

**SIDDHARTH INSTITUTE OF ENGINEERING & TECHNOLOGY:: PUTTUR
(AUTONOMOUS)**

B.Tech III Year I Semester Supplementary Examinations June-2024

ELEMENTS OF ROAD TRAFFIC SAFETY

(Common to all Branches)

Open Elective-III

Time: 3 Hours

Max. Marks: 60

(Answer all Five Units 5 x 12 = 60 Marks)

UNIT-I

1 a Briefly explain about road accidents and how traffic engineers play a role in the prevention of road accidents. **CO1 L1 7M**

b Explain about the engineering uses in the collection of accident data. **CO1 L2 5M**

OR

2 a Give a detailed discussion about accident situation in India with past accident data. **CO1 L2 6M**

b Identify the various measures to be taken into account to prevent the accident caused by i) Two-wheeler driver ii) Pedestrian. **CO1 L2 6M**

UNIT-II

3 a What are the needs for traffic regulation? **CO2 L1 6M**

b List out the various Traffic Laws as per the Indian Motor Vehicle Act. **CO2 L1 6M**

OR

4 a Give the discussion about the regulation of speed at night. **CO2 L2 6M**

b Discuss the various speed limits in rural and urban areas. **CO2 L2 6M**

UNIT-III

5 a Write the importance of traffic signs. **CO3 L1 4M**

b What are the various objectives in general principles of traffic signing? **CO3 L1 8M**

OR

6 a Briefly explain about Indication signs with neat sketch. **CO3 L2 6M**

b Write the conditions for placing the overhead signs. **CO3 L1 6M**

UNIT-IV

7 How Amber period, Red/Amber period and intergreen period is determined in various countries practices? **CO4 L1 12M**

OR

8 a What do you mean by Area traffic control and give the objectives of it? **CO4 L1 6M**

b Give a brief discussion about Delay at signalized intersections. **CO4 L2 6M**

UNIT-V

9 What are the functions of road markings ? List out all 14 various types of road markings. **CO5 L1 12M**

OR

10 a Explain briefly about tunnel lighting. **CO5 L2 6M**

b Write in detail about lighting at bends. **CO5 L1 6M**

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