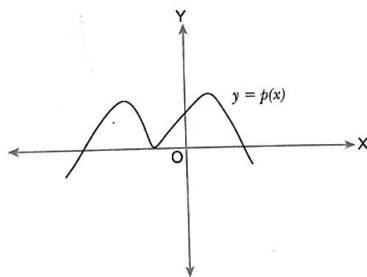


1. The number of zeroes for a polynomial  $p(x)$  where graph of  $y = p(x)$  Fig. 2.1, is  
(a) 3 (b) 4 (c) 0 (d) 5



2. The zeros of the quadratic polynomial  $ax^2 + bx + c, c \neq 0$  are equal, then  
(a)  $c$  and  $a$  have opposite signs      (b)  $c$  and  $b$  have opposite signs  
(c)  $c$  and  $a$  have the same sign      (d)  $c$  and  $b$  have the same sign

3. If the sum of zeroes of polynomial  $ax^2 + 5x - 3a$  is equal to their product, then find the value of  $a$   
(a)  $-5$       (b)  $-3$       (c)  $-\frac{5}{3}$       (d)  $\frac{5}{3}$

4. If  $\alpha$  and  $\beta$  are the zeroes of the quadratic polynomial  $f(x) = x^2 - 4x + 3$ , then the value of  $\alpha^4\beta^3 + \alpha^3\beta^4$  is  
(a)  $104$       (b)  $108$       (c)  $112$       (d)  $5$

5. The quadratic polynomial, the sum of whose zeroes is  $-5$  and their product is  $6$ , is  
(a)  $x^2 + 5x + 6$       (b)  $x^2 - 5x + 6$       (c)  $x^2 - 5x - 6$       (d)  $-x^2 + 5x + 6$

6. The value of  $k$  such that the polynomial  $x^2 - (k+6)x + 2(2k-1)$  has sum of its zeroes equal to half of their product is  
(a)  $-4$       (b)  $4$       (c)  $-7$       (d)  $7$

7. The number of polynomials having zeroes as  $-2$  and  $5$  is  
(a)  $1$       (b)  $2$       (c)  $3$       (d) more than  $3$

8. If  $\alpha$  and  $\beta$  are the zeroes of  $4x^2 + 3x + 7$ , then the value of  $\frac{1}{\alpha} + \frac{1}{\beta}$  is  
(a)  $-\frac{8}{7}$       (b)  $-\frac{3}{7}$       (c)  $\frac{2}{7}$       (d)  $\frac{6}{8}$

9. If the zeroes of the quadratic polynomial  $x^2 + (a+1)x + b$  are  $2$  and  $-3$ , then  
(a)  $a = -7, b = -1$       (b)  $a = 5, b = -1$       (c)  $a = 2, b = -6$       (d)  $a = 0, b = -6$

10. If  $\alpha$  and  $\beta$  are zeroes of the polynomial  $x^2 - p(x+1) + c$  such that  $(\alpha+1)(\beta+1) = 0$ , then the value of  $c$  is  
(a)  $-2$       (b)  $2$       (c)  $-1$       (d)  $1$

11. If one of the zeroes of the quadratic polynomial  $x^2 + 3x + k$  is  $2$ , then the value of  $k$  is  
(a)  $10$       (b)  $-10$       (c)  $-7$       (d)  $-2$

12. The graph of a quadratic polynomial is.....  
(a) straight line      (b) parabola      (c) hyperbola      (d) None of these

13. If  $\alpha$  and  $\beta$  are the zeroes of the polynomial  $2y^2 + 7y + 5$ , then the value of  $\alpha + \beta + \alpha\beta$  is  
(a)  $-1$       (b)  $0$       (c)  $1$       (d)  $2$

14. If one of the zeroes of the quadratic polynomial  $(k-1)x^2 + kx + 1$  is  $-3$ , then the value of  $k$  is  
(a)  $\frac{4}{3}$       (b)  $-\frac{4}{3}$       (c)  $\frac{2}{3}$       (d)  $-\frac{2}{3}$

15. If  $\alpha$  and  $\beta$  are the zeroes of the quadratic polynomial  $f(x) = x^2 + x - 2$ , then the polynomial whose zeroes are  $2\alpha + 1$  and  $2\beta + 1$  is  
(a)  $x^2 + 9$       (b)  $x^2 - 4$       (c)  $x^2 - 9$       (d)  $x^2 + 4$

16. If zeroes  $\alpha$  and  $\beta$  of a polynomial  $x^2 - 7x + k$  are such that  $\alpha - \beta = 1$ , then the value of  $k$  is  
(a) 21      (b) 12      (c) 9      (d) 8

