

ADMISSION NUMBER

School of Engineering

M.TECH Transportation Engineering Semester End Examination - Jun 2024

Duration : 180 Minutes Max Marks : 100

Sem II - G1PD206T - Highway construction practices

<u>General Instructions</u> 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) List down the component layers of rigid pavement. K1(2)
- ²⁾ What are the uses and limitations of sheep-foot rollers? K2(4)
- ³⁾ Briefly explain with neat sketches the method of construction of ^{K2(6)} construction joints.
- 4) Mention the problems of constructing high embankments over K3(9) weak foundations. Explain the measures that can be adopted for highway construction.
- 5) What are the special features, advantages and limitations of ^{K3(9)} interlocking concrete block pavements?
- 6) Mention the specification of materials, construction steps and ^{K5(10)} quality control checks for laying bituminous concrete surface course.
- 7) Mention the specification of materials, construction steps and quality control checks for laying dense bituminous macadam binder course.
- ⁸⁾ Mention the specifications and construction steps for wet mix ^{K5(15)} Macadam base course.
- ⁹⁾ What are the objectives of highway maintenance? Also, mention ^{K5(15)} the causes of distresses in the pavements.
- ¹⁰⁾ Mention the specification of materials, construction steps and ^{K6(18)} quality control checks for the construction of CC pavement slab.