

**PARUL UNIVERSITY**  
**FACULTY OF ENGINEERING & TECHNOLOGY**  
**M.Tech. Summer 2018– 19 Examination**

**Semester: 2****Subject Code: 203211182****Subject Name: Road Safety Engineering****Date: 13/05/2019****Time: 10:30 AM TO 1:00 PM****Total Marks: 60****Instructions:**

1. All questions are compulsory.
2. Figures to the right indicate full marks.
3. Make suitable assumptions wherever necessary.
4. Start new question on new page.

- Q.1** A) Discuss the various causes of road accidents. (05)  
B) Explain in detail road safety management process. (05)  
C) Explain in detail the multi-causal dynamic system approach. (05)
- Q.2** Answer the following questions. (Attempt any three) (Each five mark) (15)  
A) Write a short note on condition diagram and collision diagram.  
B) What are the difference between an accident and a crash?  
C) Explain with flowchart Black Spot Identification & Investigations.  
D) Which are the advanced statistical methods of crash Data? Explain in detail any one method.
- Q.3** A) Explain in detail accident data analysis. (07)  
B) What are the guidelines for Enforcement of Rules and Regulation? (08)
- OR**
- B) What are the guidelines for managing exposure to risk through transport policies? (08)
- Q.4** A) List out the Crash Countermeasures & explain any three in detail. (07)
- OR**
- A) What do you mean by road safety audit? List out the essential elements of an RSA. (07)  
B) What are the checklist as per IRC:SP 88 - 2010 for different stages of road safety audit? (08)