

## Multiple Choice Questions

1. Which of the following is not a polynomial?  
A.  $x^2 + \sqrt{2}x + 3$  B.  $x^2 - \sqrt{2}x + 6$   
C.  $x^3 + 3x^2 - 3$  D.  $6x + 4$
2. The degree of the polynomial  $3x^3 - x^4 + 5x + 3$  is  
A. 3 B. -4 C. 4 D. 1
3. Zero of the polynomial  $p(x) = a^2x$ ,  $a \neq 0$  is  
A.  $x = 0$  B.  $x = 1$  C.  $x = -1$  D.  $a = 0$
4. Which of the following is a term of a polynomial?  
A.  $2x$  B.  $\frac{3}{x}$  C.  $\sqrt{x}$  D.  $x^{\sqrt{x}}$
5. If  $p(x) = 5x^2 - 3x + 7$ , then  $p(1)$  equals  
A. -10 B. 9 C. -9 D. 10
6. Factorisation of  $x^3 + 1$  is  
A.  $(x + 1)(x^2 - x + 1)$  B.  $(x + 1)(x^2 + 1)$   
C.  $(x + 1)(x^2 + x + 1)$  D.  $(x - 1)(x^2 - x - 1)$
7. If  $x + y + 2 = 0$ , then  $x^3 + y^3 + 8$  equals  
A.  $(x + y + 2)^3$  B. zero C.  $6xy$  D.  $-6xy$
8. If  $x = 2$  is a zero of the polynomial  $2x^2 + 3x - p$ , then the value of  $p$  is  
A. -4 B. 0 C. 8 D. 14
9.  $x + \frac{1}{x}$  is  
A. a polynomial of degree 1 B. a polynomial of degree 2  
C. a polynomial of degree 3 D. not a polynomial
10. Integral zeroes of the polynomial  $(x + 3)(x - 7)$  are  
A. -3, -7 B. 3, 7 C. -3, 7 D. 3, -7
11. The remainder when  $p(x) = 2x^2 - x - 6$  is divided by  $(x - 2)$  is  
A.  $p(-2)$  B.  $p(2)$  C.  $p(3)$  D.  $p(-3)$
12. If  $2(a^2 + b^2) = (a + b)^2$ , then  
A.  $a + b = 0$  B.  $a = b$  C.  $2a = b$  D.  $ab = 0$