

CBCS SCHEME

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21CV651

Sixth Semester B.E./B.Tech. Degree Examination, June/July 2025 Remote Sensing and GIS

Time: 3 hrs

Max. Marks: 100

Note: Answer any FIVE full questions, choosing ONE full question from each module.

Module-1

- 1 a. With a neat sketch, explain the components of remote sensing. (10 Marks)
b. Explain the key elements of visual interpretation. (10 Marks)

OR

- 2 a. With a neat sketch explain the electromagnetic spectrum. (10 Marks)
b. Enumerate the types of sensors and platforms. (10 Marks)

Module-2

- 3 a. Explain photogrammetry with its types and advantages. (10 Marks)
b. Explain the process of aerial photogrammetry. (10 Marks)

OR

- 4 a. With a neat sketch explain the geometry and scale of vertical photograph. (10 Marks)
b. Enumerate the process of flight planning and its importance. (10 Marks)

Module-3

- 5 a. Define GIS and explain the components of GIS. (10 Marks)
b. Explain the types of database along with its advantages and disadvantages. (10 Marks)

OR

- 6 a. Explain the components of GPS and its working principles. (10 Marks)
b. Explain briefly the map projections and its types. (10 Marks)

Module-4

- 7 a. Explain the applications of remote sensing and GIS in highway alignment. (10 Marks)
b. Explain the applications of remote sensing and GIS in solving the environmental issues. (10 Marks)

OR

- 8 a. Explain the application of remote sensing and GIS in road accident analysis. (10 Marks)
b. Explain the application of remote sensing and GIS in water resource management. (10 Marks)

Module-5

- 9 a. Explain the application of remote sensing, GIS and GPS in urban planning. (10 Marks)
b. Explain the application of remote sensing and GIS in landuse and land cover mapping. (10 Marks)

OR

- 10 a. Explain the application of GIS, remote sensing and GPS in Disaster Management. (10 Marks)
b. Explain the application of remote sensing and GIS in analysis and improving the crop yield. (10 Marks)

Important Note : 1. On completing your answers, compulsorily draw diagonal cross lines on the remaining blank pages.
2. Any revealing of identification, appeal to evaluator and /or equations written eg, 42+8 = 50, will be treated as malpractice.