C1071

Total Pages: 3 Roll No.

GIS-506/DGIS-506

Advance GIS

(MAGIS/MSCGIS/DGIS)

2nd Semester Examination, 2022 (June)

Time: 2 Hours] Max. Marks: 80

Note: This paper is of Eighty (80) marks divided into two (02) Sections A and B. Attempt the questions contained in these sections according to the detailed instructions given therein.

SECTION-A

(Long Answer Type Questions)

Note: Section 'A' contains Five (05) long answer type questions of Twenty (20) marks each. Learners are required to answer any Two (02) questions only.

 $(2 \times 20 = 40)$

1. What is GIS database? What are the features of GIS Database Management System (DBMS)?

- **2.** What is spatial data? What are the characteristics of spatial and non-spatial data?
- **3.** Define multi-layer raster analysis. Describe local, neighbourhood, zonal and global raster operations.
- **4.** What do you understand by buffering in vector operation? Elaborate various proximity and buffering options in GIS?
- **5.** What is vector overlay analysis? What are the primary functions of using clip, intersection and union?

SECTION-B (Short Answer Type Questions)

Note: Section 'B' contains Eight (08) short answer type questions of Ten (10) marks each. Learners are required to answer any Four (04) questions only. $(4\times10=40)$

- **1.** Explain the data sources of GIS. What do you mean by International Standardization of geospatial data?
- **2.** What is relational database? Explain different GIS data Models.
- **3.** What do you mean by metadata? Explain the role of metadata in GIS.
- **4.** Present brief accounts on raster measurements and arithmetic computations.

- **5.** Briefly discuss common single layer geoprocessing operation on vector layers.
- **6.** Describe various multiple layer operations of vector datasets.
- **7.** What is database topology? Explain geographical features and elements of topology.
- **8.** What do you about network analysis? Briefly explain different types of network analysis.