

B. Tech Degree VIII Semester Examination, April 2010

CE 802 A/B CONSTRUCTION SAFETY AND FIRE ENGINEERING (2006 Scheme)

Time : 3 Hours

Maximum Marks : 100

PART - A

(Answer ALL questions)

(8 x 5 = 40)

- I. (a) Define lost time accidents and reportable accidents.
(b) What is ergonomics? What are the other studies associated with ergonomics?
(c) What is confined space? Give some examples in construction.
(d) What are the important safety precautions in the use of ladders?
(e) Classify fire.
(f) What is "jacketing"?
(g) What is occupancy? Why are buildings classified on the basis of occupancy?
(h) What is the difference between mercantile and business buildings? Give examples of the above two classes of buildings.

PART – B

(4 x 15 = 60)

- II. Discuss the organizational and behavioural aspects of safety in construction.
OR
III. Discuss the roles of various agencies or stakeholders of construction in ensuring the safety, health, welfare etc. of construction workers.
- IV. Prepare checklists to ensure safety in trench excavation and demolition.
OR
V. List out the safety aspects in use of excavators and chain-pulley blocks.
- VI. Discuss the effect of fire on concrete with respect to thermal and engineering properties.
OR
VII. Discuss various repair techniques for structural concrete damaged by fire.
- VIII. Discuss the design principles of fire resistant walls.
OR
IX. Mention the classification and sub-division of buildings based on occupancy as per the National Building Code of India and give examples.

