

B. Tech Degree V Semester Examination, November 2008**SE 506 SAFETY IN CONSTRUCTION**
(2006 Scheme)

Time : 3 Hours

Maximum Marks : 100

PART - A(Answer **ALL** Questions)(All questions carry **EQUAL** marks)

(8 x 5 = 40)

- I. (a) Briefly explain the role of human factors in construction safety management.
 (b) "Safety begins at the design stage of a construction project". Examine this statement.
 (c) What is underpinning? Under what situations the use of underpinning is warranted?
 (d) Explain how retained excavations can fail.
 (e) Enumerate the factors which influence the selection of construction equipment.
 (f) Mention the safety precautions to be taken while availing temporary power supply for construction activities.
 (g) Discuss the provisions in the Building and other Contract Workers Act and Rules regarding training of building workers.
 (h) Mention the important provisions in the Contract Labour Act regarding payment of wages.

PART - B

(4 x 15 = 60)

- II. (a) Explain the various impediments to safety in construction industry. (8)
 (b) Briefly discuss the role of contractors and site engineers in ensuring safety in construction. (7)

OR

- III. The reclaimed areas at Willingdon Island, Cochin are proposed to be used for installing liquid fuel storage tanks. A contract for site grading is to be finalized. Draw up the clauses on safety to be incorporated in the tender document. (15)

- IV. (a) Briefly discuss the important safety precautions in blasting. (7)
 (b) Define "confined space". Give two examples of confined space in an industrial construction site. Enumerate the safety precautions to be taken while organizing works in a confined space. (8)

OR

- V. (a) What is scaffolding? Mention its various components and their functions? Name any four types of scaffolding. (8)
 (b) Briefly enumerate the steps to be taken by the site-in-charge of a construction site in case of accidents. (7)

- VI. Explain the safety measures to be adopted while using cranes, lifts and trucks. (15)

OR

- VII. Prepare checklists of safety in the use of (i) Excavator (ii) Wire ropes. (8 + 7 = 15)

- VIII. Give an account of the important safety, health and welfare provisions in the Contract Labour Act and Central Rules. (15)

OR

- IX. Discuss the important provisions in the Building and other Contract Workers Act and Central Rules regarding the following :

- (i) Registration
 (ii) Welfare Board and Welfare Fund
 (iii) Health and Welfare provisions.

(3 x 5 = 15)

