LOYOLA COLLEGE (AUTONOMOUS) CHENNAI – 600 034

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

FIRST SEMESTER – **APRIL 2025**

UEC1MC02 – STATISTICAL TOOLS FOR ECONOMICS

Date: 26-04-2025 Dept. No. Max. : 100 Marks

Time: 01:00 PM - 04:00 PM

SECTION A - K1 & K2 (CO1)

Q.No	Levels	**Answer ALL the Questions**	**(10 x 2 = 20)**
1	K1	Define secondary data.	
2		Distinguish between primary data and Secondary data.	
3		What do you understand by "Central Tendency"?	
4		Recall the properties of a Good Average.	
5		What is meant by Measures of Dispersion?	
6	K2	Point out the uses of Quartiles for measuring Dispersion.	
7		Write a short note on a Scatter diagram.	
8		Give formula for Spearman's Rank correlation coefficient.	
9		State the components of time series.	
10		Give the names of difference methods of forecasting.	

SECTION B – K3 & K4 (CO2)

Answer ALL the Questions **(4 x 10 = 40)**

11 Explain the objects of classification.

[OR]

12 Represent the following data of a company by a suitable bar diagram.

YEAR	Sales (Rs in cores)
2008-2009	6
2009-2010	9
2010-2011	12
2011-2012	10
2012-2013	15

13 Find Mean and median from the following data:

Annual Expenditure (Rs1000)	No. of Families
40-59	50
60-79	250
80-99	500
100-119	100
120-139	50

[OR]

14 Calculate the geometric mean from the data given below:-

Marks	5	15	25	35	45	55	65	75
No. of Students	15	18	25	30	22	17	10	30

15 Calculate the Standard Deviation from the following data;

Size of items	Frequency
06	03
07	06
08	09
09	13
10	08
11	05
12	04

[OR]

16 K4 Calculate Karl Person's Coefficient of Correlation from the following data;

Roll no of Students	Marks in physics	Marks in Chemistry
1	48	45
2	35	20
3	17	40
4	23	25
5	47	45

17 Draw the trend line by Semi-average method using the given data

Year	1998	2000	2001	2001	2002	2003
Production in (tonnes)	253	260	255	266	259	264

[OR]

18 Explain the various types of Correlation.

SECTION C – K5 & K6 (CO3)

Answer ALL the Questions **(2 x 20 = 40)**

19 K5 Discuss the Nature and scope of Statistics

[OR]

20 Calculate (i) Mean (ii)Median and (iii) Mode for the following data

Marks Below	10	20	30	40	50
No. of Students	03	08	17	20	22

21 K6 The profits (Y) of a company in the Xth year of its life were observed to be as shown below, fit regression equation.

Years of Life (X)	1	2	3	4	5
Profit(Y)in Rs:0001	1,250	1400	1650	1950	2500

[OR]

22 Fit a Straight line trend equation to the following data by the method of least square and estimate the value of sales for the year 1985.

Year	1979	1980	1981	1982	1983
Sales in Rs	100	120	140	160	180
