

A-0648

Total Pages : 3

Roll No.

GIS-506/DGIS-506

Advance GIS

(MAGIS/MSCGIS/DGIS/CGIS)

Examination 2026 (Feb.)

Time: 02:00 hrs

Max. Marks: 70

Note : This paper is of seventy (70) marks divided in to 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.*

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)

P.T.O

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1. Explain the characteristics of Spatial Data and Non-spatial Data in detail. Describe the concept and procedure of Topology Creation.
2. Define data manipulation and explain the purpose and need of data manipulation. Describe data manipulation language and its steps.
3. Describe single layer and multilayer raster data analysis. Explain how raster data format is advantageous in spatial analysis.
4. Define proximity analysis and its importance in GIS? Explain the different types of buffering and the application of buffering.
5. What are the basic elements of the raster data model. Describe different raster data formats.

Section-“B”

(Short -answer - type questions)

Note:- Section ‘B’ contains eight (08) short-answer type questions of eight (8) marks each. Learners are required to answer any Four (04) questions only.

(4x8=32)

1. Define Topology. Write the major significance of Topology?
2. What do you mean by data model in GIS. Explain data analysis environment.
3. Describe the procedures and operations of raster data manipulation.
4. Define the reclassification with suitable example. Differentiate between user-controlled classification and automatic classification.
5. Distinguish between the local and focal operations of the raster data.
6. Explain local programming and functional programming.
7. Explain vector data and vector data structures. List out the advantages and disadvantages of vector data models in GIS.
8. Write detailed note on Neighborhood analysis and its areas of application.
