21. If (x - 2) is a factor of the polynomial x^3 - 2x^2 - kx + 2k, what is the value of k?
   A. 3
   B. 4
   C. 5
   D. 6

22. What is the degree of the zero polynomial?
   A. 0
   B. 1
   C. Undefined
   D. Infinity

23. The polynomial p(x) = x^4 - 2x^3 + x^2 - 8x + 4 has how many real roots?
   A. 1
   B. 2
   C. 3
   D. 4

24. Which of the following expressions is a quadratic polynomial?
   A. x^2 + √2
   B. x^3 + x^2 + x + 1
   C. 3√x + 2
   D. 2x^2 - 5x + 3

25. If the polynomial x^2 + px + q is divided by x + 1, the remainder is 10. What is p + q?
   A. 9
   B. 10
   C. 11
   D. 12

26. For which of the following values of k will the polynomial x^2 + kx + 64 have two equal roots?
   A. -8
   B. 8
   C. 16
   D. -16

27. What is the coefficient of x^2 in the polynomial (2x^3 + 3x^2 - 5x + 7) - (5x^3 - 2x^2 + x - 3)?
   A. 5
   B. 4
   C. 1
   D. -1

28. If the roots of the quadratic polynomial ax^2 + bx + c = 0 are reciprocal of each other, then which of the following is true?
   A. ac = b^2
   B. a = c
   C. a^2 = bc
   D. ab = c

29. The polynomial x^3 - 4x^2 + x + 6, when divided by x - 2, gives a remainder of:

A. 0
B. 2
C. 4
D. -2

30. Which of the following is not a polynomial function?
A. $y = x^2 + 2x + 1$
B. $y = 5x^{(-2)} + 3$
C. $y = x^5 + 4x^3 - 2x^2 + x$
D. $y = 7$

31. If a and b are the roots of the polynomial $x^2 - x - 1$, what is the value of $a^2 + b^2$?
A. 1
B. 3
C. 5
D. 7

32. If one root of the quadratic equation $x^2 - 3x + k = 0$ is 2, what is the value of k?
A. 2
B. 4
C. 6
D. 8

33. What is the sum of the squares of the zeros of the polynomial $x^2 - 5x + 6$?
A. 25
B. 36
C. 1
D. 30

34. The roots of the polynomial $x^2 - (k/2)x + 16$ are real and equal. Find the value of k.
A. 8
B. 16
C. 4
D. -8

35. If the polynomial $x^3 - 3x^2 + x + 5$ is divided by $x - 1$, then the quotient is:
A. $x^2 - x + 5$
B. $x^2 - 2x + 3$
C. $x^2 - 4x + 5$
D. $x^2 - x + 1$

36. The remainder when $x^3 + 2x^2 + 3x + 4$ is divided by $x + 1$ is:
A. 0
B. 1
C. 2
D. 4

37. Which of the following is a binomial of degree 3?
A. $x^3 - 2x^2$
B. $x^2 - 2$
C. x^3

+ 3
D. 3x - 2

38. If (x + 1) and (x - 2) are factors of the polynomial ax^2 + bx + c, then what is a + b + c?
A. 1
B. -1
C. 2
D. -2

39. What is the discriminant of the quadratic equation 3x^2 - 4x + 1 = 0?
A. 4
B. 16
C. 8
D. -8

40. If the polynomial 2x^3 - 3x^2 - 11x + 6 is divided by the polynomial x - 1, then the remainder is:
A. 0
B. 1
C. -1
D. 2

Here are the answers to the MCQs:

21. B. 4
22. C. Undefined
23. D. 4
24. D. 2x^2 - 5x + 3
25. B. 10
26. B. 8
27. A. 5
28. B. a = c
29. A. 0
30. B. y = 5x^(-2) + 3
31. B. 3
32. B. 4
33. D. 30
34. A. 8
35. B. x^2 - 2x + 3
36. C. 2
37. C. x^3 + 3
38. B. -1
39. A. 4
40. A. 0

These questions cover concepts such as polynomial division, factor theorem, relationship between roots and coefficients, and the nature of polynomial roots.