

B.M.S. College of Engineering, Bengaluru-560019

Autonomous Institute Affiliated to VTU

August 2024 Supplementary Examinations

Programme: B.E.

Branch: Institutional Elective

Course Code: 21CV7OERSG

Course: Remote Sensing and Geographic Information System

Semester: VII

Duration: 3 hrs.

Max Marks: 100

Instructions: 1. Answer any FIVE full questions, choosing one full question from each unit.
2. Missing data if any, may be suitably assumed.

UNIT - I

- 1 a) Explain the silent features of the geodatabase 05
- b) Explain topology and its benefits in the geodatabase. 05
- c) Explain the methods of geodatabase creation and organization. 10

UNIT - II

- 2 a) Differentiate between Multi-Objective Decision Making (MODM) and Multi - Attribute Decision Making (MADM). 10
- b) Explain the process of making decisions under certainty and uncertainty. 10

UNIT - III

- 3 a) Differentiate between Vector and Raster Data. Explain key characteristics of Raster data manipulation operations. 10
- b) Explain the following topological operations 10
 - i) Buffering
 - ii) Overlay
 - iii) Dissolve
 - iv) Clip

UNIT - IV

- 4 a) Explain spatial and relational databases. 10
- b) Explain basic concepts of XML and GML and its advantages. 10

OR

- 5 a) Elaborate on Mobile GIS and its capabilities. 10
- b) Explain structure of an ideal expert GIS system. 10

UNIT - V

- 6 a) Define Enterprise GIS highlighting the capabilities and objectives. 10
- b) Explain the criteria that decides RDBMS software selection. 10

OR

- 7 Discuss case studies on
 - a) Application of GIS in healthcare services 10
 - b) Application of GIS in Disaster Management in flooded areas. 10

Important Note: Completing your answers, compulsorily draw diagonal cross lines on the remaining blank pages. Revealing of identification, appeal to evaluator will be treated as malpractice.