Final Year T.D.C.(Arts) Examination, 2001

ECONOMICS Paper - II (Elements of Statistics)

Time: Three Hours Maximum Marks: 100

Candidate have to attempt **five** questions from the following All questions carry equal marks.

- 1. 'Statistics are like clay of which you can make a God or devil as you please.' Comment.
- 2. What are the requisites of a good table? State the rules that serve as a guide in tabulating statistical material.
- 3. Find out Arithmatic Mean and Mode from the following data:

Marks (Less than) अंक (कम से कम)	No. of Students विद्यार्थियों की संख्या	
80	50	
70	45	
60	40	
50	30	
40	16	
30	10	
20	7	
10	3	

4. Calculate Kari Pearson's Co-efficient of Skewness from the following data:

Variable (चर)	Frequency (आवृति)
0-5	2
5-10	5
10-15	7
15-20	13
20-25	21
25-30	16
30-35	8
35-40	3

5. Ten students got the following percentage of marks in two subjects. Find the Co-efficient of Co-relation between the marks in the two subjects.

Roll No (रोज नं.)	Х	Y
1	80	45
2	60	71
3	51	60
4	69	57
5	58	62
6	62	68
7	64	48
8	72	50
9	56	62
10	58	60

6. Interpolate by Lagrange's formula the national income for the year 1962 from the following data:

Year (वर्ष) 1960 1961 1962 1963 1964 National Income 5112 6514 ? 9069 9685 (राष्ट्रीय आय)

7. Treating 1969 as the base yer, show with the help of the following data that both 'Time Reversal Test' and 'Factor Reversal Test' are satisfied by Fischer's Ideal Index Numbers.

Commodity	1969		1972	
(वस्तु)	Price (मूल्य)	Quantity (तादाद)	Price (मूल्य)	Quantity (तादाद)
Α	10	3	15	3
В	4	15	4	12
С	6	2	6	4
D	8	8	12	6
E	6	4	6	12

8. An investigation into the demand for T.V. sets in 7 town has resulted in the following data :

Population in ('000) (जनसंख्या '000)	TV sets demanded (टी.वी. सेट की मॉॅंग)
Х	Y
11	15
14	27
14	27
17	30
17	34
21	38
25	46

- 9. Why is sampling necessary in statistical investigations? Explain the important methods of sampling commonly used.
- 10. How are area and field statistics of agricultural crops collected in India ? What are the shortcomings of agricultural statistics ? Suggest measures to remove them.