



MARRI LAXMAN REDDY INSTITUTE OF TECHNOLOGY AND MANAGEMENT

(AN AUTONOMOUS INSTITUTION)

(Approved by AICTE, New Delhi & Affiliated to JNTUH, Hyderabad)

Accredited by NBA and NAAC with 'A' Grade & Recognized Under Section 2(f) & 12(B) of the UGC act, 1956

II B.Tech I Sem Supply End Examination, July-2022

Surveying and Geomatics

(CIVIL ENGINEERING)

Time: 3 Hours.

Max. Marks: 70

Note: 1. Question paper consists: Part-A and Part-B.

2. In Part - A, answer all questions which carries 20 marks.

3. In Part - B, answer any one question from each unit.

Each question carries 10 marks and may have a, b as sub questions.

PART- A

(10*2 Marks = 20 Marks)

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|-------|---|----|-----|-----|
| 1. a) | Define Surveying | 2M | C01 | BL1 |
| b) | What is meant by 'dip' | 2M | C01 | BL1 |
| c) | Draw contour of a lake | 2M | C02 | BL1 |
| d) | Draw neat sketch of leveling staff | 2M | C02 | BL1 |
| e) | Explain the purpose of theodolite | 2M | C03 | BL4 |
| f) | Name the instruments to measure horizontal angle. | 2M | C03 | BL1 |
| g) | What is "omitted measurement"? | 2M | C04 | BL1 |
| h) | What is a reverse curve in traverse | 2M | C04 | BL1 |
| i) | Explain 'mosiac' | 2M | C05 | BL4 |
| j) | What is the purpose of EDM? | 2M | C05 | BL1 |

PART- B

(10*5 Marks = 50 Marks)

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|---|----|-------------------------------------|----|-----|-----|
| 2 | a) | List out the surveying accessories | 5M | C01 | BL1 |
| | b) | Explain the principles of surveying | 5M | C01 | BL4 |

OR

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|---|--|--|-----|-----|-----|
| 3 | | Explain the tape corrections to be made when a tape is elongated due to temperature rise | 10M | C01 | BL4 |
|---|--|--|-----|-----|-----|

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|---|----|--|----|-----|-----|
| 4 | a) | Explain temporary adjustments to dumpy level | 5M | C02 | BL4 |
| | b) | What is the effect of curvature on earth | 5M | C02 | BL1 |

OR

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|---|--|--|-----|-----|-----|
| 5 | | Explain the methods of contour surveying | 10M | C02 | BL4 |
|---|--|--|-----|-----|-----|

6	a) What are the different types of theodolites . Write the features of any two	5M	C03	BL1
	b) Explain 'reiteration' method.	5M	C03	BL4
OR				
7	Explain trigonometrical levelling	10M	C03	BL4
8	a) Explain the necessity of curves in surveying .	5M	C04	BL4
	b) Explain the application of vertical curves	5M	C04	BL4
OR				
9	Explain methods of traversing using chain and compass	10M	C04	BL4
10	a) Write the advantages of total station surveying	5M	C05	BL1
	b) Mention any two errors in above surveying	5M	C05	BL1
OR				
11	Explain photogrammetry survey on the ground	10M	C05	BL4

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