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# M.Sc. DEGREE EXAMINATION, 2010

#### (GEOINFORMATICS)

### (FIRST YEAR)

### (PAPER-IV)

#### 540. STATISTICAL METHODS AND COMPUTER PROGRAMMING

Dec]

Maximum: 100 Marks

[Time : 3 Hours

 $(5 \times 20 = 100)$ 

## Answer any FIVE questions Each answer should be in about 1500 words All questions carry equal marks

1. Discuss in detail the various considerations one has to bear in mind while preparing a a) frequency distribution.

(OR)

b) Compute Mean and Standard deviation for the following data. Also interpret you results.

Rainfall (in cms) in 5 locations					
Region A	3.4	3.8	3.9	4.2	5.1
Region B	2.6	2.9	3.4	3.5	4.1

2. Compute Karl Pearson's coefficient of correlation for the following data. a)

Х	4	28	20	12	32	24	16	8	
Y	3	27	19	11	31	23	15	7	
		((	)R)						

- Explain in detail various aspects involved in a sample survey. b)
- 3. Explain the following: a)
  - Statistics and parameter i)
  - Critical region and region of acceptance ii)
  - Null and Alternative Hypothesis iii)

(OR)

To test the effectiveness of innoculation against cholera the following data were b) obtained.

	Attacked	Not Attacked	Total
Inoculated	30	160	190
Non Inoculated	140	460	600
Total	170	620	790

The figure represents the number of persons. Does inoculation prevent attack from cholera? (Given  $\chi^2_{0.05}$ =3.84 for 1.d.f)

Explain the principle of object oriented programming. 4. a)

(OR)

- What is meant by a friend function? Explain the merits and demerits of using friend b) function.
- 5. How do we invoke a construction function? Mention the special properties of the a) construction functions.

### (OR)

b) Write an explanatory note on multilevel inheritance with an example.

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