

Bc/Bs-603

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(6th Semester)

COMMERCE

Paper : BC-603

(Business Statistics)

(PART : A—OBJECTIVE)

(Marks : 25)

The figures in the margin indicate full marks for the questions

Answer **all** questions

- 1.** Choose and write the correct answer from the options provided : 1×10=10

(a) The scope of survey depends on

- (i) the objectives
- (ii) resources
- (iii) availability of time
- (iv) All of the above

(b) The graphic method of studying dispersion is called

- (i) cartogram
- (ii) pictogram
- (iii) Lorenz curve
- (iv) scatter diagram

(2)

- (c) The coefficient of correlation
- (i) varies between 0 and 1
 - (ii) varies between -1 and +1
 - (iii) varies between and
 - (iv) varies between 0 and 100
- (d) Fisher's ideal index is
- (i) AM of Laspeyres' and Paasche's index
 - (ii) GM of Laspeyres' and Paasche's index
 - (iii) average of base and current years' quantities
 - (iv) median of Laspeyres' and Paasche's index
- (e) The most important factors causing seasonal variations are
- (i) growth in population
 - (ii) technological improvements
 - (iii) weather and social customs
 - (iv) change in fashions
- (f) The classical school of thought on probability assumes that all possible outcomes of an experiment are
- (i) equally likely
 - (ii) independent
 - (iii) mutually exclusive
 - (iv) mutually exclusive and equally likely

(3)

- (g) If two events A and B are dependent, the conditional probability of A given B is
- (i) $P(B / A)$
 - (ii) $P(A) / P(B)$
 - (iii) $P(A \cap B) / P(A)$
 - (iv) $P(A \cap B) / P(B)$
- (h) Sum of squared deviations of a set of values is minimum when deviations are taken from the
- (i) arithmetic mean
 - (ii) geometric mean
 - (iii) harmonic mean
 - (iv) median
- (i) If one of the regression coefficients is greater than unity, then the other must be
- (i) equal to unity
 - (ii) less than unity
 - (iii) greater than unity
 - (iv) zero
- (j) Diagrams and graphs are tools of
- (i) collection of data
 - (ii) presentation of data
 - (iii) summarization of data
 - (iv) analysis of data

(4)

2. State whether the following statements are True or False : 1×5=5

- (a) The value of mode and median can be determined graphically.
- (b) Quartile deviation is more suitable in case of open end distribution.
- (c) Correlation always signifies a cause and effect relationship between the variables.
- (d) Judgement sampling is a type of probability sampling method.
- (e) If coefficient of correlation is zero, then two regression lines will be identical.

3. Write short notes on/Answer the following (any five) : 2×5=10

- (a) Lorenz curve
- (b) Chain index number
- (c) Mutually exclusive events
- (d) Business cycle
- (e) Two properties of coefficient of correlation
- (f) What is Statistics?
- (g) Graphic method
