





- (20) 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) Standard deviation
  - d) Coefficient of variation
- (21) To compare the variation of two or more than two series, we use
- a) Combined standard deviation
  - b) Corrected standard deviation
  - c) Coefficient of variation
  - d) Coefficient of skewness
- (22) If mean=25, median=30 and standard deviation=15, the distribution will be:
- a) Symmetrical
  - b) Positively skewed
  - c) Negatively skewed
  - d) Normal
- (23) The degree of peaked ness or flatness of a unimodal distribution is called:
- a) Skewness
  - b) Symmetry
  - c) Dispersion
  - d) Kurtosis
- (24) The range of the scores 29, 3, 143, 27, 99 is:
- a) 140
  - b) 143
  - c) 146
  - d) 70
- (25) Which of the following measures of dispersion is expressed in the same units as the units of observation?
- a) Variance
  - b) Standard deviation
  - c) Coefficient of variation
  - d) Coefficient of standard deviation
- (26) Which of the following statements is correct?
- a) The standard deviation of a constant is equal to unity
  - b) The sum of absolute deviations is minimum if these deviations are taken from the mean.
  - c) The second moment about origin equals variance
  - d) The variance is positive quantity and is expressed in square of the units of the observations
- (27) For a positively skewed distribution, mean is always:
- a) Less than the median
  - b) Less than the mode
  - c) Greater than the mode
  - d) Difficult to tell
- (28) Half of the difference between upper and lower quartiles is called:
- a) Interquartile range
  - b) Quartile deviation
  - c) Mean deviation
  - d) Standard deviation
- (29) The variance is zero only if all observations are the:
- a) Different
  - b) Square
  - c) Square root
  - d) Same
- (30) Which measure of dispersion can be computed in case of open-end classes?
- a) Standard deviation
  - b) Range
  - c) Quartile deviation
  - d) Coefficient of variation
- (31) Which one is known as Scalar Matrix from the following?
- a) Identity Matrix
  - b) Square Matrix
  - c) Row Matrix
  - d) Column Matrix
- (32) If determinant of a matrix A is Zero than:



- a) A is a Singular matrix  
c) Can't say
- (33) Which one of the following is a measure of dispersion  
a) Median  
c) Mean
- (34) Transpose of a rectangular matrix is a  
a) rectangular matrix  
c) square matrix
- (35) A column matrix is of order  
a)  $1 \times n$   
c)  $n \times n$
- (36) The order of matrix A is  $4 \times 5$  and order of matrix B is  $5 \times 3$ , then order of  $(AB)^T$  is:  
a)  $4 \times 3$   
c)  $5 \times 4$
- (37) If the number of rows and columns are equal, then matrix is called:  
a) Singular Matrix  
c) Rectangular Matrix
- (38)  $X^0 = ?$   
a) 0  
c) 2
- (39) A matrix having one row and many columns is known as?  
a) Row matrix  
c) Diagonal matrix
- (40) Two matrix can be added if:  
a) rows of both the matrices are same  
c) both rows and columns of both the matrices are same
- (41) In a set of observations, amount of variation can be shown in form of figures with help of  
a) absolute measures  
c) non-uniform measures
- (42) If the standard deviation of a population is 9, the population variance is:  
a) 18  
c) 81
- (43) Arithmetic Mean is \_\_\_\_\_ affected by extreme values  
a) highly  
c) not
- (44) One of the classifications of time series is that they can be either  
a) Categorical or ordinal  
c) inflationary or non-inflationary
- (45) If arithmetic mean is 20 and harmonic mean is 30 then geometric mean is  
a) 24.94  
c) 44.94
- b) A is a non-Singular matrix  
d) None of the mentioned
- b) Skewness  
d) Standard Deviation
- b) diagonal matrix  
d) scalar matrix
- b)  $n \times 1$   
d)  $m \times n$
- b)  $4 \times 5$   
d)  $3 \times 4$
- b) Square Matrix  
d) Null Matrix
- b) 1  
d) 3
- b) Column matrix  
d) None of the mentioned
- b) columns of both the matrices are same  
d) number of rows of first matrix should be equal to number of column of second
- b) uniform measures  
d) exploratory measures
- b) 3  
d) 9
- b) less  
d) none of these
- b) Stationary or non-stationary  
d) None of these
- b) 24.49  
d) 25.34

- (46) If arithmetic mean is multiplied to coefficient of variation then resulting value is classified as
- a) coefficient of mean
  - b) standard deviation
  - c) variance
  - d) mean
- (47) A certain sum of money in simple interest scheme amount to Rs. 8,880 in 6 years and Rs. 7,920 in 4 years respectively. Find the principal and rate percent.
- a) Principal = 6,000, rate = 8%
  - b) Principal = 6,300, rate = 8%
  - c) Principal = 6,000, rate = 7.5%
  - d) Principal = 6,300, rate = 7.5%
- (48) Mean absolute deviation is 5 and arithmetic mean is 110 then coefficient of mean absolute deviation is
- a) 1.054
  - b) 0.045
  - c) 0.054
  - d) 0.064
- (49) Around central value of observations, extent to which values depart from normal distribution is classified as
- a) negative variation
  - b) positive variation
  - c) skewness
  - d) positive trailing
- (50) Arithmetic mean is 12 and number of observations are 20 then sum of all values is
- a) 8
  - b) 32
  - c) 240
  - d) 1.667
- (51) In arithmetic mean, sum of deviations of all recorded observations must always be
- a) two
  - b) minus one
  - c) one
  - d) zero
- (52) Variables whose measurement is done in terms such as weight, height and length are classified as
- a) continuous variables
  - b) measuring variables
  - c) flowchart variables
  - d) discrete variables
- (53) An orderly set of data arranged in accordance with their time of occurrence is called
- a) Arithmetic series
  - b) Harmonic series
  - c) Geometric series
  - d) Time series
- (54) Wheat crops badly damaged on account of rains is:
- a) Cyclical movement
  - b) Random movement
  - c) Secular trend
  - d) Seasonal movement
- (55) Price of gasoline for three days are as 98, 96, 97, 100 then the value of standard deviation with the assumed mean method is
- a) 15
  - b) 10
  - c) 1
  - d) 11
- (56) What will be difference in population 3 years ago and 2 years ago of Devon village, whose current population is 100000 and which is increasing at a rate of 25% every year?
- a) 15250
  - b) 13900
  - c) 16400
  - d) 12800
- (57) If  $f(x) = g(u)$  and  $u = u(x)$  then
- a)  $f'(x) = g'(u)$
  - b)  $f'(x) = g'(u) \cdot u'(x)$
  - c)  $f'(x) = u'(x)$
  - d) None of these

- (58) Raju invested Rs. 77500 in ICICI bank. In two years how much compound interest will he get, if the first year rate of interest was 10% and second year had 2% more than first year?
- a) Rs. 17850  
b) Rs. 17980  
c) Rs. 18963  
d) Rs. 16880
- (59) A sum of money becomes 1.331 times in 3 years as compound interest. The rate of interest is
- a) 0.070000000000000001  
b) 0.085000000000000001  
c) 0.1  
d) 0.125
- (60) A sum invested under compound interest doubles itself in 10 years. In how many years will it become 8 times of the initial amount?
- a) 15 Years  
b) 20 Years  
c) 25 Years  
d) 30 Years

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