



**LOYOLA COLLEGE (AUTONOMOUS), CHENNAI – 600 034**

**B.A. DEGREE EXAMINATION – ECONOMICS**

**THIRD SEMESTER – NOVEMBER 2016**

**EC 3502/EC 3500 – QUANTITATIVE TOOLS FOR ECONOMICS**

Date: 08-11-2016

Dept. No.

Max. : 100 Marks

Time: 01:00-04:00

**PART-A (5 x 4 = 20 Marks)**

**Answer any FIVE Questions each in about 75 words**

1. Define statistics and state its limitations.
2. Point out the parts of a frequency table
3. State the various types of classification of data.
4. List out the features of a good average.
5. State the uses and limitations of Range.
6. State the different types of correlation.
7. Define time series and state its significance.

**PART-B (4 x 10 = 40 Marks)**

**Answer any FOUR Questions each in about 250 words**

8. Explain the functions and uses of statistics
9. Explain the different types of diagrams with suitable illustration in data presentation.
10. From the following data calculate median and mean deviation.  
Size : 0-10 10-20 20-30 30-40 40-50 50-60 60-70  
Frequency : 7 12 18 25 16 14 8
11. Calculate the lower and upper quartiles and third deciles from the following data:  
Class : 0-5 5-10 10-15 15-20 20-25  
Frequency : 7 18 25 30 20
12. Differentiate correlation analysis from regression analysis.
13. Explain the problems faced in the construction of an index number.
14. Explain the four basic components of time series analysis.

**PART-C (2 x 20 = 40 Marks)**

**Answer any TWO Questions each in about 900 words**

15. Explain the various methods that are used for collecting primary data.
16. Calculate Standard deviation and Coefficient of Variation from the following data.  
Wages (Rs) : 0-10   10-20   20-30   30-40   40-50   50-60   60-70   70-80  
No. of workers: 12   18   35   42   50   45   20   8
17. From the following data obtain the two regression equations and the coefficient of correlation.  
X : 25   28   35   32   31   36   29   38   34   32  
Y : 43   46   49   41   36   32   31   30   33   39
18. a) Explain the consumer price index number.  
b) Construct Fisher's ideal index number for the following data and show that it satisfies the time and factor reversal tests.

| Commodities | 2014     |       | 2015     |       |
|-------------|----------|-------|----------|-------|
|             | Quantity | Price | Quantity | Price |
| M           | 20       | 12    | 30       | 14    |
| N           | 13       | 14    | 15       | 20    |
| O           | 12       | 10    | 20       | 15    |
| P           | 8        | 6     | 10       | 4     |
| Q           | 5        | 8     | 5        | 8     |

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