A-0440

Total Pages : 4

Roll No. -----

GIS-506/DGIS-506/MGIS-506

Advance GIS

(MAGIS/MSCGIS/DGIS/CGIS)

2nd Semester Examination 2024(Dec.)

Time: 2:00 hrs

Max. Marks: 70

Note : This paper is of Seventy (70) marks divided into Two (02) Section A and B. Attempt the questions contained in these sections according to the detailed instructions given therein. Candidates should limit their answers to the questions on the given answer sheet. No additional (B) answer sheet will be issued.

P.T.O.

A-0440

Section-A

(Long-Answer-Type Questions)

Note : Section 'A' contains Five (05) long-answer-type questions of Nineteen (19) marks each. Learners are required to answer any Two (02) questions only.

[2x19=38]

- Q.1. What is map manipulation? Define the various types of map manipulation tools.
- Q.2. What is a map? Define the various types of maps and explain their practical applications.
- Q.3. Explain raster data analysis with a focus on arithmetic operations and rule-based decision-making. Illustrate your answer with examples of how these techniques are applied in real-world scenarios.
- Q.4. Define the following terms in detail:
 - a. Projection
 - b. Proximity Analysis in GIS
 - c. Object-Oriented Programming
 - d. Binary data
 - e. TIFF and Geo TIFF

A-0440

- f. Data
- Q.5. What do you mean by data manipulation? Write a note on Data Manipulation Language (DML) and its types.

Section-B (Short-Answer-Type Questions)

Note : Section 'B' contains Eight (08) short-answer-type questions of Eight (08) marks each. Learners are required to answer any Four (04) questions only.

[4x8=32]

- Q.1. What is overshoot, undershoot and slivers in vector data? Explain with example.
- Q.2. Explain the role of topology in GIS data creation?
- Q.3. What is a physical map? Define the various types of physical maps.
- Q.4. What do you mean by binary operators?

P.T.O.

A-0440

- Q.5. Explain the following terms:
 - a. Topological Editing
 - b. Edge Enhancement
 - c. Raster Bands
 - d. Non-topological Data structure
 - e. Layers and Coverages
- Q.6. What is Raster Data Generalization?
- Q.7. What is spatial data and its characteristics.
- Q.8. In the context of spatial data topology consists of three components: adjacency, containment, and connectivity. Explain these terms.
