

BCOM SEMESTER -1
Paper 1- Business Statistics

1. The word statistics have been derived from the Latin word ---
[(a) Statistik (b) Status (c) Statista (d) Strata]
Ans:(b)
2. Statistics helps in
[(a) Testing (b) Prediction (c) Formulating policies (d) all of these]
Ans:(d)
3. Modern statistical devices have been made business forecasting more
[(a) precise and accurate (b) difficult (c) misunderstanding (d) easy]
Ans:(a)
4. ---- are the eyes of Govt. administration
[(a) Statistics (b) Economics (c) Politics (d) none]
Ans:(a)
5. Statistics does not study ----
[(a) Individual cases (b) Group (c) Average (d) None]
Ans:(a)
6. Statistics does not deals with
[(a) Qualitative (b) Quantitative (c) Both (d) None]
Ans:(a)
7. Statistics is an art as well as
[(a) Science (b) Average (c) Theory (d) None]
Ans:(a)
8. -----is a figure that represents the whole group
[(a) Average Value (b) Value (c) Data (d) None]
Ans:(a)
9. -----is a measure of central tendency
[(a) Mean (b) Median (c) Mode (d) All these]
Ans:(d)
10. ----- is the most commonly used measure of central tendency
[(a) Mean (b) Median (c) Mode (d) None]
Ans:(a)
11. What is the Mean for the following observation ; 3,4,6,7,10
[(a) 4 (b) 5 (c) 6 (d) 9]
Ans :(c)
12. Which divides the value of a variable into two equal parts?
[(a) Median (b) Mean (c) Mode (d) All these]

Ans:(a)

13.----- is the value of item of a series which occurs most frequently
[(a) Median (b) Mean (c) Mode (d) none]

Ans:(c)

14.----- is not affected by extreme items
[(a) Mean(b) Median (c) Mode (d) All these]

Ans:(c)

15. When the distribution is of open end classes which average may appropriate
[(a) Mean (b) Median (c) Mode (d) None]

Ans:(b)

16. Find mode of the following series 2 3 4 3 4 3 5 3 7
[(a) 3 (b) 4 (c) 5 (d) 2]

Ans:(a)

17.----- is a positional average
[(a) Mean (b) Median (c) Both (d) None]

Ans:(b)

18.----- is useful for computing average rate of increase of profits , average rate of speed , average price ..etc
[(a) Arithmetic Mean (b) Geometric Mean (c) Harmonic Mean (d) Mode]

Ans:(c)

19. Geometric mean is useful in
[(a) Finding average % increase in sales, production (b) Finding index numbers (c) Both (d) None]

Ans:(c)

20.-----is a mathematical average
[(a) Arithmetic Mean (b) Geometric Mean (c) Both (d) None]

Ans:(a)

21.-----is not a patrician value
[(a) Mean (b) Median (c) Quartiles (d) all these]

Ans:(a)

22.----- is the half distance between the third and first quartiles
[(a) Q.D (b) M.D (c) S.D (d) Variance]

Ans:(a)

23. The formula of Q.D
[(a) $(Q_3 - Q_1)/2$ (b) $(Q_2 - Q_3)/2$ (c) $(Q_2 - Q_1)/2$ (d) none]

Ans:(a)

24. Measures of dispersion are called averages of ----- order
[(a) First (b) second (c) Third (d) None]

Ans:(b)

25. ----- is the difference between highest and lowest values in a series
[(a) Range (b) Mean (c) Dispersion (d) None]

Ans:(a)

26. Variability in the distribution of earth and income is generally
measures in terms of -----
[(a) Mean Deviation (b) Quartile Deviation (c) Standard Deviation (d)
Variance]

Ans:(a)

27. Standard Deviation was First used by
[(a) Karl Pearson (b) Horas Secrist (c) Lorance (d) Spearman]

Ans:(a)

28. The most important measure of dispersion
[(a) Range (b) Mean deviation (c) Standard deviation (d) Quartile
deviation]

Ans:(c)

29. Square of Standard Deviation is known as
[(a) Range (b) Variance (c) Quartile (d) none]

Ans:(b)

30. For comparing variability in scores of 2 Batsman we can use
[(a) Standard Deviation (b) Mean (c) Co-efficient of variation (d) mode]

Ans:(c)

31. Variance = -----
[(a) (S.D)² (b) $\sqrt{S.D}$ (c) (S.D)³ (d) 1/S.D]

Ans:(a)

32. In Standard deviation, deviations are taken only from ----- values of
series

[(a) Mean (b) Median (c) Mode (d) Variance]

Ans:(a)

33. Co-efficient of variation is equal to
[(a) $(S.D/Mean)*100$ (b) $(S.D/Range)*100$ (c) $(Mean/S.D)*100$
(d) None]

Ans:(a)

34. ----- means lack of symmetry
[(a) Skewness (b) Kurtosis (c) Range (d) None]

Ans:(a)

35. A distribution is skewed if Mean, Median, Mode are
[(a) Equal (b) Not equal (c) Symmetric (d) None]

Ans:(b)

36. ----- is a measure of peakedness

[(a) Skewness (b) Kurtosis (c) Range (d) Variance]

Ans:(b)

37. Skewness may be ----

[(a) + or – (b) Zero (c) Both (d) None]

Ans:(a)

38. When the frequency curve is more peaked than normal curve it is called

[(a) Leptocurtic (b) Platy (c) Mesokurtic (d) None]

Ans:(a)

39. ----- are devices for measuring differences in the magnitude of a group of related variables

[(a) Index numbers (b) Time series (c) Standard deviation (d) Mean]

Ans:(a)

40. Index numbers are expressed in

[(a) Average (b) Percentage (c) Both (d) None]

Ans:(b)

41. ----- index number is called Ideal index number

[(a) Laspear's (b) Paasche's (c) Fishers (d) Kelley's]

Ans:(c)

42. In Laspear's Index number ---- year quantities are used

[(a) Base (b) Current (c) Average (d) None]

Ans:(a)

43. The Time series analysis helps to

[(a) Understanding past behavior (b) Evaluating current program (c) Both (d) None]

Ans:(c)

44. ----- is not a factor responsible for seasonal variation

[(a) Climatic condition (b) social customs (c) Religious functions (d) Operation condition]

Ans:(d)

45. laspeyer's method and Paashe's method do not satisfy

[(a) Unit test (b) Factor reversal test (c) Time reversal test (d) None]

Ans:(d)

46. Fisher's formula satisfies ---- test

[(a) unit test (b) Time reversal Test (c) factor Reversal test (d) All]

Ans:(a)

47. ----- is the easiest of all the methods for measuring trend

[(a) Freehand curve (b) Method of semi average (c) Method of least squares (d) Method of moving curve]

Ans:(a)

48.----- is a set of values arranged in chronological order

[(a) Time series (b) Index number (c) Both (d) None]

Ans:(a)

49.Cyclic variation Occur at intervals of more than ---- year

[(a) 1 (b) 2 (c) 3 (d) 4]

Ans:(a)

50. Moments are used to find a measure of

[(a) Central tendency (b) Dispersion (c) Skewness (d) All these]

Ans:(d)

51 Statistical methods are most dangerous tools in the hands of

[(a) Expert (b) Inexpert (c)Business man (d)All of them]

Ans:(b)

52 In discrete series arithmetic mean can be calculated by

[(a) Direct method (b) Short cut method (c) Step deviation method]

Ans:(d)

53 ----- is capable of more algebraic treatment

[(a) arithmetic mean (b) Median (c)Both (d)None]

Ans:(a)

54 ----- is considered to best average

[(a) arithmetic mean (b) Median (c)Mode (d)None]

Ans:(a)

55 ----- is used whenever the relative importance of the items in a series differs

[(a)Simple arithmetic mean(b) Weighted arithmetic mean (c)Geometric mean (d)None]

Ans:(b)

56 Weighted averages are used in the calculation of

[(a)death rate (b)birth rate (c)Both (d)None]

Ans:(c)

57 Median is a ----- average

[(a) Mathematical (b) Positional(c) Both (d) None]

Ans:(b)

58 ----- is not capable of algebraic treatment

[(a) arithmetic mean (b) Median (c)Both (d)None]

Ans:(b)

59 ---- is not a mathematical average

[(a)A.M (b)G.M (c)H.M (d)mode]

Ans:(d)

60 ----- is ill-defined

[(a) arithmetic mean (b) Median (c)Mode (d)None]

Ans:(c)

61 ----- divides the data into 4 equal parts

[(a) Quartiles (b) Mean(c) Median(d)Range]

Ans:(a)

62 ---- are known as averages of first order

[(a) Measures of central tendency (b) Measures of dispersion (c) Averages (d) None]

Ans:(a)

63 Simplest possible measure of dispersion is

[(a) Range (b) Q.D(c)M.D (d) Variance]

Ans:(a)

64 ---- cannot be computed in the case of open ended distribution

[(a) Range (b) Mean (c)Both (d) None]

Ans:(c)

65 Standard deviation of a series can have minimum value of -----

[(a) Zero (b) One (c) Two (d) Three]

Ans:(a)

66 In ---- signs are ignored

[(a) S.D (b)Mean (c) Both (d) None]

Ans:(a)

67 ----- is defined as the reciprocal of the mean of the reciprocal of these values [(a)H.M(b)G.M(c)A.M(d)S.D]

Ans:(a)

68 ----- is used in averaging rates , times etc

[(a)H.M(b)G.M(c)A.M(d)Mode]

Ans:(a)

69 Measures of dispersion are statistical devices to measure the ----- in a series

[(a) Variability (b) Convertibility (c) Flexibility (d) None]

Ans:(a)

70 ----- is a geometric method of measuring variability

[(a) Lorenz Curve (b)Geometric curve (c) Both (d) None]

Ans:(a)

71 The most commonly used relative measure of dispersion

[(a) Coefficient of variation (b) Q.D (c)S.D(d)None]

Ans:(a)

72 Range is an ----- measure

[(a) Absolute (b) Relative (c)Both (d) None]

Ans:(a)

73 Range =-----

[(a) H-L(b) L-H(c) Both (d) None]

Ans:(a)

74 Find range from the following values 23 32 85 32 42 10 20 18 28

[(a) 70(b) 75 (c) 85 (d)32] Ans:(b)

75 --- is used in quality control

[(a) Mean(b) Median(c) Range (d) Quartiles]

Ans:(c)

76 Q . D is ----- of more algebraic treatment

[(a) Capable (b) Not capable (c) either capable or not (d) None]

Ans:(a)

77 Mean deviation is based on all values , so it is more

[(a) valuable (b) Understandable (c) Representative(d) All these]

Ans:(a)

78 Squares of ----- is known as variance

[(a) S.D(b) Q.D(c) M.D(d) Range] Ans:(a)

79 In standard deviation, deviations are measured from

- [(a) Mean (b) Median (c) mode(d) None] Ans:(a)
- 80 In Mean deviation, deviations are measured from [(a) Mean (b) Median (c) mode(d) All these] Ans:(a)
- 81 If the value of a series are equal , S.D is
[(a) Zero (b) One (c)Two(d)None] Ans:(a)
- 82 Graphical method of measuring variability is first used by
[(a) Max O Lorenze (b) Carl Pearson (c) Spiegel (d) Fishers]
Ans:(a)
- 83 ---- means asymmetry of a distribution
[(a) skewness(b) Kurtosis(c) Moments(d) Dispersion]
Ans:(a)
- 84 A measure of dispersion is an average of
[(a)Deviation (b) Skewness(c) Median (d) Variance]
Ans:(a)
- 85 A measure of skewness is only the difference between 2-----
[(a) averages (b) Deviation (c) Both (d) None]
Ans:(a)
- 86 ---- serves as an economic barometer
[(a) Index numbers (b) Skewness(c) Kurtosis(d)None]
Ans:(a)
- 87 ---- are specialized type of averages
[[a) Index numbers (b) mean(c) Median(d)Mode]
Ans:(a)
- 88 Important use of Index numbers is for
[(a) Wage negotiation and wage contracts (b) Employee satisfaction(c) Job satisfaction (d) welfare schemes]
Ans:(a)
- 89 According to ---- method original data are plotted on graph
[(a) Free hand curve (b) Semi average(c) moving average (d) Least square]
Ans:(a)
- 90 Consumer price index numbers are prepared for

101. In olden days statistics also called
- [a. science of soldiers b. science of kings
c. science of business man d. science of managers]
- Ans : (b)
102. Now a days the use of statistics is extended to various fields such as
- [a. Agriculture b. Economic c. Psychology d. All of these]
- Ans: (d)
103. In sense, statistics refers to numerical statements of facts.
- [a. plural b. singular c. both d. none]
- Ans : (a)
104. Measures of central tendency is also known as measures of
- [a. central calculation b. central location c. central information d. central data]
- Ans : (b)
105. The arithmetic mean of a variable 'x' is denoted by the symbol.
- [a. x^2 b. \sqrt{x} c. \bar{x} d. $\sum x$]
- Ans : (c)
106. Short cut method for calculating arithmetic mean also known as
- [a. assumed average method b. Assumed variable method
c. Assumed mean method d. All of these]
- Ans : (c)
107. Geometric mean considered to be the best average in the construction of
- [a. Index numbers b. median c. mode d. quartiles]
- Ans: (a)
108. There are equal number of observations on the right and on the left of value
- [a. mean b. median c. mode d. quartile]
- Ans: (b)

c. freehand curve d. None]

Ans: (b)

119. is known as semi inter quartile range.

(a.Q.D b. S.D c. M.D d. range]

Ans : (a)

120. Is the property of a distribution which expect to relative peakedness

[a. skewness b. kurtosis c. variance d. None]

Ans : (b)

121. A kurtosis curve flatter than normal curve is called

[a. platykurtic b. mesokurtic c. leptokurtic d. none]

Ans : (a)

122. A distribution in which the observation equidistant from the mean have equal frequencies is called

[a. symmetric b. asymmetry c. both d. none]

Ans : (a)

123. is a special type of average which provides a measurement of relative changes from time to time or from place to place.

(a. index numbers b. time series c. variance d. none]

Ans: (a)

124. In index numbers, price in the base year is denoted by

[a. p1 b. p0 c. q0 d. q1]

Ans : (b)

125. is the ratio of the price of a certain commodity at the current year to its price at the base year.

[a. price relative b. relative price c. price index d. none]

Ans : (a)

126. Index numbers helps in

[a. studying the trends b. policy formation

- [a. index of cost of living b. index of industrial production
c. weighted price index d. All)
- Ans : (b)
135. index possess upward bias
[a. laspeyre's b. fishers c. Kelly's d. Paashe's)
- Ans : (a)
136. Most frequently used index number formula are
[a. fixed weighted formula b. weighted formula
c. un weighted formula d. none of these]
- Ans: (b)
137. Statistical data arranged with respect to time are said to constitute.
[a. index number b. time series c. S.D d. M.D]
- Ans : (b)
138. the fluctuations or variations in the value of a time series exhibited over a period of one year or less are termed as
- [a. seasonal fluctuations b. cyclical variation
c. operational fluctuations d. none of these]
- Ans: (a)
139. Time series is a set of data recorded
[a. periodically b. At time or space intervals
c. At successive points of time d. All of these]
- Ans: (d)
140. If the slope of the trend line is positive, it shows
[a. declining b. rising c. stagnation d. none)
- Ans : (b)
141. The gross national product value is deflated through.....
[a. price index numbers b. weighted index numbers
c. consumer price index numbers d. All of these]
- Ans : (a)

142. A Consists of long term changes, short term variation, irregular variation etc.

[a. time series b. index numbers c. either A or B d. none]

Ans : (a)

143. The base year for index numbers should be.....

[a. normal period b. a year only c. a period at distant part d. none]

Ans: (a)

144. In plural sense, statistics means.....

[a. statistical methods b. numerical set of data
c. science of collection, presentation etc. d. None]

Ans :(b)

145. The sum of deviations taken from mean is

[a. 0 b. 1 c. 2 d. 3]

Ans: (a)

146. When an observation in the data is, then its geometric mean is zero.

[a. 0 b. 1 c. 2 d. 3]

Ans: (a)

147. Which of the following is an absolute measure of dispersion

[a. co-efficient of variation b. standard deviation
c. Co. efficient of quartiles d. co efficient of mean deviation]

Ans : (b)

148. Standard deviation is always than mean deviation.

[a. smaller b. greater c. lower d. none]

Ans: (b)

149. A time reversal test is satisfied if we use.....

[a. Mean b. mode c. Geometric mean d. None)

Ans : (c)

150. Which of the following is an economic barometer?

[a. skewness b. median c. index numbers d. mode]

Ans : (c)

151. Is an extension of time reversal test

[a. circular test b. unit test c. both d. none]

Ans : (a)

152. index satisfies circular test

[a. Paspeyres b. Paashe's c. Fishers d. Bowley's]

Ans : (c)

153. Commodities which shows considerable price fluctuations could be best measured by a.....

[a. value index b. price index c. quantity index d. quality

index]

Ans : (c)

154. Comparison is made between base year and is called index number of prices.

[a. current year b. past year c. actual year d. none]

Ans : (a)

155. is a series of arithmetic mean of values of a sequence of fixed number of years.

[a. moving average b. free hand method c. both A & B d. none)

Ans : (a)

156. is a ratio that measures how much a variable has changed over a time.

[a. time series b. index numbers c. both d. none]

Ans : (b)

157. Which of the following component of time series is attached to short term fluctuations?

[a. seasonal variation b. cyclical variation c. irregular variation d. All the

above]

Ans : (d)

158. Component is used for a short term forecast

[a. cyclical b. seasonal c. trend d. none]

Ans : (c)

159. General Index Number =

$$\left[\frac{\sum 1W}{\sum W}, \frac{\sum W}{\sum IW}, \frac{\sum [q_1] W}{\sum W}, \text{none} \right]$$

Ans : (a)

160. Is a measure of central tendency for finding average rates.

[a. A.M b. G.M c. H.M d. S.D]

Ans : (a)

161. Average is a measure of

[a. central tendency b. symmetry c. dispersion d. All of these]

Ans : (a)

162. is the best average to analyse speed.

[a. A.M b. G.M c. H.M d. W.M]

Ans : (c)

163. The range of 10, 20, 15, 18, 16, 21, 25 is

[a. 10 b. 15 c. 20 d. 5]

Ans : (b)

164. A lock cut in a factory for a month is allocated with the component of time series is.....

[a. regular movement b. irregular movement c. cyclical movement d. structural movement]

Ans : (b)

165. The Fisher's index number is the of Laspeyre's and Paashe;s index numbers.

(a. Harmonic mean b. Geometric mean c. Average d. All]

Ans : (b)

166. means combining 2 or more overlapping series of index number with different years in to one with a common base year.

- [a. deflating b. splicing c. base shifting d. none]
 Ans : (b)
167. An average The given data
 [a. summarizes b. Extension c. concludes d. none]
 Ans : (a)
168. the mean of 5 numbers is 10, afterwards a new number is added. The mean of 6 number is
- [a. 10 b. 11 c. 6 d. 7]
 Ans : (b)
169. The deciles D1 D2 are less than Quartile
 [a 1st b. 2nd c. 3rd d. 4th]
 Ans : (a)
170. In kurtosis, the normal curve is termed as
 [a. platy kurtic b. meso kurtic c. leptokurtic d. none]
 Ans: (b)
171. β_2 is a relative measure of
 [a. Skewness b. variance c. Kurtosis d. S.D]
 Ans : (c)
172. Suppose we want to know the average changes in the price of a set of commodities in 2010 with respect to the prices of same set of commodities in 2008. In this case what will be the base year?
 (a. 2010 b. 2008 c. 2000 d. None]
 Ans: (b)
173. When mean = 5, median = 10, mode =
 [a. 10 b. 20 c. 15 d. 25]
 Ans : (b)
174. The value of a variant that occurs most often is called
 [a. median b. mode c. mean d. none]
 Ans : (b)
175. The algebraic sum of deviations of values of a variable from its arithmetic mean is

[a. -1 b. 1 c. 2 d. 0]

Ans : (d)

176. Moves like a pendulum of clock and it is never ending process.

[a. free hand curve b. moving average
c. cyclical fluctuation d. All of these]

Ans : (b)

177. Variation in a time series that occurs due to chance is

[a. regular component b. irregular component c. stagnant d. none]

Ans : (b)

178. Which of the following statement is true

[a. Mean is not affected due to sampling fluctuations
b. mean is not affected by extreme values.
c. Arithmetic mean is not stable
d. Mean is not capable of more algebraic treatment]

Ans : (a)

179. reflects on the price change experienced by families of people.

[a. consumer price index b. weighted average price
c. whole sale price index d. none]

Ans : (a)

180. A time series is a set of values arranged in order.

[a. descending b. ascending c. spatial d. chronological]

Ans : (d)

181. Which of the following measure of central tendency is difficult to complete

[a. AM b. HM c. GM d. none]

Ans : (c)

182. Quartiles can be determined graphically using

[a. ogive b. Histogram c. frequency polygon d. pie chart]

Ans : (a)

183. The values which varies with maximum frequency is called

- [a. mode b. median c. mean d. variance]
- Ans : (a)
184. Mean - Mode = 3 ($\overline{\text{mean}} - \text{Median}$)
 [a. median b. standard deviation c. mode d. mean]
- Ans : (d)
185. Index Number reveals the state of,
 [a. inflation b. deflation c. both (a) & (b) d. None]
- Ans : (c)
186. Arithmetic mean is not to be used in which of the following situations.
 [a. the distribution is highly skewed b. distribution is open ended classes
 c. the average required is for rates, ratios, percentage d. All of these]
- Ans : (d)
187. Mode – 3 median -
- [a. 2 mean b. 3 mean c. mean d. 2 mode]
- Ans : (a)
188. Lorenz curve is a geometric method of measuring
 [a. variability b. flexibility c. both d. none]
- Ans : (a)
189. Mean deviation is measure
 [a. relative b. absolute c. both d. none]
- Ans : (b)
190. is non negative
 [a. standard deviation b. mean deviation c. variance d. harmonic mean]
- Ans : (a)
191. From the following which is not a kind of index number
 [a. price b. quantity c. value d. quality]
- Ans : (d)

192. Quartiles are the values dividing a given set of observation in to

[a. two equal parts b. four equal parts c. three equal part d. five equal parts]

Ans : (b)

193. percentage of values of a series are less than Q1

[a. 75 b. 50 c. 25 d. 10]

Ans : (c)

194. The amount of a variation is designated as measure of dispersion.

[a. absolute b. relative c. both d. none]

Ans : (a)

195. Pie chart is always

[a. circular b. freehand c. both d. none]

Ans : (a)

196. If the mean deviation of a distribution is 3.6, standard deviation is

[a. 6.8 b. 6.0 c. 1.6 d. none]

Ans : (b)

197. Index numbers may be constructed to reflect percentage changes in

[a. prices b. wages c. transport costs d. All of these]

Ans : (d)

198. In index number current year quantity is denoted by

[a. p1 b. p0 c. q1 d. q0]

Ans : (c)

199. From the following which is not a problem in the construction of Index numbers?

[a. understanding of the purpose b. selection of commodities
c. selection of base d. selection of price]

Ans: (d)

200. is the geometric mean of Laspeyre's and Paashe's Index number.

[a. Walsche's Index Number b. Kelly's c. Fishers d. Bowley's]

Ans : (c)