



LOYOLA COLLEGE (AUTONOMOUS), CHENNAI – 600 034

B.A.DEGREE EXAMINATION – ECONOMICS

SECOND SEMESTER – APRIL 2018

CO 2110- STATISTICAL METHODS FOR ECONOMICS

Date: 28-04-2018
Time: 01:00-04:00

Dept. No.

Max. : 100 Marks

SECTION-A

Answer all the questions:

10 x 2 = 20

1. What are the measures of central tendency?
2. What are the merits of Mode?
3. Define Range and its Coefficient.
4. What is Quartile Deviation?
5. What is Standard Deviation?
6. The marks obtained by 10 students in a class are 40,50,30,60,70,80,40,50,60,90. Calculate the arithmetic mean.
7. Find the Mode-2, 2, 3,5,6,8,5,9,5.
8. Calculate the Range and its coefficient -61, 62,63,64,65,66,67,68.
9. What are the different types of correlation?
10. What is Index number?

SECTION-B

Answer any five questions:

5 x 8 = 40

11. Distinguish between Correlation and Regression.
12. Explain the uses and disadvantages of Statistics
13. Explain the various measures of dispersion.
14. Fit the straight line trend equation and estimate the trend and short term fluctuations:

Year	1960	1961	1962	1963	1964	1965	1966	1967	1968
Value	38	40	60	72	69	62	67	95	104

Find the Trend value for the year 1971.

15. Calculate the Rank Correlation from the following data:

X	52	63	45	36	72	65	47	25
Y	62	53	51	25	79	43	60	33

16. Construct a 5 yearly moving average:

Year	No. of students	Year	No. of students
2004	332	2009	405
2005	317	2010	410
2006	357	2011	427
2007	392	2012	405
2008	402	2013	438

17. Draw Histogram and Frequency Polygon from the following data:

Income(Rs.)	40-45	45-50	50-55	55-60	60-65	65-70	70-75	75-80
No. of Employees	20	35	55	100	60	45	15	10

18. Compute Quartile Deviation from the following data:

X	10-20	20-30	30-40	40-50	50-60	60-70	70-80
f	12	19	5	10	9	6	6

SECTION-C

Answer any two questions:

2 x 20 = 40

19. Construct index numbers of price from the following data by applying

- a) Laspeyre's method
- b) Paasche method
- c) Bowley method
- d) Fisher's Ideal method and
- e) Marshall Edgeworth method.

Commodities	2004 Price	2004 Quantity	2005 Price	2005 Quantity
A	2	8	4	6
B	5	10	6	5
C	4	14	5	10
D	3	19	2	13

20. From the following:

- A) Fit a regression line of X on Y and predict X when Y=35
- b) Fit a regression line of Y on X and predict Y when X=7
- c) Coefficient of correlation.

X	1	2	3	4	5
Y	10	20	15	25	30

21. The scores of two players A and B in 12 rounds are given below:

A	83	85	80	85	84	87	89	97	95	94	92	91
B	87	89	85	91	92	94	96	82	86	81	86	83

- a) Who is the better scorer A or B?
- b) Who is the most consistent player?
- c) Who is less stable?

22. Calculate Mean, Median and Mode and verify empirical relation:

Class	5-10	10-15	15-20	20-25	25-30	30-35	35-40
Frequency	3	6	10	20	15	5	4
