



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 Regular End Examination, FEBRUARY-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 bench mark. | 2M | C01 | BL1 |
| b) What is meant by bearing? | 2M | C01 | BL1 |
| c) Draw contour of hill. | 2M | C02 | BL1 |
| d) Draw neat sketch of dumpy level. | 2M | C02 | BL1 |
| e) Name the instruments to measure vertical heights. | 2M | C03 | BL1 |
| f) Write the use of fundamental line. | 2M | C03 | BL1 |
| g) How to correct omitted measurement? | 2M | C04 | BL1 |
| h) What is compound curve? | 2M | C04 | BL1 |
| i) What is purpose of total station. Mention the instruments replaced by it | 2M | C05 | BL1 |
| j) Write the advantages of GPS Advantage. | 2M | C05 | BL1 |

PART- B

(10*5 Marks = 50 Marks)

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|--|----|-----|-----|
| 2 a) Explain various classification of surveying. | 5M | C01 | BL4 |
| b) Draw any five conventional symbols adapted in survey. | 5M | C01 | BL2 |

OR

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|--|-----|-----|-----|
| 3 Explain different methods of distance measurement. | 10M | C01 | BL4 |
| 4 a) Explain the characteristics of contours. | 5M | C02 | BL4 |
| b) What is the advantage of contours? | 5M | C02 | BL1 |

OR

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|---|-----|-----|-----|
| 5 Explain the method of finding capacity of reservoir | 10M | C02 | BL4 |
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|-----------|---|-----|-----|-----|
| 6 | a) Explain the trigonometrical leveling for base is accessible. | 5M | C03 | BL4 |
| | b) What are the principles of tacheometry? | 5M | C03 | BL1 |
| OR | | | | |
| 7 | Explain tangential method of tacheometry | 10M | C03 | BL4 |
| 8 | a) Explain the significance of simple curves in survey. | 5M | C04 | BL4 |
| | b) Write the procedure to record traverse measurements | 5M | C04 | BL1 |
| OR | | | | |
| 9 | Explain the methods of traversing. | 10M | C04 | BL4 |
| 10 | a) What are the available modern surveying methods? | 5M | C05 | BL1 |
| | b) Explain types of EDM instruments. | 5M | C05 | BL4 |
| OR | | | | |
| 11 | Draw the neat sketch of total station. | 10M | C05 | BL2 |

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