

(6)

(f) From the data given below, find out the co-efficient of correlation between two variables using Pearson's direct method :

Marks in English	1	2	3	4	5
Marks in Statistics	6	7	8	9	10

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Course Code
BBA – 02

Term End Examination - December, 2019

STATISTICS

Bachelor of Business Administration (BBA)

Time : 3 hours

Full Marks : 100

The figures in the right-hand margin indicate marks

Answer **all** Groups as directed

Group—A

1. Answer *all* the questions, each within 1 word : 1×10=10

(a) A frequency distribution with one variable.

(b) When data are classified on the basis of geographical locations?

(c) Main part of the table containing the numerical figures.

(d) The graph obtained by joining the mid-points of histograms.

(e) A quality possessed by an individual or object.

(2)

- (f) Name a variable which takes specific values only between two fixed limits.
- (g) What do you mean by the term the collection of all items related to any survey?
- (h) A variable which can take any value between two fixed limits.
- (i) A part of selected items taken from a population for a survey.
- (j) The technique of selecting sample from a population.

Group—B

2. Answer any *ten* questions each within 2 sentences : $2 \times 10 = 20$
- (a) Name the discrete probability distribution for which mean is greater than the variance.
 - (b) State the three different quantitative methods of time series forecasting.
 - (c) Define Type I and Type II error.
 - (d) What is meant by one-tailed and two-tailed tests?

(5)

Group—D

4. Answer any *four* questions each within 500 words : $10 \times 4 = 40$

- (a) Calculate mean and median from the following distribution :

Class Interval	0-10	10-20	20-30	30-40	40-50
Frequency	3	10	17	7	6

- (b) An urn contains 15 balls numbering from 1 to 15 (no two balls are of the same number). What is the probability that a ball selected at random is a ball with number that is multiple of 3 or 4?
- (c) What is simple random sampling? What are its advantages? Describe two methods of selection of simple random sampling.
- (d) Define 'business forecasting'? Write down the steps involved in business forecasting.
- (e) Distinguish between census and sample survey. Give reasons why sample survey is preferred.

(4)

- (b) Describe briefly the different sources of error in sample survey.
- (c) Mention three theories of business forecasting.
- (d) Distinguish between Prediction and Forecasting.
- (e) Name the steps involved in testing of hypothesis.
- (f) Write a note on the probable error of correlation coefficient.
- (g) What are the chief assumptions of ANOVA?
- (h) State the application of F distribution.
- (i) Highlight the importance of classification in statistical analysis.
- (j) Distinguish between Primary and Secondary data.
- (k) What is the difference between Questionnaire and Schedule?
- (l) Write essential characteristics of an ideal questionnaire.

(3)

- (e) How many types of correlation that may exist between the variables in bivariate data?
- (f) What are the different types of classification of data?
- (g) What is tabulation?
- (h) What is the difference between population and sample?
- (i) Name the various types of statistical survey.
- (j) What is the difference among Mean, Median and Mode?
- (k) What is stratified random sampling?
- (l) What is correlation of coefficient?

Group—C

3. Answer any *ten* questions each within 75 words : 3×10=30
- (a) What is the probability that an ordinary year (not leap year) has 53 Mondays?

