## LOYOLA COLLEGE (AUTONOMOUS) CHENNAI – 600 034



## **B.Sc.** DEGREE EXAMINATION – **STATISTICS**

## FIRST SEMESTER – APRIL 2025





Date: 23-04-2025	Dept. No.	Max. : 100 Marks
Time: $0.1.00$ DM $0.00$ DM		

		SECTION A - K1 & K2 (CO1)													
Q.No	Levels	Answer ALL the Questions	$(10 \times 2 = 20)$												
1		Define Classification.													
2		What do you mean by Tabulation?													
3	K1	What are the various measures of central tendency?													
4		Find the Range and its coefficient of range for the data: 13,25,36,22,18,45,21,26,30,22													
5		What is meant by Skewness?													
6		Calculate the Inter-Quartile Range (IQR) of the numbers 8, 10, 11, 12, 14.													
7		What are the properties of the coefficient of correlation?													
8	K2	Calculate the probable error assuming the correlation coefficient of items.	at of 0.9 from a sample of 25 pairs												
9		Define consistency of data.													
10		What do you understand by `Association of Attributes'?													
		SECTION B – K3 & K4 (CO2)													
		Answer ALL the Questions	$(4 \times 10 = 40)$												
11		Construct the methods of collecting primary and secondary data	1.												
		[OR]	(5)												
12	K3	<ul><li>(i). Distinguish between classification and tabulation.</li><li>(ii). Represent the following data by a sub-divided bar diagram</li></ul>	(5) (5)												
	KS	Commodities (in Rs) A B													
		Price per unit 3 2													
		Quantity sold 75 100													
		Value of raw material 175 150													
		Other production expenses 30 25 Profits 20 25													
1.2															
13		Calculate the Geometric Mean and Harmonic Mean from the fo	llowing data:												
		x 10 15 20 25 40 72													
		f 1 3 4 10 5 2   OR													
14		Calculate the Quartile Deviation and its Coefficient of Quartile Deviation	tion from the following data:												
		Weekly Wages   100   200   400   500   600													
		No. of Weeks 5 8 21 12 6													

5		Expla	in Karl	Pearso	on's c	oeffic	ient o	f Ske	wness	s. Wha	t is t	he diff	erenc	e betw	een a re	lative	measu
			ne absol														
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16	K4	Calculate the first four mor								ition 5	about 1	ne m	ean.				
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		correlation.  X 15 20 28 12 40 60 20 80															
			Y	40	30	50	30	20	10	30	60						
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	Ansv	wer AL	L the C	)uesti	ons										(2 :	x 20 =	40)
19		(i) De	escribe t	he var	ious r	netho	ds of	graph	ical re	epreser	ntatio	on of st	atisti	cal dat	a.		(8)
	K5	(ii) Ca	lculate t					_			1				(12)		
			Class Interval		(	0-20		-40	40-		60-8	0		)-100			
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