



LOYOLA COLLEGE (AUTONOMOUS), CHENNAI – 600 034

B.A. DEGREE EXAMINATION – ECONOMICS

SECOND SEMESTER – APRIL 2016

ST 2103 - STATISTICAL METHODS FOR ECONOMICS

Date: 26-04-2016
Time: 01:00-04:00

Dept. No.

Max. : 100 Marks

SECTION - A

Answer ALL questions.

(10 x 2 = 20 marks)

1. State any two uses of Statistics.
2. What are the types of data under the method of data collection?
3. Mention any two types of diagram.
4. What are the measures of dispersion?
5. Define Kurtosis.
6. Define Mean Deviation.
7. Define positive and negative correlation.
8. Give the formula for Spearman’s coefficient of correlation.
9. Define Paasche’s method.
10. Define cost of living index

SECTION - B

Answer any FIVE questions

(5 X 8 =40 Marks)

11. Explain the Scope and Limitation of Statistics
12. Give a comparison between census method and sampling method
13. Explain the Planning of a Statistical Survey.
14. Find the Median for the following data.

Class interval	Frequency	Class interval	Frequency
0-10	5	50-60	21
10-20	14	60-70	10
20-30	29	70-80	7
30-40	21	80-90	15
40-50	25	90-100	3

15. Find the rank correlation coefficient for the ten competitors in a beauty contest are ranked by two judges in the following order.

Judge A	1	5	4	8	9	6	10	7	3	2
Judge B	4	8	7	6	5	9	10	3	2	1

16. Find the coefficient of correlation between X and Y from the following data:

X	39	65	62	90	82	75	25	98	36	78
Y	47	53	58	86	62	68	60	91	51	84

17. Given below is the amount of production (in lakh kgs.) of a sugar factory:

Year	1982	1983	1984	1985	1986	1987	1988
Production	125	128	133	135	140	141	143

18. Explain the concept of Scatter Diagram

SECTION – C

Answer any TWO questions

(2 X 20 =40 Marks)

19. a) Describe about the various methods of diagrammatic and graphical representation of data.

b) Explain all the components of time series.

(10+10)

20. a) Calculate Quartile Deviation from the following data

Variable	40-49	50-59	60-69	70-79	80-89	90-99
Frequency	306	182	144	96	42	34

b) Find out coefficient of Mean Deviation by using Median from the following data.

Class	16-20	21-25	26-30	31-35	36-40	41-45	46-50	51-55	56-60
Frequency	8	15	13	20	11	7	3	2	1

(10+10)

21. Find Karl person's coefficient of correlation from the following data.

X \ Y	20-30	30-40	40-50	50-60	60-70	Total
15-25	5	9	3	-	-	17
25-35	-	10	25	2	-	37
35-45	-	1	12	2	-	15
45-55	-	-	4	16	5	25
55-65	-	-	-	4	2	6
Total	5	20	44	24	7	100

22. For the following data, calculate price index numbers by:

- (a) Laspeyre's method,
- (b) Paasche's method
- (c) Fisher's ideal method
- (d) Marshall-Edgeworth method
- (e) Dorbish-Bowley method.

Commodity	Base year		Current year	
	Price	Quantity	Price	Quantity
A	20	10	25	12
B	18	16	32	10
C	35	8	48	8
D	28	12	40	10

(4+4+4+4+4)