

**B. Tech Degree VII Semester Examination November 2010****SE 703 SAFETY IN ENGINEERING INDUSTRY**  
(2006 Scheme)

Time: 3 Hours

Maximum Marks: 100

**PART A**(Answer All questions)

(8 x 5 =40)

- I. (a) Classify engineering industries and list.  
 (b) Write down the procedure for making sand casting.  
 (c) What are the basic forging operations? List.  
 (d) Differentiate primary and secondary operations of a press.  
 (e) What are the precautions to be followed for welding torches?  
 (f) What is "Alkaline Chlorination"? Explain.  
 (g) List out the 10 principles of material handling.  
 (h) What are the common accessories employed in material handling using cranes? Explain briefly.

**PART B**

(4 x 15 = 60)

- II. What are the major processes employed in a ship yard? List out and for each one show the different equipments used and the hazards associated with them. (15)
- OR**
- III. For a safety engineer in an engineering industry, what are the major areas of concern and associated safety aspects? Explain in detail. (15)
- IV. (a) Classify guards and explain in detail. (8)  
 (b) What are the different feeding mechanism employed during secondary operations in a power press? List and explain any two in detail. (7)
- OR**
- V. (a) Classify point-of-operation safe guarding devices and explain. (8)  
 (b) Prepare a safe operating procedure for forging hammers. (7)
- VI. (a) What are the safety precautions to be followed while using compressed gas cylinders for welding? List. (7)  
 (b) Write down guidelines for ventilation inside a welding shop. (8)
- OR**
- VII. What are the general hazards in the use of salt baths and their remedy? Explain briefly. (15)
- VIII. (a) Write down the safe procedure for manual handling. (5)  
 (b) Classify industrial trucks and explain briefly each one. (10)
- OR**
- IX. (a) With block diagram explain the power – train of all movements of an EOT crane. (5)  
 (b) Prepare a preventive maintenance checklist for an EOT crane. (10)