

CBCS SCHEME

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BCV654B

Sixth Semester B.E./B.Tech. Degree Examination, June/July 2025 Geographic Information System

Time: 3 hrs.

Max. Marks: 100

*Note: 1. Answer any FIVE full questions, choosing ONE full question from each module.
2. M : Marks , L: Bloom's level , C: Course outcomes.*

Module – 1				M	L	C
Q.1	a.	Explain the components of GIS.		10	L3	CO1
	b.	Differentiate between spatial data and attribute data with suitable examples.		10	L2	CO1
OR						
Q.2	a.	Explain the different types of GIS software with a comparison of proprietary and open source software.		8	L8	CO1
	b.	Discuss the evolution and history of GIS.		4	L3	CO1
	c.	What are coordinate systems? Describe their importance in GIS.		8	L1	CO1
Module – 2						
Q.3	a.	Differentiate between raster and vector data models.		10	L2	CO2
	b.	Explain the structure of spatial database using ER diagrams.		10	L3	CO2
OR						
Q.4	a.	Compare and contrast conceptual, logical and physical data models in GIS.		10	L2	CO2
	b.	Describe raster data structure and technique used for raster data compression.		10	L2	CO2
Module – 3						
Q.5	a.	Define Digitizer. List the different types of digitizer.		10	L1	CO3
	b.	How GPS data integrated into a GIS? Discuss with a flow chart.		10	L3	CO3
OR						
Q.6	a.	Explain the various methods and importance of coordinate transformation system.		10	L3	CO3
	b.	Enumerate the difference between connectivity and containment.		10	L2	CO3
Module – 4						
Q.7	a.	Define Spatial Data Infrastructure (SDI) and its significance.		10	L1	CO4
	b.	What is GIS standards? Why is interoperability important in GIS system?		10	L1	CO4

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OR					
Q.8	a.	Explain open geospatial consortium.	10	L3	CO4
	b.	Explain the concept of metadata and its role in data documentation.	10	L3	CO4
Module – 5					
Q.9	a.	What are the functions of data management in GIS?	10	L1	CO5
	b.	Explain the process of converting raster to vector and vice versa.	10	L3	CO5
OR					
Q.10	a.	Describe steps involved in map compilation and layout design.	10	L3	CO5
	b.	Differentiate between enterprise and Desktop GIS.	10	L2	CO5
