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School of Engineering**B.TECH Civil Engineering
Mid Term Examination - Nov 2023****Duration : 90 Minutes
Max Marks : 50****Sem III - G1UA304C - Surveying**General Instructions*Answer to the specific question asked**Draw neat, labelled diagrams wherever necessary**Approved data hand books are allowed subject to verification by the Invigilator*

- 1) Explain meridian and azimuth. K2 (2)
- 2) Define vertical angles and their importance in elevation determination. K1 (3)
- 3) Explain the key differences between conventional tape measurement and electronic distance measurement (EDM) in surveying. K2 (4)
- 4) Explain the purpose and procedure for performing a reciprocal leveling survey. K2 (6)
- 5) Identify a strategy for calculating the volume of earthwork required for a road construction project, considering the cut and fill operations. K3 (6)
- 6) Identify a surveying plan for measuring the horizontal and vertical angles at a construction site using theodolites, specifying instrument settings and data collection methods. K3 (9)
- 7) Compare plane surveying and Geodatic surveying. K4 (8)
- 8) Analyze the ethical considerations in GPS surveying, particularly in data collection and privacy concerns. K4 (12)

OR

- Analyze the critical factors in contour map interpretation and discuss how contour maps are used in land planning and development. K4 (12)