Code No: R203101B **R20** SET - 1

III B. Tech I Semester Supplementary Examinations, July – 2023
REMOTE SENSING AND GIS
(Common to CE, MIN)

Time: 3 hours Max. Marks: 70

Answer any **FIVE** Questions **ONE** Question from **Each unit**
All Questions Carry Equal Marks
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UNIT-I

1.	a)	What are the various applications of remote sensing? Describe its uses.	[7M]
	b)	Explain in detail about types of sensors employed in the remote sensing	[7M]
		(OR)	
2.	a)	Briefly describe the different elements of remote sensing.	[7M]
	b)	What are the advantages and disadvantages of usage of remote sensing data?	[7M]

UNIT-II

3.	a)	Explain in detail the different types of digital image processing techniques.	[7M]
	b)	Discuss about the basic elements of image interpretation	[7M]
		(OR)	
4.	a)	Explain in detail about preprocessing and image enhancement.	[7M]
	b)	State the significance of image classification in Remote Sensing.	[7M]

UNIT-III

5.	a)	What do you understand by data input and data manipulation? Explain in detail.	[7M]
	b)	Discuss UTM. State the limitations of UTM system	[7M]
		(OR)	
6.	a)	Explain the classification of GIS operations	[7M]
	b)	Differentiate between data retrieval and data analysis.	[7M]

UNIT-IV

7.	a)	Describe in detail about overlay function and vector overlay operations.	[7M]
	b)	What is meant by data compression? Explain about the different types of data compression methods.	[7M]
		(OR)	
8.	a)	Discuss in detail about various vector overlay operations.	[7M]
	b)	What do you understand about optimal path finding explain in detail.	[7M]

UNIT-V

9.	a)	Demonstrate about the RS and GIS applications in the field of qualitative agriculture	[7M]
	b)	Explain in detail how the remote sensing is applicable ground water pollution studies.	[7M]
		(OR)	
10.	a)	Describe the role of RS and GIS in continuous monitoring of floods.	[7M]
	b)	Explain any one case study of continuous monitoring of floods in RS & GIS.	[7M]