(STA N-1306)

B.Sc. (MSCS) (CBCS) Examinations

APRIL - 2022

EXAMINATION AT THE END OF SEMESTER - I

PART - II STATISTICS-1

DISCRIPTIVE STATISTICS

TIME : Three hours | Maximum : 60 Marks

Section-A

Answer any five of the following questions: 5 x 4 = 20marks

1. Prove the limits of Bowley's Coefficient of Skewness
2. Explain Kurtosis
3. Explain Fitting of Straight line
4. Write the normal equations for ~~power~~ Exponential curve $y = ab^x$
5. Explain about Karl Pearson Coefficient of Correlation
6. Define multiple and partial correlation coefficient
7. Explain about Regression lines
8. Explain the importance of Regression
9. Explain about association of two attributes
10. Define Q and Y and express the relation between them

Section-B

Answer all the following questions: 5 x 8 = 40marks

11A) Derive the relationship between Central and noncentral moments

(or)

B) Explain Skewness and its Various measures

12A) Fit a Stecond degree Parabola for the following data

X :	1	2	3	4	5	6
Y :	55	46	40	38	33	30

(or)

B) Explain the fitting of ~~power~~ Exponential curve $Y = ae^{bx}$

13A) Show that Coefficient of Correlation is independent of change of origin and scale

(or)

B) Compute Spearman's Rank Correlation Coefficient to the following data

X :	20	14	36	29	5	11
Y :	15	9	25	10	2	6

14A) State and Prove any four properties of Regression

(or)

B) Distinguish between Corrrelation and Regression

15A) Explain the Conditions of Consistency for two and three attributes

(or)

B) Explain the Criteria of independence of two attributes

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AUGUST-2021
EXAMINATION AT THE END OF SEMESTER - I
PART - II STATISTICS-1
DISCRIPTIVE STATISTICS

TIME : Three hours | Maximum : 60 Marks

Section-A

Answer any five of the following questions: 5 x 4 = 20 marks

1. Explain about Central and Non central moments.
2. Explain about Kurtosis
3. Define Principle of Least squares.
4. Explain the fitting of a power curve.
5. Explain Scatter diagram.
6. Define Partial Correlation
7. Distinguish between Correlation and Regression.
8. Explain about angle between two regression lines.
9. Explain Yule's coefficient of association with its limits.
10. Define Independence of attributes.

Section-B

Answer all the following questions: 5 x 8 = 40 marks

11.A) Establish the relationship between Central and non central moments.

(OR)

B) Define Skewness and Show that Bowley's coefficient of skewness lies between -1 and +1.

12.A) Explain the fitting of second degree parabola.

(OR)

B) Explain the fitting of an exponential curve.

13.A) Explain about the various types of correlation and Write the properties of correlation.

(P.T.O)

(OR)

B) Derive the Spearman's rank Correlation Coefficient.

14.A) Derive the Regression line of Y on X.

(OR)

B) Derive the properties of regression .

15.A) Explain the Conditions for Consistency of data for two and three attributes.

(OR)

B) Explain the association of two attributes and its measures.

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