Total Number of Questions : 70

Time : 2.00 Hours   Max. Marks : 100

Fill in the blanks.

1. The three east-flowing rivers of Kerala are the tributaries of the river _____   (1 Mark)

2. The capital of Ukraine is _____   (1 Mark)

3. The Euro currency's origins lay in the _____ treaty of 1991.   (1 Mark)

4. The earliest writing system developed in India after the Indus script is _____   (1 Mark)

5. The term United Nations was originally suggested by _____   (1 Mark)

6. The first general election to the Kerala state legislative assembly was conducted in the
   year _____   (1 Mark)

7. The master mind behind the Chittagong Armoury Raid in April 1930 was _____   (1 Mark)

8. The Viceroy who appointed Mac Donnell Commission to study about famine in India ____   (1 Mark)

9. Who invented Nebulae and proved that there is extra galactic universe ?   (1 Mark)

10. 'Kerala Model of Development' was proposed in a UN study by a team headed by _____
    during the 1970s.   (1 Mark)

11. True / False :

    Kerala state electricity regulatory commission can set the electricity tariff under the Indian

    Electricity Act, 2013.   (1 Mark)

12. True / False :
    Achieving social stability is one of the objectives of union budget.   (1 Mark)

13. State whether the following statement is true/false :

    Habeas Corpus Writ will become infructuous if the defence is provided before the
    Magistrate.   (1 Mark)

14. State whether the following statement is true/false :
    The president of India make rules for regulating the procedure and conduct of business in
    parliament.   (1 Mark)

15. True / False :
    KSEBL established its first Solar Power Plant at Kanjikode in 2015.   (1 Mark)

16. Who were dhamma – Mahamattas ?   (1 Mark)

Write answer in **one** or **two** sentences :

17. What are micro and pico hydel projects ? (1 Mark)

18. How domestic violence is defined in the 'Protection of women from Domestic Violence Act 2005' ? (1 Mark)

19. What was Miyan Tansen's contribution to music ? (1 Mark)

20. What is catfishing in social media ? (1 Mark)

21. Convert 1 kWhr into joules. (1 Mark)

22. Which are the main pillars of Non-Proliferation Treaty ? (1 Mark)

23. What are the main objectives and target groups of information technology rules 2021 ? (1 Mark)

24. What are the forms of energy involved when a nuclear reactor produces electricity ? (1 Mark)

25. What are the mission goals of James Webb Space Telescope ? (1 Mark)

26. Which is _____ longest river in India ? (Use the correct article) (1 Mark)

27. He is not _____ honourable man. (Use the correct article) (1 Mark)

28. Each one of these substances _____ found in India. (Supply the correct verb) (1 Mark)

29. The tourist guide gave us some _____ (information /informations) about the town. (Choose the correct option) (1 Mark)

30. The poultry _____ mine. (Use the correct verb) (1 Mark)

31. I _____ him last sunday. (meet) (Use the correct form of verb) (1 Mark)

32. The river _____ under the bridge. (flow/flows) (Choose the correct option) (1 Mark)

33. He feels sorry for his faults. (Change into past tense) (1 Mark)

34. We _____ here since 1982. (lived/have lived) (Choose the correct option) (1 Mark)

35. The criminal _____ when the police arrived. (Use the correct form of the verb 'abscond') (1 Mark)

36. I like getting up early _____ the morning. (Use preposition) (1 Mark)

37. Paula didn't go _____ work yesterday. (Use preposition) (1Mark)

38. Silver is _____ gold. (Complete the sentence using the comparative degree form of the adjective 'light') (1 Mark)

39-43 : Fill in the blanks using the words given in bracket. (tomorrow, fairly, us, whom, often)

39. This is the boy _____ everyone likes. (1 Mark)

40. If we get involved in fears about the future, we shall miss the chances that the present offers _____ . (1 Mark)

41. He _____ comes here.

(1 Mark)

42. We will meet them _____

(1 Mark)

43. She wrote _____ well.

(1 Mark)

44-47 : Correct the following sentences :

44. Gupta returned back the book yesterday.

(1 Mark)

45. When I was young, I will run very fast.

(1 Mark)

46. We heard her cry bitterly in the next room.

(1 Mark)

47. Sallu is desirous of having praised.

(1 Mark)

48. The boy teased the dog. (Change the voice)

(1 Mark)

49. Arrange the jumbled letters into a proper word : siruiojnu.

(1 Mark)

50. Arrange the jumbled words into a proper sentence :
    equal, country, citizens, principle have, on , works, the , rights, that the, all, should

(1 Mark)

51. Find the proper subdivisors of 340 and 466. Compute the sum of all proper subdivisiors.

(2 Marks)

52. Verify the Remainder theorem for the polynomial $t^5 + t^4 + t^3 + t^2 + 2$ dividing by $t + 1$.

(2 Marks)

53. If the product of roots of the equation $2ky^2 + 12y + (4k - 2) = 0$ is -1, determine the value of k.

(2 Marks)

54. For what value of m, the following system of linear equations have infinitely many solutions ?
    $(m + 1) x + 8y = 4m$
    $mx + (m + 3)y = 3m - 1$

(2 Marks)

55. Calculate the sum of all numbers divisible by 8 in between 200 and 650.

(2 Marks)

56. Compute the cube root of 50653.

(2 Marks)

57. A basket consists of 5852 apples is distributed to three shops S_1, S_2 and S_3 in the ratio 5 : 6 : 8. Among them 30, 40 and 50 respectively be rotten apples to S_1, S_2, and S_3. Then, how many good apples be received by S_2 ?

(2 Marks)

58. If the principal is Rs. 7,500, the interest is Rs. 600/- and the time is 60 days, determine the rate.

(2 Marks)

59. Find the value of α if mean of the following distribution is 6.

x :	2	4	6	10	$\alpha + 5$
f :	3	2	3	1	2

(2 Marks)

60. A tangent AB at a point A on a circle of radius 15 cm meets a line through the center O at a point B such that OB = 25 cm. Find the length AB.

(2 Marks)

61. A boy with height 120 cm is walking away from the base of a lamp post of height 4.8 m, at a speed of 1.5 m/s. Find the length of his shadow after 3 seconds. (2 Marks)

62. Find the percentage of increase in the surface area of a cube if each side of the cube is doubled. (2 Marks)

63. If $\cos\theta + \sin\theta = \sqrt{2}\cos\theta$, prove that $\cos\theta - \sin\theta = \sqrt{2}\sin\theta$. (2 Marks)

64. Find the value of x if the points A(6, 1), B(8, 2), C(9, 4), D(x, 3) are the vertices of a parallelogram ABCD taken in order. (2 Marks)

65. Evaluate $\lim\limits_{x\to 2}\left(\dfrac{x^2-5x+6}{x^2-4}\right)$. (2 Marks)

66. Prove that any integer n > 1 can be written as a product of prime factors in an unique way. (4 Marks)

67. A manufacturing company makes a profit of 20% by selling a smart phone for Rs. 78,000/-. If the cost of manufacturing increases by 35% and the price paid by the retailer is increased by 25% . Compute the profit percent obtained by the company. (4 Marks)

68. A customer in a city purchased a colour TV with 5% state sales tax and 2% city sales tax cost at Rs. 52,000/-. He was given a 10% discount and the delivery charge be Rs. 500/-. Calculate the tax and total cost. (4 Marks)

69. If the perimeter of a triangle is 40 m and its hypotenuse is 15 m. Find the area of the triangle. (4 Marks)

70. In a survey of 100 people, it was observed that 45 people read newspaper A, 40 read newspaper B, 23 read newspaper C, 9 read both A and B, 10 read both B and C, 10 read both A and C, 6 read all the three newspapers. Find the numbers of people who read none of the newspapers. (4 Marks)