

B. Tech Degree VIII Semester Examination, April 2009

SE 802 ACCIDENT INVESTIGATION AND ANALYSIS *(Common for 1999 & 2002 Schemes)*

Time : 3 Hours

Maximum Marks : 100

- I. (a) Define Accident. With a neat sketch explain the human factors theory of accident causation. (15)
(b) Any accident is worth investigating. Why? (5)
- OR**
- II. (a) Explain the role of Engineering, Education and Enforcement in the successful implementation of a safety programme. (12)
(b) Write short note on Safety Policy. (8)
- III. (a) Write short note on :
(i) Unpredictable performance (ii) Work place violence. (10)
(b) With the help of a case study, explain the methodology for conducting an accident investigation. (10)
- OR**
- IV. (a) A large number of serious accidents in process plants is attributable to errors in maintenance work. Explain. (15)
(b) Write short note on 'Human failings' which leads to accident. (5)
- V. (a) Describe the process of dealing with witnesses during an accident investigation process. (10)
(b) A major fire occurs in a chlorine plant causing injury to 4 persons. Suppose you are one of the members of accident investigation team. What type of data will you collect as part of accident investigation? How will you collect these data? (10)
- OR**
- VI. (a) How will you document the facts collected during an accident investigation process? (10)
(b) Discuss the various method of presentation of the data collected during an investigation process. (10)
- VII. (a) Discuss the role of group discussion in accident investigation and analysis. (10)
(b) How do you classify accidents? (10)
- OR**
- VIII. As the head of an accident investigation team, you are supposed to convene a meeting of all concerned. Prepare an agenda for the meeting. Also prepare an appropriate minutes of the meeting. (20)
- IX. (a) What are the objectives of accident analysis? (10)
(b) Discuss the content of a typical safety data sheet. (10)
- OR**
- X. (a) How will you make inferences from an accident analysis? (10)
(b) Suggest a format for supervisors accident record. (10)

