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SIDDHARTH INSTITUTE OF ENGINEERING & TECHNOLOGY:: PUTTUR
(AUTONOMOUS)**B.Tech II Year I Semester Supplementary Examinations Nov/Dec 2019****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 methods of obstacles in chaining. **5M**
b Briefly explain the various accessories (any three) in chain surveying. **5M**

OR

- 2 a Explain with neat sketch the radiation method in plane table surveying. **5M**
b What is local attraction and how it is detected and eliminated? **5M**

UNIT-II

- 3 a Mention various methods of leveling. **3M**
b The following consecutive readings were taken with a dumpy level and 4 m leveling staff on a continuously sloping ground at common intervals of 30 m 0.905 (on A), 1.745, 2.345, 3.125, 3.725, 0.545, 1.390, 2.055, 2.955, 3.445, 0.595, 1.015, 1.850, 2.655, 2.945 (on B). The RL of A was 395.500 m. Tabulate the page of field book and calculate the levels of the points. **7M**

OR

- 4 a Define contour. Mention the uses of contour in civil engineering works. **5M**
b What is a bench mark? Describe different types of bench marks. **5M**

UNIT-III

- 5 a Give a list of the permanent adjustments of a transit theodolite. **5M**
b Write about parts of the Transit Theodolite. **5M**

OR

- 6 a The following readings were taken by a tachometer with the staff held vertical. The tachometer 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. **7M**

Inst. station	Staff station	Vertical angle	Staff readings	Remarks
A	BM	-6°00'	1.100, 1.153, 2.060.	R.L. of B.M =
	B	8°00'	0.982, 1.105, 1.188	976.000

- b What is tachometry? What are different systems of tachometric measurements? **3M**

UNIT-IV

- 7 a Write short notes on types of circular curves. **5M**
b Define and draw a typical compound curve. Under what circumstance compound curves are provided. **5M**

OR

- 8 a Define degree of curve. Derive a relation between the radius and degree of a curve. **5M**
b Explain various elements of a simple curve with a neat sketch. **5M**

UNIT-V

- 9 a Write short notes on total stations. **5M**
b Explain the principle of EDM instrument. **5M**

OR

- 10 a State and brief about transit time. **5M**
b Write short notes Wild T-1000 Electronic Theodolite. **5M**

*** END ***