

**B. Tech Degree V Semester Examination November 2010****SE 506 SAFETY IN CONSTRUCTION**  
(2006 Scheme)

Time : 3 Hours

Maximum Marks : 100

**PART - A**(Answer ALL questions)

(8 x 5 = 40)

- I. (a) Why do you say that construction industry is hazardous in nature?  
 (b) What are the basic elements to be considered while framing a contract condition on safety in construction?  
 (c) Explain the role of NBC in ensuring safety in construction.  
 (d) Explain the safety requirements during under-pinning operation.  
 (e) What are the general requirements to be followed during storage, stacking and handling of construction materials?  
 (f) Discuss about the safety checks to be done before using wire ropes  
 (g) What is the purpose of forming contract labour (R&A) Act and Rules?  
 (h) Discuss on the "penalty" clauses in BOCW Act and Rules.

**PART - B**

(4 x 15 = 60)

- II. (a) Discuss about the human factors that are obstacles for ensuring safety at a construction site. (8)  
 (b) What is ergonomics? Discuss about the ergonomic risks related to various construction activities. (7)

**OR**

- III. (a) Write short note on the role of various groups in ensuring safety in construction. (8)  
 (b) Write a sample contract document to ensure safety at work and to have insurance coverage for a construction project. (7)

- IV. Write short note on the safety requirements for the following operations :

- (i) Blasting of rock (8)  
 (ii) Working in confined space (7)

**OR**

- V. Write short note on the safety requirements for the following operations :

- (i) Working in pneumatic caissons (8)  
 (ii) Using scaffolds. (7)

- VI. (a) Write short note on the safety requirements during storage, stacking and handling cement bags at a construction site. (8)  
 (b) Write short note on the safe use of electricity at construction site. (7)

**OR**

- VII. Discuss the safety requirements while using the following :

- (i) Trucks at construction site (8)  
 (ii) Hoists and pulley blocks. (7)

- VIII. Write short notes on the following :

- (i) Rules regarding wages as per Contract Labour Act and Rule (5)  
 (ii) Welfare and health provisions as per Contract Labour Act and Rule. (10)

**OR**

- IX. Write short notes on the following with respect to BOCW Act and Rule :

- (i) Role of Welfare Board  
 (ii) Method of registration and benefits to workers from Welfare Board  
 (iii) Welfare measures to be taken by employer at construction site. (3 x 5 = 15)