320760(20)

APR-MAY

B. E. (Seventh Semester) Examination, 2020

(Old Scheme)

(Civil Engg. Branch)

TRAFFIC ENGINEERING

Time Allowed : Three hours

Maximum Marks : 80

Minimum Pass Marks : 28

Note : *Attempt all questions. Part (a) from each question is compulsory. Attempt any **two** parts from part (b), (c) and (d) of each questions.*

Unit-I

1. (a) What are the objective of traffic engineering?   2

   (b) Explain the passenger car unit in detail. Describe the PCU values suggested by IRC for different categories of vehicles.   7

(c) Explain the term 3E's of traffic engineering.   7

(d) Explain the heterogeneous traffic flow and its problem.   7

Unit-II

2. (a) Define AADT.   2

(b) What are the different vehicular characteristics which affect the road design? Briefly explain.   7

(c) Enlist the various methods of origin and destination studies and explain them.   7

(d) Explain the various steps involved in traffic accident studies.   7

Unit-III

3. (a) What do you mean by traffic regulation?   2

(b) Enlist the main advantages of one-way streets.   7

(c) Explain various types of traffic signs with sketches.   7

(d) What are the various types of traffic markings commonly used?   7

Unit-IV

4. (a) Explain traffic safety in brief.   2

(b) Describe the various factors to be considered in the design of road lighning.   7

(c) Explain the various safety measures to increase pedestrain safety.   7

(d) Explain the effect of road condition and road geometrics on traffic safety.   7

Unit-V

5. (a) Explain types of vibrations.   2

(b) What are the harmful effects of noise pollution on human health?   7

(c) Describe in details about the air pollution due to vehicular traffic in urban areas.   7

(d) What are the benefits of EIA?   7