

B. Tech Degree VIII Semester Examination, April 2008

CE 803 CONSTRUCTION, SAFETY AND FIRE ENGINEERING (1999-2001 Scheme)

Time : 3 Hours

Maximum Marks : 100

- I. Write a brief essay on the role of various groups in ensuring safety in construction planning, design and execution. (20)
- OR**
- II. (a) Briefly explain the main clauses to be incorporated in construction contract with respect to safety, insurances and penalties. (10)
- (b) Write a brief essay on NBC, 2005 with respect to construction safety. (10)
- III. Prepare check lists for safety in construction operations as under : (20)
- (i) Tunnelling
- (ii) Blasting.
- OR**
- IV. You are the Team leader of an inspection team hired to inspect the construction works of a bridge under construction on a state highway. Prepare the draft plan of inspection to include actions before, during and after inspection. (20)
- V. (a) State and explain the various classifications of fire. (10)
- (b) What do you understand by fire resistance of building? What are the standards and how it is achieved? (10)
- OR**
- VI. Explain the effects of fire on the properties of materials given below : (20)
- (i) Steel (ii) Wood
- (iii) R. C. C (iv) Brick work.
- VII. Write a brief essay on fire transmission between buildings. Incorporate corrective/remedial actions to be taken to avoid/control fire transmissions. (20)
- OR**
- VIII. Write brief notes on the following : (20)
- (i) Fire stopped areas
- (ii) Fire resistant walls
- (iii) Fire protection of RCC structures
- (iv) Fire resistant ceilings.
- IX. Write an essay on the fire safety requirements in a building complex consisting of RCC multistoreyed buildings meant for residential purposes. (20)
- OR**
- X. (a) Explain the procedure for assessing the fire damages and recommending actions for rehabilitation. (8)
- (b) Explain the methods of repairing the members of a structure damaged in fire and rehabilitating them. (12)
- (i) RCC column (ii) Steel beam of I Section (iii) RCC floor slab.

