Registration no: | | | | | | | | | | |

Total Number of Pages: 01 **M.TECH**

CEPE206

2nd Semester Back Examination – 2016-17
INFRASTRUCTURE ENGINEERING & TRANSPORTATION PLANNING
BRANCH(S): STRUCTURAL & FOUNDATION ENGG, STRUCTURAL ENGG
Time: 3 Hours
Max Marks: 70
Q.CODE: Z824
Answer Question No.1 which is compulsory and any five from the rest.
The figures in the right hand margin indicate marks.

Q1 **Answer the following questions:** (2 x 10)

a) What do you mean by a transportation network?
b) State the various stages of transportation planning process?
c) State PIEV theory.
d) Explain the difference between *on street parking* and *off street parking*.
e) State the organizational structure of traffic engineering department.
f) What do you mean by *reduced traffic demand* ?
g) What do you mean by Tidal Flow Operation?
h) Draw a neat sketch of a Trumpet interchange.
i) What do you mean by staggered hours?
j) Define *one-way streets*.

Q2 a) Explain quick response travel evaluation procedure. (5)
b) Discuss the effects of vehicle characteristics on traffic. (5)

Q3 State and explain various transportation network theories. (10)

Q4 Explain the design procedure of a rotary intersection. Draw a neat sketch of a rotary and show its important elements.. (10)

Q5 a) Explain telematics concept in travel planning. (5)
b) Explain in detail the detrimental effects of traffic on the environment in regard to various parameters. (5)

Q6 a) Define traffic restraint. What are the different methods employed for traffic restraint? (5)
b) Explain the techniques applied for reducing traffic flows during peak hours. (5)

Q7 a) Discuss the importance of traffic management. (10)
Describe various traffic management techniques for improving vehicular flow in a road network.

Q8 **Write short notes on any TWO** . (5 x 2)

a) Advantages of one way street
b) Rotary intersection
c) Methods of trip distribution
d) Economic span of a bridge