## BBA-05

## December - Examination 2018

## BBA Pt. I Examination

## Fundamentals of Business Statistics

## Paper - BBA-05

## Time : 3 Hours ]

[ Max. Marks :- 80
Note: The question paper is divided into three sections $\mathrm{A}, \mathrm{B}$ and C. Write answers as per given instructions.

## Section - A

$8 \times 2=16$
(Very Short Answer Questions)
Note: Answer all questions. As per the nature of the question delimit your answer in one word, one sentence or maximum upto 30 words. Each question carries 2 marks.

1) (i) Give a definition of statistics.
(ii) What do you mean by secondary data?
(iii) What is the meaning of cumulative frequency?
(iv) What is range?
(v) What is the formula given by Bowley for measuring co-efficient of skewness?
(vi) Define Index Number.
(vii) What do you mean by seasonal variations?
(viii) What do you mean by independent events?
(Short Answer Questions)
Note: Answer any four questions. Each answer should not exceed 200 words. Each question carries 8 marks.
2) State the essentials of a good sample.
3) Calculate median from the following data of Sunita Ltd.:

| Marks more <br> than | 70 | 60 | 50 | 40 | 30 | 20 |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: |
| No. of <br> students | 7 | 18 | 40 | 55 | 65 | 70 |

4) Calculate standard deviation and its coefficient from the following data of Neha Ltd.:

| Marks out <br> of 10 | $0-2$ | $2-4$ | $4-6$ | $6-8$ | $8-10$ |
| :--- | :---: | :---: | :---: | :---: | :---: |
| No. of <br> students | 02 | 05 | 15 | 07 | 01 |

5) Explain and illustrate the difference between Time Reversal Test and Factor Reversal Test.
6) Enumerate different methods of calculating correlation.
7) Explain the difference between regression and correlation.
8) In a throw of two cubical dice, find the change of getting a total which is divisible either by 2 or 3.
9) Define interpolation and state its assumptions.

Section - C

Note: Answer any two questions. You have to delimit your each answer maximum upto 500 words. Each question carries 16 marks.
10) Complete mode and mean of the data given below:

| Marks less <br> than | 10 | 15 | 20 | 25 | 30 |
| :--- | :---: | :---: | :---: | :---: | :---: |
| No. of <br> students | 20 | 50 | 100 | 140 | 150 |

11) How will the skewness be tested in a distribution? Explain with example.
12) What is a Time series? Name the components of a time series. Explain their salient features.
13) Calculate the Fisher's Ideal Index No. from the following data:

| Articles | 2016 |  | 2017 |  |
| :---: | :---: | :---: | :---: | :---: |
|  | Expenditure | Price in ₹ | Expenditure | Quantity |
| X | 300 | 10 | 150 | 15 |
| Y | 400 | 8 | 250 | 10 |
| Z | 420 | 7 | 200 | 5 |

