Roll No…….. **Total No. of Printed Pages: 2**
Total No. of Questions: [09]

B.Com. (Hons.) (Semester – 2nd)
BUSINESS STATISTICS
Subject Code: BCOM1207
Paper ID: [140110]

Time: 03 Hours **Maximum Marks: 60**

Instruction for candidates:

1. Section A is compulsory. It consists of 10 parts of two marks each.
2. Section B consist of 5 questions of 5 marks each. The student has to attempt any 4 questions out of it.
3. Section C consist of 3 questions of 10 marks each. The student has to attempt any 2 questions.

Section – A **(2 marks each)**

Q1. Attempt the following:

a. Differentiate between regression and correlation analysis.
b. Differentiate between seasonal and cyclic variation in time series analysis.
c. Write a short note on Base shifting.
d. What are regression coefficients?
e. What are merits and demerits of rank correlation method?
f. Find the mode from the following data:
11.1, 10.9, 10.7, 11.4, 10.6, 11.3, 10.6, 10.6, 10.4
g. What are the limitations of Statistics?
h. Construct a frequency polygon of the following data without constructing a histogram:

Marks	No. of Students
0-10	2
10-20	4
20-30	6
30-40	8
40-50	4

i. What are the methods of collecting primary data?
j. The mean of 100 times is 80. By mistake one item is misread as 92 instead of 29. Find the correct mean.

Section – B **(5 marks each)**

Q2. Calculate the value of mode from the following data:

Marks	10-20	20-30	30-40	40-50	50-60	60-70	70-80	80-90
No. of Students	4	6	20	32	33	17	8	2

Q3. Calculate the mean variance and coefficient of variations from the data given below:

Daily Wages	No. of Workers

0-10	2
10-20	7
20-30	10
30-40	5
40-50	3

Q4. What is skewness? How does it differ from dispersion? Describe the various measures of skewness.

Q5. Explain briefly the components if time series.

Q6. Give the regression equations:

$3X + 4Y = 44$

$5X + 8Y = 80$ variance of $X = 30$

Find $\overline{X}$, $\overline{Y}$, γ and σ_y

Section – C **(10 marks each)**

Q7. a) Construct index number of prices from the following data by

(i) Laspeyri's Method (ii) Paaschi's Method (iii) Fisher's Method

Commodity	1994		1995	
	Price (Rs.)	Value (Rs.)	Price (Rs.)	Value (Rs.)
A	8	100	10	90
B	10	60	11	66
C	5	100	5	100
D	3	30	2	24
E	2	8	4	20

and show that it satisfies both time reversal factor reversal test. 8

b) Write importance and uses of statistics. 2

Q8. a) Draw less than and more than ogives from the data given below: 7

Marks	No. of Students
0-5	4
5-10	6
10-15	10
15-20	10
20-25	25
25-30	22
30-35	18
35-40	5

b) What is regression? Describe types of regression analysis. 3

Q9. What is meant by classification of data? What are its various objectives? Also discuss various methods of classification.