

GUJARAT TECHNOLOGICAL UNIVERSITY**M.E –IIst SEMESTER–EXAMINATION – JULY- 2012****Subject code: 1721310****Date: 12/07/2012****Subject Name: Road Safety and Environment****Time: 10:30 am – 13:00 pm****Total Marks: 70****Instructions:**

1. Attempt all questions.
2. Make suitable assumptions wherever necessary.
3. Figures to the right indicate full marks.

- Q.1** (a) Briefly give Road safety scenario in India. **07**
(b) List out various methods of Statistical analysis of Road Accident Records. **07**
Explain Poisson Distribution with suitable example.
- Q.2** (a) Explain briefly traffic management measures and their influence on accident prevention. **07**
(b) What do you mean by condition diagram? Explain briefly. **07**
- OR**
- (b) Explain collision diagram with neat sketches. **07**
- Q.3** (a) Write short on Traffic calming measures. **07**
(b) Briefly explain the details to be collected in Road accident form A-1. **07**
- OR**
- Q.3** (a) Discuss various measures to increase pedestrian safety. **07**
(b) Discuss how highway design can enhance road safety. **07**
- Q.4** (a) What is Road Safety Audit? State the specific aims of RSA. Also state important benefits of Road safety audits. **07**
(b) Discuss how safety can be enhanced during construction operations in a highway. **07**
- OR**
- Q.4** (a) With a flow chart, state the steps involved in Road safety Audit process as per IRC: SP: 88-2010. **07**
(b) Draw flow diagram for environmental impact assessment of highway projects in India as per IRC: 104:1988. **07**
- Q.5** (a) Enlist the detrimental effects of traffic on the environment. Explain vibration and severance effect briefly. **07**
(b) What do mean by Noise? What are the detrimental effects of traffic noise? Explain briefly. **07**
- OR**
- Q.5** (a) What are the various measures for controlling air pollution from road traffic? Explain briefly. **07**
(b) Write explanatory note on international guidelines for EIA of highway projects. **07**

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