LPCET LIBRARY BANGALORE-49

CBCS SCHEME

USN | | | | | | | | | | |

21CV651

Sixth Semester B.E./B.Tech. Degree Examination, June / July 2026
Remote Sensing and GIS

Time: 3 hrs. Max. Marks: 100

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

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.

Module-1

1 a. Define Remote Sensing, state advantages and disadvantages of remote sensing. **(10 Marks)**
b. Briefly explain the Sensor Resolution in Remote sensing. **(10 Marks)**

OR

2 a. Explain Spectral Reflectance curve of soil, vegetation, water. **(10 Marks)**
b. Write a short note on : i) IRS ii) Landsat **(10 Marks)**

Module-2

3 a. Explain Photogrammetry in detail, with their features and principles. **(10 Marks)**
b. Explain the Geometry of camera in vertical photographs with neat sketch. **(10 Marks)**

OR

4 a. Explain Aerial photogrammetry with their advantages. **(10 Marks)**
b. Describe the scale coordinates in aerial photography. **(10 Marks)**

Module-3

5 a. What are the components of GIS? Explain in brief the various components. **(10 Marks)**
b. Illustrate the advantages and disadvantages of Database in GIS. **(10 Marks)**

OR

6 a. List the sources of GIS data and describe the attribute data in GIS. **(10 Marks)**
b. Explain the components and working principles of GPS. **(10 Marks)**

Module-4

7 a. Explain the application of Remote Sensing and GIS in water resource management. **(10 Marks)**
b. Briefly explain the importance of integration of Remote Sensing and GIS. **(10 Marks)**

OR

8 a. Explain the application of Remote Sensing and GIS in Environmental Engineering. **(10 Marks)**
b. Explain the application of Remote Sensing GIS and GPS in highway and transportation. **(10 Marks)**

Module-5

9 a. Explain the role of Remote Sensing and GIS in monitor of Land use changes. **(10 Marks)**
b. Explain the role of Remote Sensing, GIS and GPS in Disaster management. **(10 Marks)**

OR

10 a. Explain the application of Remote Sensing and GIS in Urban Planning and Management. **(10 Marks)**
b. Explain the application of Remote Sensing and GIS in Water Distribution System. **(10 Marks)**

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