Roll No. ..... **Total Pages : 02**

MT/D-21 **49075**

PAVEMENT ANALYSIS AND DESIGN
MCG-109A

Time : Three Hours] [Maximum Marks : 60

Note : Attempt *Five* questions in all, selecting at least *one* question from each Unit. All questions carry equal marks.

Unit I

1. Explain ESWL and the concept in the determination of the equivalent wheel load.

2. What are the various factors to be considered in pavement design ? Discuss the significance pattern in pavement design.

Unit II

3. Discuss the effects of repeated applications of loads on pavements. Explain equivalent wheel load factors for load repetitions.

4. Discuss the importance of gross wheel load and contact pressure in stress distribution pattern and in pavement design.

Unit III

5. Explain briefly the construction of earth roads. Discuss the advantages and limitations of earth roads.

6. Write down the construction steps for WBM road.

Unit IV

7. Explain the CBR method of pavement design. How is this method useful to determine thickness of component layers ?

8. What are the considerations for design of rigid pavements ?