

M.Sc. Part—II Semester—III (C.B.C.S. Pattern) Examination

GEOINFORMATICS

Paper—MGI-304 GEOSTATISTICS

Time : Three Hours]

[Maximum Marks : 80

Note :— (1) All questions are compulsory and carry equal marks.

(2) Draw neat sketches wherever necessary.

1. Write in brief on the following :—

- (a) What do you mean by average and standard deviation ? Explain it for continuous distribution.
- (b) Explain concept of correlation with the help of scattered diagram.

OR

- (c) Define classical probability. State and prove addition law of probability.
 - (d) Discuss diagrammatic representation of data. How you can draw Histogram ?
2. Explain probability mass function and cumulative distribution function of discrete variable.

OR

Discuss the concept of random variable expectations and moments.

3. Write in brief on the following :—

- (a) What do you mean by estimation ? Give properties of estimator.
- (b) Explain concept of sampling from normal distribution.

OR

- (c) Explain unbiasedness of estimator with example.
 - (d) How would you select sample from Poisson distribution ?
4. Write in brief on the following :—

- (a) Define Hypothesis, alternate hypothesis. Give Example.
- (b) Explain chi-square test of independence of attributes.

OR

- (c) Explain the concept of confidence interval. Give example.
 - (d) Discuss sequential test of hypothesis.
5. Explain concept of variogram with its calculation and interpretation.

OR

Discuss Linear regression in view of geostatistics.

