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School of Engineering**B.TECH Civil Engineering
Mid Term Examination - Nov 2023****Duration : 90 Minutes
Max Marks : 50****Sem V - G1UA503C - Transportation Engineering I**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) Write short notes on Macadam Roads with diagram. K2 (2)
- 2) Define spot speed, running speed and journey speed. K1 (3)
- 3) Write salient features of first twenty year road development plant K2 (4)
- 4) Explain PIEV theory K2 (6)
- 5) Identify need of overtaking Zones ? Draw a neat sketch showing the signs to be installed and their positions. K3 (6)
- 6) Write short notes on: (a) Traffic separators (b) Kerbs (c) Road margins (d) Pavement unevenness (e) Camber (f) Right of way (g) Width of formation K3 (9)
- 7) Explain the concept of camber and discuss its objectives and recommended ranges for various types of pavements. K4 (8)
- 8) Examine the impact of changing super elevation on vehicle speeds and comfort. K4 (12)

OR

Calculate the safe stopping sight distance for design speed of 50kmph for (a) two-way traffic on two lane road (b) two-way traffic on single lane road. K4 (12)