)(x-2)$
(D) $(x-1)(x+2)$
13. The factors of $12 x^{2}-x-6$ are
(A) $(3 x-2)(4 x+3)$
(B) $(12 x+1)(x-6)$
(C) $(3 x+2)(4 x-3)$
(D) $(12 x-1)(x+6)$
14. The factors of $x^{3}-2 x^{2}-13 x-10$ are :-
(A) $(x-1)(x+2)(x+5)$
(B) $(x-1)(x-2)(x-5)$
(C) $(x+1)(x-2)(x+5)$
(D) $(x+1)(x+2)(x-5)$
15. The expanded form of $(2 x-3 y-z)^{2}$ is :-
(A) $4 x^{2}+9 y^{2}+z^{2}-6 x y+3 y z-2 z x$
(B) $4 x^{2}+9 y^{2}+z^{2}+6 x y+6 y z-2 z x$
(C) $4 x^{2}+9 y^{2}+z^{2}-12 x y-6 y z-4 z x$
(D) $4 x^{2}+9 y^{2}+z^{2}-12 x y+6 y z-4 z x$
16. The expanded form of $(x+y+2 z)^{2}$ is :-
(A) $x^{2}+y^{2}+4 z^{2}+2 x y+2 y z+2 z x$
(B) $x^{2}+y^{2}+4 z^{2}+x y+2 y z+2 z x$
(C) $x^{2}+y^{2}+4 z^{2}+2 x y+4 y z+4 z x$
(D) $x^{2}+y^{2}+4 z^{2}+2 x y+2 y z+4 z x$
17. The expanded form of $\left(x+\frac{1}{3}\right)^{3}$ is :-
(A) $\mathrm{x}^{3}+\frac{1}{9}+3 \mathrm{x}^{2}+3 \mathrm{x}$
(B) $x^{3}+\frac{1}{27}+x^{2}+\frac{1}{3} x$
(C) $x^{3}+\frac{1}{27}+3 x^{2}+x$
(D) $x^{3}+\frac{1}{27}+3 x^{2}+\frac{1}{3} x$
18. $x^{3}+y^{3}+z^{3}-3 x y z$ is :-
(A) $(x+y-z)$
(B) $(x-y+z)^{3}$
(C) $(x+y+z)\left(x^{2}+y^{2}+z^{2}-x y-y z-z x\right)$
(D) $(x+y+z)^{3}-3 x y z$
19. $(\mathrm{a}-\mathrm{b})^{3}+(\mathrm{b}-\mathrm{c})^{3}+(\mathrm{c}-\mathrm{a})^{3}$ is equal to :-
(A) 3 abc
(B) $3 a^{3} b^{3} c^{3}$
(C) $3(a-b)(b-c)(c-a)$
(D) $[\mathrm{a}-(\mathrm{b}+\mathrm{c})]^{3}$
20. $\frac{0.83 \times 0.83 \times 0.83+0.17 \times 0.17 \times 0.17}{0.83 \times 0.83-0.83 \times 0.17+0.17 \times 0.17}$ is equal to :-
(A) 1
(B) $(0.83)^{3}+(0.17)^{3}$
(C) 0
(D) None of these

## EXERCISE \# 1

| Que. | $\mathbf{1}$ | $\mathbf{2}$ | $\mathbf{3}$ | $\mathbf{4}$ | $\mathbf{5}$ | $\mathbf{6}$ | $\mathbf{7}$ | $\mathbf{8}$ | 9 | 10 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Ans. | B | C | D | A | C | D | C | B | D | C |
| Que. | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 |
| Ans. | A | B | C | D | D | C | B | C | C | A |

