

B. Tech Degree VII Semester (Supplementary) Examination July 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) Differentiate hot working and cold working
 (b) What are the hazards associated with forging? Explain.
 (c) What are the basic requirements of a machine guard? List.
 (d) Explain 'ring test'.
 (e) What are the different PPEs used inside a welding shop? List.
 (f) Write notes on ventilation inside a Heat Treatment Shop.
 (g) Write down the procedure for manual material handling.
 (h) What are the different material handling equipments used in engineering industry? List.

PART – B

(4 x 15 = 60)

- II. (a) Describe the process of making castings in a foundry. (10)
 (b) What are the various hazards associated with furnace operations? Explain. (5)

OR

- III. As a safety engineer, what are the major aspects of safety you will be addressing in a forge shop. (15)

- IV. (a) What are the different types of guards employed in a power press to safeguard? Explain. (8)
 (b) What are the different devices used to safeguard an operator working on a shearing machine? List and explain any three. (7)

OR

- V. (a) What are the safety instructions to be followed by an operator working on a grinding machine? List. (8)
 (b) What are the general safety instructions to be followed inside a machine shop? (7)

- VI. (a) What are the safety precautions to be followed while storing compressed fuel cylinders? List. (8)
 (b) What are the safety precautions to be followed during electric arc welding? List. (7)

OR

- VII. What are the hazards associated with salt baths in a heat treatment plant? Explain. (15)

- VIII. (a) For an EOT crane, draw the schematic diagram of the power train. (5)
 (b) Prepare a preventive maintenance. Check list for an EOT crane. (10)

OR

- IX. (a) What are the general material handling techniques? Explain. (9)
 (b) List out and explain some of the common accessories used in material handling using cranes. (6)