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SIDDHARTH INSTITUTE OF ENGINEERING & TECHNOLOGY:: PUTTUR
(AUTONOMOUS)

B.Tech II Year I Semester Regular Examinations May-2022

SURVEYING & GEOMATICS

(Common to CE & AGE)

Time: 3 hours

Max. Marks: 60

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

UNIT-I

1 Explain in detail the classifications of surveying. L1 12M

OR

2 a Briefly explain the various accessories in chain surveying L2 6M

b What are the duties of a surveyor? L1 6M

UNIT-II

3 a Write short notes on errors in leveling. L1 6M

b Discuss the effects of curvature and refraction in leveling. L2 6M

OR

4 a Write short notes on methods of leveling. L1 6M

b Briefly explain the temporary adjustment of leveling. L2 6M

UNIT-III

5 The vertical angles to vanes fixed at 0.5m and 3.5m above the foot of the staff held vertically at a point were $-00^{\circ} 30'$ and $+10^{\circ} 12'$ respectively. Find the horizontal distance and the reduced level of the point, if the level of the instrument axis is 125.380meters above datum. L3 12M

OR

6 Write short note on tacheometer and what are the uses of tacheometer. L2 12M

UNIT-IV

7 Explain various elements of a simple curve with a neat sketch. L4 12M

OR

8 a Write short notes on types of circular curves. L1 6M

b Define degree of curve. Derive a relation between the radius and degree of a curve. L1 6M

UNIT-V

9 Explain with sketch the principle of EDM instrument. L2 12M

OR

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

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