

GBCS SCHEME

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18CV651

Sixth Semester B.E. Degree Examination, Dec.2023/Jan.2024 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. Define the remote sensing and with a neat sketch, and explain the process of remote sensing. (08 Marks)
b. Explain the elements of visual interpretation techniques. (08 Marks)
c. What are the disadvantages of remote sensing? (04 Marks)

OR

- 2 a. With a neat sketch, explain the electromagnetic spectrum. (08 Marks)
b. Write a note on energy interactions with the Earth's atmosphere. (08 Marks)
c. Write a note on False colour composite. (04 Marks)

Module-2

- 3 a. Define a remote sensing platforms and explain different types of platforms. (10 Marks)
b. Explain sensor resolutions. (10 Marks)

OR

- 4 a. Discuss the data formats of remote sensing. (08 Marks)
b. Explain the systematic errors. (04 Marks)
c. Explain contrast enhancement of remote sensing. (08 Marks)

Module-3

- 5 a. Define GIS and explain the components of GIS. (08 Marks)
b. Write a note on geographically referenced data. (08 Marks)
c. What is a raster data in GIS? (04 Marks)

OR

- 6 a. Define a map and explain different types of maps. (06 Marks)
b. Define a coordinate system and discuss cartesian co-ordinate system. (06 Marks)
c. What is a map projection and explain conical map projection. (08 Marks)

Module-4

- 7 a. What is a vector data model? Explain object-based and Vertex-Dictionary vector models. (10 Marks)
b. Explain shape file and relational data base models. (10 Marks)

OR

- 8 a. Define a raster data model and explain object based raster models. (12 Marks)
b. Write a note on topology. (08 Marks)

Module-5

- 9 a. Explain the applications of remote sensing and GIS in water resources. (10 Marks)
b. Write a note on remote sensing applications in Urban planning. (10 Marks)

OR

- 10 a. Discuss the applications of remote sensing and GIS in transportation. (10 Marks)
b. Write a note on applications of remote sensing and GIS in land use and land cover analysis. (10 Marks)

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