## May, 2019 <br> BBA - II SEMESTER Business Statistics (BBA/GEN/206)

Note: Attempt five questions in all selecting four questions from Part-B in addition to compulsory Part-A.

## PART-A

1. (a) "Statistics is the science of averages". Comment.
(b) Explain partial and multiple correlations.
(c) What is skewness?
(d) Define secular trend.
(e) What are the uses of time series in business decision-making?
(f) Explain diagrams and graphs. (1.5)
(g) What do you meant by index numbers?
(h) Discus the uses of time series in business forecasting.
(i) What is standard error?
(j) "The regression equations of X on Y and Y on X are irreversible". Explain.

## PART-B

2. Following are the marks obtained by two students A and $B$ in 10 sets of examination:

| Sets | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| A's marks | 44 | 80 | 76 | 48 | 52 | 72 | 68 | 56 | 64 | 64 |
| B's marks | 48 | 75 | 54 | 60 | 63 | 69 | 72 | 51 | 57 | 56 |

If the consistency of performance is the criterion for awarding the prize, who should get the prize?
3. "Statistics is essentially an applied science. Its only justification lies in the help it can give in solving a problem". In the light of the above statement, explain, with illustrations, how statistics can be helpful in solving business problems.
4. Compute Fisher's Ideal quantity index number form the following data :

| Commodity | 2017 |  | 2018 |  |
| :---: | :---: | :---: | :---: | :---: |
|  | Price (₹) | Total <br> Value (₹) | Price (₹) | Total <br> Value (₹) |
| A | 5 | 50 | 4 | 48 |
| B | 8 | 48 | 7 | 49 |
| C | 6 | 18 | 5 | 20 |

5. What is tabulation? What are its uses? Mention the points that a good statistical table should contain.
6. "Measures of dispersion and central tendency are complementary to each other in highlighting the characteristics of a frequency distribution". Explain this statement with suitable examples.
.. What is regression? Why are there, in general, two regression lines? When do they coincide? Explain the use of regression equations in an economic enquiry.
