2018

CBCS

1st Semester

STATISTICS

PAPER—DSC1AT

(General)

Full Marks : 40

Time : 2 Hours

The figures in the right-hand margin indicate full marks.

Candidates are required to give their answers in their own words as far as practicable.

Illustrate the answers wherever necessary.

Descriptive Statistics

Answer *all* questions

1. Answer any *five* questions : 5×2

(a) Define Statistics.

(b) What is the difference between a line diagram and a ratio chart ?

(c) Write the relation between mean, median and mode.

(d) Define coefficient of variation ?

(e) Give two uses of geometric mean.

(f) What is a scatter diagram ?

(g) Define Pearson's coefficient of skewness.

(h) What are the main scales of measurement ?

2. Answer any *four* questions : 4×5

(a) Distinguish between variable and attribute.

(b) Write short notes on discrete and continuous variable.

(c) Define root mean square deviation. Show that it is minimum when measured from the mean. 2+3

(d) What are the measures of association of attributes ? Describe in brief any one of them.

(e) Show that A.M ≥ G.M ≥ H.M where the symbols have their usual meanings.

(f) Define leptokurtic and platykurtic distributions.

3. Answer any *one* question : 1×10

(a) Explain the different diagrammatic representations of frequency distribution for both continuous and discrete variables.

(b) Describe the principle of least squares for fitting a simple linear regression.

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