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SIDDHARTH INSTITUTE OF ENGINEERING & TECHNOLOGY:: PUTTUR

(AUTONOMOUS)

B.Tech II Year I Semester Supplementary Examinations Feb-2021**SURVEYING**

(Civil Engineering)

Time: 3 hours

Max. Marks: 60

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

UNIT-I

- 1 a Explain in the detail the duties of the Surveyor. 6M
b Explain in details the classifications of surveying 6M

OR

- 2 a What is local attraction and how it is detected and eliminated? 6M
b Explain two-point problem and three-point problem with sketches. 6M

UNIT-II

- 3 a Describe in detail how you would proceed in the field for 6M
(i) profile levelling
(ii) reciprocal levelling
b Define contour. State the various characteristics of contour lines. 6M

OR

- 4 a Explain different methods of locating contours 6M
b Write short notes on difficulty in leveling 6M

UNIT-III

- 5 a How to measure horizontal angle between two points with the help of a theodolite by repetition method. 6M
b How would you, determine the constants K and C of a Tacheometer 6M

OR

- 6 a How to measure the height of the object when the two instrument stations are not in the same vertical plane using theodolite. 7M
b Write advantages of tachometric surveying 5M

UNIT-IV

- 7 a Mention the various methods of setting out of simple curve. 6M
b Explain with neat sketch offsets from long chord method in detail 6M

OR

- 8 A compound curve is made up of two arcs of radii 380m and 520m. The deflection angle of the combined curve is 105° and that of the first arc of radius 380m is 58° . The chainage of the first tangent point is 848.55m. Find the chainage of the intersection, common tangent point and forward tangent point. 12M

UNIT-V

- 9 a What are different types of EDM instruments? 6M
b Write various applications of Total station. 6M

OR

- 10 a Write the procedure to measure horizontal and vertical angles using total station. 6M
b Explain in detail about the infrared type of EDM instrument. 6M

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