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School of Engineering
M.TECH Transportation Engineering
Semester End Examination - Nov 2023

Duration : 180 Minutes
Max Marks : 100

Sem III - MTPE6018 - Rural Road Technology

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) Define the concept of "last-mile connectivity" in rural road planning. K1 (2)
- 2) Why is bituminous concrete considered a flexible pavement? K2 (4)
- 3) Illustrate why is it crucial to consider the social impact of road projects in rural areas? K2 (6)
- 4) Identify the role of the private sector in rural road planning and development. K3 (9)
- 5) . Compare the advantages and disadvantages of using concrete and asphalt for pavement construction. K3 (9)
- 6) Judge the feasibility of implementing lime fly ash pavements in regions with varying climates and soil conditions, highlighting potential advantages and challenges. K5 (10)
- 7) Analyze the social and economic impacts of road projects on indigenous communities and traditional livelihoods. K4 (12)
- 8) Explain how can polymer-modified bitumen improve road performance? K5 (15)
- 9) Evaluate the use of advanced road construction technologies, such as geosynthetics and cold mix asphalt, in rural areas. K5 (15)
- 10) Estimate the effectiveness of road safety measures in reducing accidents on rural roads. K6 (18)