

**B.Tech. Degree VIII Semester Examination in  
Safety and Fire Engineering, November 2002**

**SE 801 LEGAL ASPECTS OF SAFETY  
(1998 Admissions)**

Time: 3 Hours

Max. Marks: 100

- I. (a) "The concept of safety is as old as man". Comment. (10)  
 (b) Discuss the role of the following institutions in the propagation of the concept of safety in our country.  
 (i) Bureau of Indian standards. (ii) National Safety Council. (2 x 5 = 10)  
**OR**
- II. (a) Discuss the role of International Labour Organisation in the development of major hazard control system for industries. (10)  
 (b) What are the objectives of the Occupational Safety and Health Act passed by the American Parliament in 1970. (10)
- III. (a) Define the term 'occupier' as per Factories Act- 1948. What are the duties of occupier? (5)  
 (b) Mention the legal provisions relating to lifting machines, chains, ropes and lifting tackles. (5)  
 (c) What are the powers and duties of Factory Inspectors? (5)  
 (d) Discuss the provision in Factories Act regarding disclosure of information to general public. (5)  
**OR**
- IV. (a) Discuss the provisions in the Factories Act relating to workers participation in Safety management. (10)  
 (b) Give an account of the duties of a Safety officer as envisaged in Factories Act. (10)
- V. (a) Enumerate the purposes for which the Employees' State Insurance Fund may be expended. (10)  
 (b) Discuss the important provisions in the Contract Labour Act. (10)  
**OR**
- VI. (a) What are the obligations of a factory manager under Workman's Compensation Act? (10)  
 (b) Discuss the salient features of Employer's Liability Act. (10)
- VII. (a) Discuss the provisions in the Petroleum Act and Rules regarding electrical sources of ignition and prevention. (10)  
 (b) Give an account of the provisions in the Indian Boiler Act and Rules for the preparation of a boiler for inspection by competent authority. (10)  
**OR**
- VIII. (a) What are the special provisions in Indian Electricity Rules in respect of high and extra high voltage installations. (10)  
 (b) Discuss the safety provisions to be made in a pressure vessel as per SMPV Rules with respect to the following elements.  
 (i) Filling capacity and filling pressure.  
 (ii) Painting of vessels.  
 (iii) Pressure relief.  
 (iv) Liquid level gauging device.  
 (v) Periodic testing. (2 x 5 = 10)
- IX. (a) Briefly discuss the obligations of industries under Water (Prevention and Control of Pollution) Act, 1974. (10)  
 (b) Enumerate the provisions in the Air (Prevention and Control of Pollution) Act, 1981 with respect to the following:  
 (i) Air pollution control area.  
 (ii) Consent to operate.  
 (iii) Standards for stack emissions.  
 (iv) Appeal by aggrieved persons. (2.5 x 4 = 10)  
**OR**
- X. (a) What are the functions of the State Pollution Control Boards under Water (Prevention and Control of Pollution) Act? (10)  
 (b) The Environment Protection Act, 1986 is usually referred to as an umbrella act, Why? (4)  
 (c) What are the obligations and responsibilities of industries under Environment (Protection) Act, 1986? (6)