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# B.M.S. College of Engineering, Bengaluru-560019

Autonomous Institute Affiliated to VTU

## January 2024 Semester End Main Examinations

**Programme: B.E.**

**Branch: Institutional Elective**

**Course Code: 21CV7OERSG**

**Course: Remote Sensing and Geographic Information system**

**Semester: VII**

**Duration: 3 hrs.**

**Max Marks: 100**

**Instructions:** 1. Answer any FIVE full questions, choosing one full question from each unit.  
2. Missing data, if any, may be suitably assumed.

			<b>UNIT - I</b>	<i>CO</i>	<i>PO</i>	<b>Marks</b>
<b>Important Note:</b> Completing your answers, compulsorily draw diagonal cross lines on the remaining blank pages. Revealing of identification, appeal to evaluator will be treated as malpractice.	1	a)	Discuss the method of adding behavior to the geodatabase.	<i>CO1</i>	<i>PO1</i>	<b>10</b>
		b)	Explain topology and its benefits in the geodatabase.	<i>CO1</i>	<i>PO1</i>	<b>05</b>
		c)	Describe the types of data that can be represented as objects in a geodatabase.	<i>CO1</i>	<i>PO1</i>	<b>05</b>
			<b>UNIT - II</b>			
	2	a)	Differentiate between Multi-Objective Decision Making (MODM) and Multi-Attribute Decision Making (MADM).	<i>CO2</i>	<i>PO1</i>	<b>10</b>
		b)	With a Decision Matrix Flow-sheet, explain the criteria weight in a MCDA.	<i>CO2</i>	<i>PO1</i>	<b>10</b>
			<b>UNIT - III</b>			
	3	a)	Explain the following topological operations i) Buffering ii) Overlay iii) Dissolve iv) Clip v) Union	<i>CO3</i>	<i>PO1</i>	<b>10</b>
		b)	Write a note on reclassification of the raster data.	<i>CO3</i>	<i>PO1</i>	<b>10</b>
			<b>UNIT - IV</b>			
	4	a)	Explain structure of an ideal expert GIS system.	<i>CO3</i>	<i>PO1</i>	<b>10</b>
		b)	Discuss spatial and relational databases.	<i>CO3</i>	<i>PO1</i>	<b>10</b>
			<b>OR</b>			
	5	a)	Location based services and GIS integration makes business more efficient and productive. Justify with an example.	<i>CO3</i>	<i>PO1</i>	<b>10</b>
		b)	Define an Expert GIS system and discuss its structure in detail.	<i>CO3</i>	<i>PO1</i>	<b>10</b>
			<b>UNIT - V</b>			
	6	a)	Define Enterprise GIS highlighting the capabilities and objectives.	<i>CO3</i>	<i>PO1</i>	<b>10</b>

		b)	Discuss the case study on the use of GIS in Covid-19 vaccination programme.	<i>CO3</i>	<i>PO1</i>	<b>10</b>
			<b>OR</b>			
	7	a)	Elaborate on things that need considerations during planning of enterprise GIS for an organization.	<i>CO3</i>	<i>PO1</i>	<b>10</b>
		b)	Discuss any two case studies on the use of GIS in traffic management and policies.	<i>CO3</i>	<i>PO1</i>	<b>10</b>

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B.M.S.C.E. - ODD SEM 2023-24