Question Bank

F.Y.B.Com.

Subject- Business Mathematics and Statistics

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Choose the Correct Option: -

1. Generally, the elements of a matrix are denoted by:

a. Numbers

b. Capital letters

c. Small letters

d. Both A and C

2. What is simple interest when principal amount Rs.1000 for 3 years at the rate of 5 %?

a. 1500

b. 15

c. 150

d. None of the Above

3. Which types of interest we used calculate rate of interest on sum amount?

a. Simple Interest

b. Compound Interest

c. Both Simple & Compound Interest

d. None of the Above

4. An annuity stream where the payments occur forever is called a(n):

a. Annuity due

b. Indemnity

c. Perpetuity

d. None of the Above

5. Find amount after 5 years when Rs.80,000 is invested at 8% p.a. rate of simple interest.

a. 112000

b. 102000

c. 11200

d. None of the Above

6. With what rate of simple interest the principal of Rs.8,000 will amount to Rs.11,200 in 5 years?

a. 8

b. 5

c. 14

d. None of the Above

7. With what rate of simple will the amount double itself in 10 years?

a. 5

b. 6

c. 15

d. 10

8. In Compound Interest Formula which alphabet denoted by Period.

a. P

b. A

c. r

d. n

9. Find the amount when Rs. 18,000 is invested for 4 years at 5 % p.a. rate of interest compounded yearly (annually).

a. 21,600

b. 21,879

c. 20,879

d. 20,600

10. What is the full form of EMI ?

a. Equally Month's Interest

b. Equated Monthly Instalments

c. Equated Months Instruments

d. None of the Above

11. We can subtract two matrices A and B if their …….

a. Elements are same

b. Order is same

c. Rows are same

d. Columns are same

12. Horizontally arranged elements in a matrix is called

a. Columns

b. Rows

c. Determinants

d. Transpose

13. A matrix obtained by changing the rows into columns or vice versa is called

a. Additive inverse of A

b. Order of A

c. Determinant of A

d. Transpose of A

14. If A, B and C matrices are of same order and (a + b) + C = A + (b + c), this law is known as

a. Associative law

b. Cramer's law

c. Distributive law

d. Commutative law

15. If the number of columns and rows are not equal in a matrix, then it is said to be a

a. Rectangular matrix

b. Square matrix

c. Diagonal matrix

d. Null matrix

16. A square matrix in which all the elements except at least the one element in the diagonal are zeros is said to be a

a. Identical matrix

b. Null/zero matrix

c. Column matrix

d. Diagonal matrix

17. If the number of rows in A matrix are equal to the number of column in B matrix, then A and B are comfortable for

a. Product

b. Division

c. Transpose

d. Making identity

18. The order of matrix [2 3] is

a. 2-by-2

b. 2-by-1

c. 1-by-2

d. 1-by-1

19. The number of tally sheet count for each value or a group is called

a. Class limit

b. Frequency

c. Class boundary

d. Class width

20. The largest and the smallest values of any given class of a frequency distribution are called

a. Class Intervals

b. Class limits

c. Class boundaries

d. Class marks

21. When data are classified according to a single characteristic, it is called

a. Quantitative classification

b. Qualitative classification

c. Area classification

d. Simple classification

22. Classification is applicable in case of

a. Normal characters

b. Both Quantitative and Qualitative characters

c. Qualitative characters

d. Quantitative characters

23. The series Data : 45 40 10 35 10 is of the type:

a. Discrete

b. Grouped

c. Raw Data

d. None of the above

24. The average of lower and upper class limits is called:

a. Class limit

b. Class mark

c. Class frequency

d. Class boundary

25. A graph of time series or historical series is called:

a. Frequency polygon

b. Ogive Curve

c. Histogram

d. Frequency curve

26. The graph of the cumulative frequency distribution is called:

a. Histogram

b. Frequency polygon

c. Pictogram

d. Ogive Curve

27. "When successive mid-points in a histogram are connected by straight lines, the graph is called a:

a. Histogram

b. Frequency polygon

c. Ogive Curve

d. Frequency curve

28. For graphic presentation of a frequency distribution, the paper to be used is:

a. Carbon paper

b. Ordinary paper

c. Graph paper

d. Butter paper

29. "Any measure indicating the centre of a set of data, arranged in an increasing or decreasing order of magnitude, is called a measure of:

a. Skewness

b. Symmetry

c. Central tendency

d. Dispersion

30. The measure of central tendency listed below is:

a. The raw score

b. The mean

c. The range

d. Standard deviation

31. We must arrange the data before calculating:

a. Mean

b. Geometric mean

c. Median

d. Mode

32. The mode or model value of the distribution is that value of the variate for which frequency is:

a. Maximum

b. Minimum

c. Odd number

d. Even number

33. A measurement that corresponds to largest frequency in a set of data is called:

a. Mean

b. Percentile

c. Mode

d. Median

34. Mode of the series 0, 0, 0, 2, 2, 3, 3, 8, 10 is:

a. 0

b. 2

c. 3

d. 1

35. Taking the relevant root of the product of all non-zero and positive values are called:

a. Arithmetic mean

b. Geometric mean

c. Harmonic mean

d. Combined mean

36. The best average in percentage rates and ratios is:

a. Arithmetic mean

b. Lower and upper quartiles

c. Geometric mean

d. Harmonic mean

37. Geometric mean is suitable when the values are given as:

a. Proportions

b. Percentage rates

c. Ratios

d. All of the above

38. The total of all the observations divided by the number of observations is called:

a. Arithmetic mean

b. Geometric mean

c. Median

d. Harmonic mean

39. What is the median of the sample 5, 5, 11, 9, 8, 5, 8?

a. 5

b. 6

c. 8

d. 9

40. The scatter in a series of values about the average is called:

a. Central tendency

b. Dispersion

c. Skewness

d. Symmetry

41. The measures of dispersion can never be:

a. Positive

b. Zero

c. Negative

d. Equal to 2

42. The measure of dispersion which uses only two observations is called:

a. Coefficient of variation

b. Range

c. Median

d. Mean

43. "The range of the scores 29, 3, 143, 27, 99 is:

a. 140

b. 143

c. 70

d. 146

44. If the dispersion is small, the standard deviation is.....

a. Large

b. Small

c. Negative

d. Zero

45. The positive square root of the mean of the squares of the elevations of observations from their mean is called

a. Variance

b. Range

c. Coefficient of variation

d. Standard deviation

46. The variance is zero only if all observations are the

a. Different

b. Same

c. Square root

d. Square

47. Standard deviation is always calculated from

a. Mean

b. Median

c. Mode

d. Lower quartiles

48. Which of the following is an absolute measure of dispersion?

a. Coefficient of variation

b. Coefficient of dispersion

c. Standard deviation

d. Coefficient of skewness

49. A constraint in an LPP model restricts

a. value of the objective function

b. value of the decision variable

c. use of the available resources

d. all of the above

50. A feasible solution of LPP

a. Must be a corner point of the feasible region

b. Must satisfy all the constraints simultaneously

c. Need not satisfy all the constraints, only some of them

d. all of the above

51. The linear function of the variables which is to be maximize or minimize is called

a. Constraints

b. Objective function

c. Decision variable

d. None of the above

52. The best use of linear programming is to find optimal use of

a. Money

b. Manpower

c. Machine

d. All the above

53. In. L.P.P----

a. objective function is linear

b. constraints are linear

c. Both objective function and constraints are linear

d. None of the above

54. The region which satisfies all the constrains of the L.P.P. is called as----

a. Phisible region

b. Feasible region

c. Convex region

d. Concave region

55. Index numbers are expressed in:

a. Ratios

b. Squares

c. Percentages

d. Combinations

56. Index for base period is always taken as

a. 100

b. 1

c. 200

d. 0

57. How many types are used for the calculation of index numbers

a. 2

b. 3

c. 4

d. 5

58. How many types are used for the calculation of index numbers

a. Laspeyre's formula

b. Fisher ideal formula

c. Marshall Edgeworth formula

d. Paasche's formula

59. Most commonly used index number is

a. Volume index number

b. " Value index number

c. Price index number

d. Simple index number

60. Range calculated by :

a. L - S

b. L + S

c. L x S

d. L / S