

For Syllabus, Question Papers, Notes & many More

## **CC5003 INDUSTRIAL SAFETY MANAGEMENT L**

### **DETAILED SYLLABUS**

#### **UNIT I SAFETY MANAGEMENT**

Evaluation of modern safety concepts - Safety management functions - safety organization, safety department - safety committee, safety audit - performance measurements and motivation- employee participation in safety - safety and productivity.

#### **UNIT II OPERATIONAL SAFETY**

Hot metal Operation - Boiler, pressure vessels - heat treatment shop - gas furnace operation -electroplating-hot bending pipes - Safety in welding and cutting. Cold-metal Operation - Safety in Machine shop - Cold bending and chamfering of pipes - metal cutting - shot blasting, grinding, painting - power press and other machines.

#### **UNIT III SAFETY MEASURES**

Layout design and material handling - Use of electricity - Management of toxic gases and chemicals - Industrial fires and prevention - Road safety - highway and urban safety - Safety of sewage disposal and cleaning - Control of environmental pollution - Managing emergencies in Industries - planning, security and risk assessments, on-site and off site. Control of major industrial hazards.

#### **UNIT IV ACCIDENT PREVENTION**

Human side of safety - personal protective equipment - Causes and cost of accidents. Accident prevention programmes - Specific hazard control strategies - HAZOP - Training and development of employees - First Aid- Fire fighting devices - Accident reporting, investigation.

#### **UNIT V SAFETY, HEALTH, WELFARE & LAWS**

Safety and health standards - Industrial hygiene - occupational diseases prevention – Welfare facilities - History of legislations related to Safety-pressure vessel act-Indian boiler act – The environmental protection act - Electricity act - Explosive act.

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## REFERENCES

1. Industrial safety and the law by P.M.C. Nair Publisher's, Trivandrum.
2. John V. Grimaldi and Rollin H. Simonds, "Safety Management", All India Travellers bookseller, New Delhi-1989.
3. Krishnan N.V., "Safety in Industry", Jaico Publisher House, 1996
4. Managing emergencies in industries, Loss Prevention of India Ltd., Proceedings,1999.
5. Occupational Safety Manual BHEL.
6. Safety security and risk management by U.K. Singh & J.M. Dewan, A.P.H. Publishing company, New Delhi, 1996.
7. Singh, U.K. and Dewan, J.M., "Safety, Security and risk management", APH Publishing Company, New Delhi, 1996.

## OBJECTIVES

- To achieve an understanding of principles of safety management.
- To enable the students to learn about various functions and activities of safety department.
- To enable students to conduct safety audit and write audit reports effectively in auditing situations.
- To have knowledge about sources of information for safety promotion and training.
- To familiarize students with evaluation of safety performance.