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School of Engineering
M.TECH Transportation Engineering
Mid Term Examination - Nov 2023

Duration : 90 Minutes
Max Marks : 50

Sem I - G1PD101T - Material Characterization and Pavement Engineering

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 the difference between coarse-grained and fine-grained soils. K2 (2)
- 2) What are the primary factors affecting soil properties? K1 (3)
- 3) Explain the mechanical response of different soil types. K2 (4)
- 4) Explain the relationship between the index properties of soils and their behavior. K2 (6)
- 5) Develop a laboratory testing plan to evaluate soil properties. K3 (6)
- 6) Choose the appropriate injection method for a grouting task K3 (9)
- 7) Compare and contrast the properties of different soil types K4 (8)

- 8) Compare and contrast mechanical, cementing, and chemical stabilization methods K4 (12)

OR

- Analyze the factors influencing the selection of grouting equipment. K4 (12)