

[Time: 2½ Hrs]

[Marks:75]

Please check whether you have got the right question paper.

- N.B:
1. All question are compulsory.
 2. Figures to the right indicate full marks.
 3. Students answering in the regional language should refer in case of doubt to the main text of the paper in English.

Q1. Attempt any three of the following 15

- a. Write a note on Rasterization
- b. Write a short note on Geographic phenomena.
- c. Explain the UTM grid system with example
- d. List and explain GIS operation related to data analysis
- e. List and explain the application of GIS
- f. Explain the following terms
i) Aggregation ii). Association

Q2. Attempt any three of the following 15

- a. Explain the relational data model used in GIS.
- b. Write a note on regular tessellation.
- c. Write a note on scale and resolution.
- d. Explain GIS architecture and functionality.
- e. Explain Spatial query and analysis.
- f. Relations, tuples and attributes.

Q3. Attempt any three of the following 15

- a. Explain overlay functions
- b. Explain data Quality in detail.
- c. List and explain Interpolating continuous data
- d. Explain in briefly the concept of Combining data from multiple sources
- e. Write a note on krigging.
- f. Write a note on GPS

Q4. Attempt any three of the following 15

- a. Explain difference between raster and vector overlay
- b. Explain automatic classification
- c. What is data exploration
- d. Explain with suitable example the query by cell value type of raster data query
- e. Explain neighbourhood functions
- f. Explain error propagation in spatial data processing

Q5. Attempt any three of the following 15

- a. Describe the difference between a topographic map and a thematic map
- b. Which four main types of thematic data can be distinguished on the basis of their measurement scales?
- c. Describe different techniques of cartographic output from the user's perspective.
- d. Explain the difference between static maps and dynamic maps
- e. Explain the relationship between map & GIS.
- f. Write a note on Map cosmetics.