QB365 Question Bank Software Study Materials

Introduction to Statistical Methods and Econometrics 50 Important 1 Marks Questions With Answers (Book Back and Creative)

12th Standard

Economics

Total Marks : 50

Multiple Choice Question

50 x 1 = 50

1) The word 'statistics' is used as _____

   (a) Singular.   (b) Plural   **(c) Singular and Plural.**   (d) None of above

2) Who stated that statistics as a science of estimates and probabilities.

   (a) Horace Secrist   (b) R.A Fisher   (c) Ya-Lun-Chou   **(d) Boddington**

3) Sources of secondary data are_____

   (a) Published sources   (b) Unpublished sources   (c) Neither published nor unpublished sources   **(d) Both (a) and (b)**

4) The data collected by questionnaires are_____

   (a) Primary data   (b) Secondary data   (c) Published data   (d) Grouped data

5) A measure of the strength of the linear relationship that exists between two variables is called:

   (a) Slope   (b) Intercept   **(c) Correlation coefficient**   (d) Regression equation

6) If both variables X and Y increase or decrease simultaneously, then the coefficient of correlation will be:

   (a) Positive   (b) Negative   (c) Zero   (d) One

7) If the points on the scatter diagram indicate that as one variable increases the other variable tends to decrease the value of r will be:

   (a) Perfect positive   (b) Perfect negative   **(c) Negative**   (d) Zero

8) The value of the coefficient of correlation r lies between

   (a) 0 and 1   (b) -1 and 0   **(c) -1 and +1**   (d) -0.5 and +0.5

9) The term regression was used by:

   (a) Newton   (b) Pearson   (c) Spearman   **(d) Galton**

10) The purpose of simple linear regression analysis is to:

   (a) Predict one variable from another variable   (b) Replace points on a scatter diagram by a straight -line

   (c) Measure the degree to which two variables are linearly associated

   (d) Obtain the expected value of the independent random variable for a given value of the dependent variable

11) A process by which we estimate the value of dependent variable on the basis of one or more independent variables is called

   (a) Correlation   **(b) Regression**   (c) Residual   (d) Slope

12) If Y = 2 - O.2X, then the value of Y intercept is equal to

   (a) -0.2   **(b) 2**   (c) 0.2X   (d) All of the above

13) In the regression equation $Y = \beta_\alpha + \beta_1 X$, the Y is called:

   (a) Independent variable   **(b) Dependent variable**   (c) Continuous variable   (d) None of the above

14) In the regression equation $Y = \beta_0 + \beta_1 X$, the X is called:

(a) Independent variable   (b) Dependent variable   (c) Continuous variable   (d) None of the above

15) Econometrics is the integration of

(a) Economics and Statistics   (b) Economics and Mathematics   **(c) Economics, Mathematics and Statistics**

(d) None of the above

16) Econometric is the word coined by

(a) Francis Galton   **(b) Ragnar Frish**   (c) Karl Person   (d) Spearsman

17) The raw materials of Econometrics are:

(a) Data   (b) Goods   (c) Statistics   (d) Mathematics

18) The term Uiin regression equation is

(a) Residuals   (b) Standard error   **(c) Stochastic error term**   (d) None

19) The term Uiis introduced for the representation of

(a) Omitted Variable   (b) Standard error   (c) Bias   (d) Discrete Variable

20) Econometrics is the amalgamation of

(a) 3 subjects   (b) 4 subjects   (c) 2 subjects   (d) 5 subjects

21) The first book to have statistics as its title was 'Contributions to vital Statistics' by _____.

(a) Karl Pearson   **(b) Francis GP Neison**   (c) Crowther   (d) Fisher

22) There existed a system of maintaining vital statistics including registration of births and deaths found in _____.

(a) Thriukkural   **(b) Arthashastra**   (c) Das Capital   (d) Agananuru

23) The book _____ mentions the statistical and administrative surveys conducted during Akbar's rule.

(a) Arthasasthara   (b) Tholkappiyam   **(c) Ain-e-Akbari**   (d) none of the above

24) Since 2007_____ every year is celebrated as Statistics Day to commemorate his birth anniversary.

(a) 28th of June   (b) 29th of July   (c) 28th of July   **(d) 29th of June**

25) Which is not a limitation of statistics?

(a) Statistics is not suitable to the study of qualitative phenomenon   (b) Statistical laws are not exact

(c) Statistical collection should be systematic with a predetermined purpose

(d) Statistics is only one of the methods of studying a problem

26) Those data which do not already exist in any form, and thus have to be collected for the first time from the primary source(s).

(a) Secondary data   (b) Vital data   (c) Raw data   **(d) Primary data**

27) Calculate the mean for given data 2,4,6,8,10.

(a) 6   (b) 30   (c) 5   (d) 15

28) Standard Deviation is one of the methods of _____ of dispersion

(a) Relative measure   (b) Real measure   **(c) Absolute measure**   (d) Nominal measure

29) The standard deviation of the population is denoted by the Greek letter _____, the standard deviation of sample is denoted as 's'.

(a) β (b) π **(c) σ**   (d) μ

30) Find the incorrect match.

I. $\Sigma dxdy$ = Sum of product of the deviations x and y series from their assumed means.

II. $\Sigma dx2$ = Sum of the squares of the deviations of x series from an assumed mean

III. Σdy2 = sum of the deviation of x series from an assumed mean of x

IV. Σdx = Sum of the squares of the deviations of y series from an assumed mean

(a) I, II, III, IV are correct   (b) I, II, III are correct, IV is incorrect   (c) II and IV are incorrect, I and III are correct

(d) III and IV are only incorrect

31) Find the incorrect equation.

I. Economics + Mathematics = Mathematical Economics

II. Mathematical Economics + Statistical Data & Its Technique = Econometrics

III. {Economics + Statistics + Mathematics} + Empirical Data = Applied Econometrics

(a) I   **(b) III**   (c) III and II   (d) II and I

32) When the correlation coefficient, r, is close to one:

(a) there is no relationship between the two variables   **(b) there is a strong linear relationship between the two variables**

(c) it is impossible to tell if there is a relationship between the two variables

(d) the slope of the regression line will be close to one

33) What is the simple arithmetic mean of 15,0,36,0 and 9?

(a) 20   (b) 15   **(c) 10**   (d) 60

34) _____ is a coefficient to measure the degree of relationship between two sets of data by using ranks of observations

(a) Pearson's Correlation Coefficient   **(b) Rank Correlation Coefficient**   (c) Partial Correlation   (d) Multiple Correlation

35) Rank Correlation was obtained by _____ to measure degree of relationship between qualitative characteristics.

(a) Karl Pearson   (b) Galton   (c) Spearman   (d) None of them

36) Which among the following gives the value of by x in the regression equation of y on x?

(a) Pxy/σy 2   **(b) Pxy/σx 2**   (c) Pxy/σx.σy   (d) σy/σx

37) Which of the statements do not hold true?

(a) Both regression coefficients cannot be greater than 1

(b) Regression coefficients are unaffected by origin shift and scale shift

(c) Both correlation and regression coefficients are of same sign   (d) Two regression lines coincide if r=±1

38) A scatterplot shows:

(a) the frequency with which values appear in the data   (b) the average value of groups of data

(c) scores on one variable plotted against scores on a second variable

(d) the proportion of data falling into different categories

39) R 2 is the notation for:

(a) the coefficient of correlation.   **(b) the coefficient of determination.**   (c) the coefficient of variation.

(d) the coefficient of regression

40) The correlation coefficient is used to determine:

(a) A specific value of the y-variable given a specific value of the x-variable

(b) A specific value of the x-variable given a specific value of the y-variable

(c) The strength of the relationship between the x and y variables   (d) None of these

41) Who developed the fundamental principles of statistics?

(a) Gottfried Achenwall   (b) P.C Mahalanobis   **(c) Ronald Fisher**   (d) Irving Fisher

42) Who applied statistics to a variety of fields such as Biometry, Genetics, Psychology?

(a) P.C. Mahalanobis   **(b) R.A Fisher**   (c) Karl Pearson   (d) Kautilya

43) Which is variance?

(a) $\frac{\sum x^2}{n}$ (b) $A + \frac{\sum d}{n}$ (c) both a and b   (d) $\sqrt{\left(\frac{\sum x^2}{n}\right)}$

44) Which is not a special average?

(a) geometric mean   (b) harmonic mean   (c) both a and b   **(d) mean**

45) _____ analyses the covariation of two or more variables.

(a) Correlation   (b) Regression   (c) Arithmetic mean   (d) Probability

46) If only 2 variables are taken for the study it is _____ correlation.

(a) negative   (b) positive   **(c) simple**   (d) multiple

47) NSSO has ___ divisions

(a) 5   **(b) 4**   (c) 2   (d) 3

48) _____ is located at Kolkata.

(a) Industrial Statistics wing of CSO   (b) CSO   (c) Computer Centre of CSO   (d) NSSO

49) Which of the following is correctly matched?

(a) (a) Correlation - i) P.C.Mahalanobis   (b) (b) Modern statistics - ii) Ragnar frisch   (c) (c) Econometrics - iii) Karl person

(d) (d) Regression - iv) Francis Galton

50) Econometrics is the word coined by :

(a) Karl Pearson   (b) Francis Galton   (c) Spearman   **(d) Ragnar Frisch**