Reg. No:

SIDDHARTH INSTITUTE OF ENGINEERING & TECHNOLOGY:: PUTTUR
(AUTONOMOUS)
B.Tech II Year I Semester Supplementary Examinations December-2021
SURVEYING
(Civil Engineering)

Time: 3 hours   Max. Marks: 60

(Answer all Five Units **5 x 12 = 60** Marks)

UNIT-I

| 1 | a | Briefly explain the principles of surveying. | L1 | 6M |
| | b | Write short notes on types of errors. | L2 | 6M |

OR

| 2 | Explain two-point problem and three-point problem with sketches. | L1 | 12M |

UNIT-II

| 3 | What are the indirect methods of locating a contour? Write about any two methods. | L2 | 12M |

OR

| 4 | a | Define contour. State the various characteristics of contour lines. | L2 | 6M |
| | b | Mention the uses of contour in civil engineering works. | L2 | 6M |

UNIT-III

| 5 | Write about parts of the Transit Theodolite. Explain in detail. | L1 | 12M |

OR

| 6 | The following readings were taken by a tacheometer with the staff held vertical. The tacheometer is fitted with Analytic lens and the multiplying constant is 100. Find out the horizontal distance from A to B and the R.L of B. | L2 | 12M |

Inst.station	Staff station	Vertical angle	Staff readings	remarks
A	BM	-6°00'	1.100,1.153, 2. 060	R.L OF B.M =976.0
	B	8°00'	0.982, 1.105, 1.188	

UNIT-IV

| 7 | Explain various elements of a simple curve with a neat sketch. | L2 | 12M |

OR

| 8 | Two tangents AB and BC intersect at a point B at chainage 150.5 m. calculate all the necessary data for setting out a circular curve of radius 100 m deflected angle 300 by the method of offsets from the long chord. | L2 | 12M |

UNIT-V

| 9 | Explain with sketch the principle of EDM instrument. | L1 | 12M |

OR

| 10 | Describe with sketch, the fundamental measurement of angles and distances by total station. | L2 | 12M |

*** END ***