

Total No. of Pages:

1

Register Number:

2134

Name of the Candidate:

M.Sc. DEGREE EXAMINATION, 2011

(GEO-INFORMATICS)

(FIRST YEAR)

(PAPER-IV)

540. STATISTICAL METHODS AND COMPUTER PROGRAMMING

May]

[Time : 3 Hours

Maximum : 100 Marks

Answer ALL questions

(5×20=100)

1. a) What is meant by measures of dispersion? Mention the merits and demerits of any four measures of dispersion.

(OR)

- b) The following are the data obtained in a mountain range. Compute Mean, Median and Mode for the data.

Height of Trees (in Meters)	2-4	4-6	6-8	8-10	10-12	12-14
Number of Trees	4	6	12	20	7	1

2. a) Compute Karl-Pearson's co-efficient of correlation for the following data. Also interrupt your results.

X	1	8	5	3	7	6	4	2
Y	16.2	14.8	15.4	15.8	15.0	15.2	15.6	16.0

(OR)

- b) Write an explanatory note on the following:

i) Linear Regression

ii) Factor Varimax analysis

iii) Applications of Skewness and Kurtosis in earth sciences

3. a) What do you mean by analysis of variance? State the assumptions made under analysis of variance. Also give an example for one-way ANOVA.

(OR)

- b) Two treatments A and B were tried to control a certain type of plant disease. The following results were obtained.

Treatment	Infected	Non Infected	Total
A	80	320	400
B	70	330	400
Total	150	650	800

(Given $\chi^2_{0.05}=3.84$ for 1 d.f)

4. a) Explain overloading binary operators and write a program using friend function.

(OR)

- b) What are the constructors? Explain the different types of constructors with examples.

5. a) Explain file pointers and give illustration.

(OR)

- b) Describe hierarchical inheritance and single inheritance. Also give examples.
