

**CBT Maths class 10 June 2024**

Q1. If one of the zero of the polynomial  $3x^2 + 8x + k$  is the reciprocal of the other, then the value of  $k$  is

- (a) 3                      (b) -3                      (c)  $1/3$                       (d)  $-1/3$

Correct answer. (a)

Q2. If  $\alpha$  and  $\beta$  are the zeroes of the polynomial  $2x^2 - 13x + 6$  then  $\alpha + \beta$  is equal to

- (a) -3                      (b) 3                      (c)  $13/2$                       (d)  $-13/2$

Correct answer. (C)

Q3. If  $\alpha$  and  $\beta$  are the zeroes of the quadratic polynomial  $x^2 - x - 4$  then the value of

$$1/\alpha + 1/\beta - \alpha.\beta \text{ is}$$

- (a)  $15/4$                       (b)  $-15/4$                       (c) 4                      (d) 5

Correct answer. (a)

Q4. If -1 is a zero of the polynomial  $P(x) = x^2 - 7x - 8$  then the other zero is

- (a) -8                      (b) -7                      (c) 1                      (d) 8

Correct answer. (d)

Q5. Zeroes of a quadratic polynomial  $x^2 - 5x + 6$  are

- (a) -5, 1                      (b) 5, 1                      (c) 2, 3                      (d) -2, -3

Correct answer. (c)

Q6. If  $\alpha$  and  $\beta$  are zeroes of the polynomial  $x^2 - 1$ , then the value of  $\alpha + \beta$  is

- (a) 2                      (b) 1                      (c) -1.                      (d) 10

Correct answer. (d)

Q7. If  $\alpha$  and  $\beta$  are the zeroes of quadratic polynomial  $4x^2 + 5x + 7$  then  $\alpha\beta^2 + \alpha^2\beta + \alpha.\beta$  is

- (a)  $-5/4$                       (b)  $7/16$                       (c)  $-7/16$                       (d)  $7/4$

Correct answer. (c)

Q8. If one of the zero of the polynomial  $p(x) = x^2 - kx - 3$  is 3 then the value of k is

- (a) -3.                      (b) 2.                      (c) -2.                      (d) 0

Correct answer. (b)

Q9. If (-3) is one of the zeroes of the quadratic polynomial  $(k-1)x^2 + kx - 3$  then the sum of the zeroes of the polynomial is

- (a) 2.                      (b) 3.                      (c) 1.                      (d) -2

Correct answer. (d)

Q10. If  $\alpha$  and  $\beta$  are the zeroes of the polynomial  $f(x) = px^2 - 2x + 3p$  and  $\alpha + \beta = \alpha.\beta$  then

P is

- (a)  $2/3$ .                      (b)  $-2/3$ .                      (c)  $1/3$                       (d)  $-1/3$

Correct answer. (a)