

Exam.Code:0949

Sub. Code: 7125

1078

B.E. (Civil Engineering)

Seventh Semester

CIV-703: Advanced Transportation Engineering

Time allowed: 3 Hours

Max. Marks: 50

NOTE: Attempt five questions in all, including Question No. 1 which is compulsory and selecting two questions from each Unit.

x-x-x

- I. Attempt the following:-
- What are the various factors to be considered in pavement design?
 - What are the advantages and limitations of CBR method of design?
 - Enumerate the various methods available for Bituminous mix Design?
 - Define tunnel approaches along with a diagram?
 - What are the different type of signals provided on harbors?
 - What are the various methods available for drainage in tunnels?
 - Give two points of difference between wall type and special breakwater?
 - What is group Index method of pavement design?
 - What are the different types of Joints provided in cement concrete pavements?
 - What are the different components of a pavement structure? (10x1)

UNIT – I

- II. a) Explain flexible and Rigid pavements and bring out the points of differences?
b) Explain RSWL and the concept in the determination of equivalent wheel load. (4,3,3)
- III. a) Discuss Westergaard's concept of temperature stresses in concrete pavements?
b) Discuss the design details of Dowel bars? (6,4)
- IV. Briefly outline the IRC recommendations for determining the thickness Cement concrete pavements? (10)

UNIT – II

- V. Explain the various stages in Tunnel construction. Also explain how health protection is provided in tunnels. (6,4)

P.T.O.

(2)

- VI. What are the various docking facilities available on docks? Explain the repairing facilities available in detail. (3,7)
- VII. What protection facilities are available on Docks? Also give the classification harbours? (8,2)

x-x-x

Time
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II.