

B.Sc. (Information Technology)-II (CBCS Pattern) Third Semester
UBITT306 - Statistical and Numerical Methods Paper-VI

P. Pages : 2

Time : Three Hours



GUG/W/18/10932

Max. Marks : 40

- Notes :
1. All questions are compulsory and carry equal marks.
 2. Draw neat and labelled diagram wherever necessary.
 3. Avoid vague answers and write specific answers to related questions.

1. EITHER.

- a) Explain the merits and Demerits of statistics. 4
- b) Discuss measures of central tendency in detail. 4

OR

- c) Explain statistical data collection methods. 4
- d) Explain functions and importance of data collection. 4

2. EITHER.

- a) Calculate Range and its coefficient. 4

Marks :	5-9	10-14	15-19	20-24
No. of Student	3	6	4	1

- b) Explain types of skewness in detail. 4

OR

- c) Calculate K-P coefficient of skewness. 4

Sr. No.	1	2	3	4	5	6
Income in Rs.	10	20	30	40	50	60

- d) What is coefficient of variation? Explain. 4

3. EITHER.

- a) Given $x = 0.85y$ variance of $x = 9$ $y = 0.75x$
find out coefficient of correlation and standard deviation of y . 4

- b) Explain types and uses of Regression Analysis. 4

OR

- c) What is index number? Explain characteristics and different uses of index number. 4

- d) Find index number by Laspeyre's and Paasche's method. 4

Commodity	Quantity		Price	
	2000	2001	2000	2001
A	16	20	50	16
B	5	8	10	15
C	4	6	20	25

4. EITHER.

- a) What are numerical errors? Explain their different types. 4
- b) Find the absolute and relative error in evaluating the expression xe^y , for $x = 1.25$ and $y = 2.16$. 4

OR

- c) What is error propagation? Explain error propagation in multiplication. 4
- d) Estimate the relative error in $z = x - y$ when $x = 0.1234 \times 10^4$ and $y = 0.1232 \times 10^4$ as stored in a system with four digit mantisa. 4

5. Solve all the Questions.

- a) Write a note on frequency distribution. 2
- b) Explain Dispersion in brief. 2
- c) Write a short note on fisher ideal method. 2
- d) Explain significance of error in brief. 2
