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R-14

Code: 4G683

IV B.Tech. II Semester Supplementary Examinations July 2021

Remote Sensing and GIS Applications

(Civil Engineering)

Max. Marks: 70

Time: 3 Hours

Answer any five full questions by choosing one question from each unit (5x14 = 70 Marks)

Marks	CO	Blooms Level
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UNIT-I

- | | | | |
|--|----|-----|----|
| 1. a) What are the advantages of aerial photography? | 5M | CO1 | L1 |
| b) Explain the various types of aerial photographs. | 9M | CO1 | L2 |

OR

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|--|----|-----|----|
| 2. a) Difference between a map and an aerial photograph. | 7M | CO1 | L2 |
| b) Explain the Parallax measurements for height | 7M | CO1 | L2 |

UNIT-II

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|--|----|-----|----|
| 3. a) Explain the basic concept and foundation of remote sensing | 7M | CO2 | L1 |
| b) Explain the electromagnetic spectrum. | 7M | CO2 | L1 |

OR

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|--|----|-----|----|
| 4. a) Explain energy interaction with earth surface materials. | 7M | CO2 | L1 |
| b) Explain the elements of visual interpretation techniques | 7M | CO2 | L2 |

UNIT-III

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|---|----|-----|----|
| 5. a) Define GIS. Explain the components of GIS | 7M | CO3 | L1 |
| b) Explain the theoretical framework for GIS | 7M | CO3 | L2 |

OR

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|--|----|-----|----|
| 6. a) Describe about the attribute data and spatial data | 7M | CO3 | L1 |
| b) Explain the advantages and limitations of GIS. | 7M | CO3 | L1 |

UNIT-IV

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|---|----|-----|----|
| 7. a) Write a brief note on Computational Analysis Methods in GIS | 7M | CO4 | L1 |
| b) Explain the advantages of vector data storage | 7M | CO4 | L1 |

OR

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|--|-----|-----|----|
| 8. Explain the integrated analysis of the spatial and attribute data | 14M | CO4 | L2 |
|--|-----|-----|----|

UNIT-V

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|--|----|-----|----|
| 9. a) Explain the impact of Land use change on stream water quality. | 7M | CO5 | L1 |
| b) Give a brief note on flood and drought impact assessment and monitoring in GIS. | 7M | CO5 | L1 |

OR

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|--|----|-----|----|
| 10. a) How can you monitor water resources management through GIS? | 7M | CO5 | L1 |
| b) Describe briefly about identification of sites for artificial recharge structures | 7M | CO5 | L1 |

END