Scheme – I

Sample Question Paper

Program Name : **Civil Engineering Program Group**
Program Code : **CE/CR/CS**
Semester : **Fifth**
Course Title : **Traffic Engineering (Elective)**
Max. Marks : **70**

22507

Time: 3 Hours

Instructions:

(1) All questions are compulsory.
(2) Illustrate your answers with neat sketches wherever necessary.
(3) Figures to the right indicate full marks.
(4) Assume suitable data if necessary.
(5) Preferably, write the answers in sequential order.

Q.1 Attempt any <u>FIVE</u> of the following. **10 Marks**

a. List the objectives of traffic engineering.
b. Give the essential vehicular characteristics to be considered in traffic engineering.
c. Name the different types of traffic studies.
d. Write the role of road signs in traffic flow.
e. Define traffic signal.
f. List out the factors affecting reaction time of driver.
g. Classify the traffic markings.

Q.2 Attempt any <u>THREE</u> of the following. **12 Marks**

a. Explain the purposes of traffic volume study of a road section.
b. Explain the points to be considered while designing the road sign.
c. Draw the following traffic signs for the urban area.
   (i) U-turn prohibited (ii) Height limit 3m (iii) School ahead (iv) Hospital.
d. Explain the following carriage way marking (i) Traffic lane lines (ii) Cross walk lines.

Q.3) Attempt any <u>THREE</u> of the following. **12 Marks**

a. Enumerate the advantages and disadvantages of traffic actuated signals.
b. Describe the channelizing islands with neat sketch.
c. Explain the factors affecting the street lighting.
d. Discuss the factors affecting selection of type of roadside trees.
e. Discuss the basic requirements of a good intersection at grade.

Q.4) Attempt any <u>THREE</u> of the following. **12 Marks**

a. State the objectives of road arboriculture.

b. Explain various points to be considered for road safety.

c. Enumerate the road user causes of road accidents.

d. Suggest the preventive measures for avoiding the road accidents.

e. Explain the method of reporting and recording of road accident.

Q.5) Attempt any <u>TWO</u> of the following. **12 Marks**

a. Explain the method of representing traffic volume count with neat sketch.

b. Draw a neat and labeled layout of carriage way markings at unsignalised intersection..

c. Explain the method of origin and destination studies stating the necessity of it.

Q.6) Attempt any <u>TWO</u> of the following. **12 Marks**

a. Draw a labeled sketch of clover-leaf pattern of grade separated intersection.

b. Describe the method of computing signal time by fix time cycle.

c. Explain the following type of traffic segregation. (i) Plain segregation (ii) Time segregation.

Scheme – I

Sample Test Paper - I

Program Name : **Civil Engineering Program Group**
Program Code : **CE/CR/CS**
Semester : **Fifth**
Course Title : **Traffic Engineering (Elective)**
Max. Marks : **20**

22507

Time: 1 Hour

Instructions:

(1) All questions are compulsory.
(2) Illustrate your answers with neat sketches wherever necessary.
(3) Figures to the right indicate full marks.
(4) Assume suitable data if necessary.
(5) Preferably, write the answers in sequential order.

Q.1 Attempt any <u>FOUR</u> of the following. **08 Marks**

a) Define traffic engineering.
b) List the road characteristics to be considered in traffic engineering.
c) Define (i) traffic volume (ii) traffic capacity
d) State the necessity of parking study.
e) List out the types of traffic control devices useful in traffic engineering.
f) Define traffic marking.

Q.2 Attempt any <u>THREE</u> of the following. **12 Marks**

a) Explain manual counting method of traffic volume.
b) Justify the need of parking study for analysis of traffic.
c) Explain the necessity of various traffic control devices for smooth traffic flow.
d) Draw the traffic signs (i) No parking (ii) Stop (iii) One way (iv) Overtaking prohibited
e) Explain the points to be considered while erecting the traffic signs.

Scheme – I

Sample Test Paper - II

Program Name : **Civil Engineering Program Group**
Program Code : **CE/CR/CS**
Semester : **Fifth**
Course Title : **Traffic Engineering (Elective)**
Max. Marks : **20**

22507

Time: 1 Hour

Instructions:

(1) All questions are compulsory.
(2) Illustrate your answers with neat sketches wherever necessary.
(3) Figures to the right indicate full marks.
(4) Assume suitable data if necessary.
(5) Preferably, write the answers in sequential order.

Q.1 Attempt any <u>FOUR</u> of the following. **08 Marks**

a) List the various types of road signals.

b) Define traffic island.

c) Give various types road intersection.

d) State different types of street lighting.

e) Define (i) Collision accident (ii) Non-collision accident

f) State the use of condition diagram.

Q.2 Attempt any <u>THREE</u> of the following. **12 Marks**

a) Describe the points to be considered while deciding the location of signal.

b) Differentiate between grade intersection and grade separated intersection.

c) Explain the factors affecting the visibility at night.

d) Enumerate the sources of road accidents due to road structural defects.

e) Justify the need of law enforcement regarding accident and safety.
