

Total No. of Questions :6]

SEAT No. :

[Total No. of Pages :2

P1602

[5128] - 403

M.A/M.Sc.

GEOGRAPHY

Gg-411: Geostatistics

(2013 Pattern) (Semester - IV) (Credit System)

Time : 2½ Hours]

[Max. Marks :38

Instructions to the candidates:

- 1) Attempt any two questions from Q.1 to Q.4.*
- 2) Question 5 and 6 are compulsory.*
- 3) Draw figures wherever necessary.*
- 4) Figures to the right indicate full marks.*

- Q1)** a) Define isotropy and anisotropy. [2]
- b) Give the definition and meaning of geostatistics. [4]
- c) Explain the point patterns and area with counts as spatial data sets of geostatistics. [4]
- Q2)** a) Define the term Exploratory Data Analysis (EDA). [2]
- b) Explain with proper examples the terms heterogeneity and dependency in geostatisstics [4]
- c) Enlist the bivariate descriptors used in geostatistics and explain any two of them with suitable examples. [4]
- Q3)** a) Define the term autocorrelation. [2]
- b) Explain in brief the concept of correlogram. [4]
- c) Elaborate the concept of semivariogram. [4]

P.T.O.

- Q4)** a) Define correlogram. [2]
- b) Describe the components of variogram. [4]
- c) Explain the characteristics of Markov chain analysis. [4]
- Q5)** a) Give the characteristics of global versus local and abrupt versus smooth techniques of spatial interpolation techniques. [4]
- b) Describe the spatial interpolation technique - Inverse Distance Weighted (IDW). [5]
- Q6)** a) Give the merits and demerits of cluster analysis. [4]
- b) Write a note on applications of cluster analysis in the studies of Earth sciences. [5]

EEE