

Industrial Safety Management

| Sub. Code | Paper Name | Credit | Internal Mark | End Term Mark |
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| ENS-VAC-401 | Industrial Safety Management | 2 | 50 | 50 |

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| Objectives | To understand the significance of Industrial safety and get an elementary idea on the prevention and control of Accidents in Industries |
| Pre-Requisites | Preliminary knowledge on Environmental Pollution. |
| Teaching Scheme | Regular class room lectures with use of ICT tools as and when required. |

Detailed Syllabus

Module 1: Safety Laws

The basic Purpose and Provisions of: Factories Act and Rules, Employees State Insurance Act, The Public Liability Insurance Act 1991 and Rules, The Manufacture, Storage and Import of Hazardous Chemical (Amendment) Rules 2000, The Batteries (Management and Handling) Rules, Mines Act 1952 Mine Rules – 1955, Coal Mine Regulation-1957, Chemical Accidents (Emergency Preparedness, Planning and Response) Rules 1996, Environmental protection Act 1986. Hazardous and other Waste (Management & trans boundary movement) rules-2016.

Module 2: Industrial Hazards, Risks, Accidents and their Assessment

Concepts of Hazards, Risks and Safety; Hazard and Risk Assessment Techniques; Accident Causative Factors; Principles of Accident Prevention, Behaviour Based Safety (BBS); Safety Management: Management Information System (MIS) for Safety; Accident Investigation, Analysis and Reporting;

Module 3: Measures of Safety in Industry

Ventilation and Heat Control, Electrical Safety, Noise and Vibration control, Fire and Explosion safety, Requirements of Machine Guarding, Types of Chemical Hazards & Controls, Air Pollutant control; Water Pollutant control; Radiation pollution Control

Module 4: Industrial Hygiene and Health

Industrial Hygiene and pollution, Health hazards due to improper sanitation and pollution; Physiology of Work, Definition of Occupational Health, Ergonomics and other potential Occupational Health Hazards in Industries; Example of common occupational diseases in Industry;

Module 5: Personal Protective Equipment and First Aid

Non Respiratory Personal Protective Equipments; Respiratory Personal Protective Equipments; Need of the First Aid, General Principles for Rendering First Aid, Electrical Injuries, Artificial Respiration, Burns and Scalds, Poisoning - First Aid and Antidotes

Reference Book:

1. Fundamentals of Industrial safety & health by K.U. Mistry.

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| Course Outcome | At the end of the course, the students will be able to get an idea about i) Different legislations related to Industrial and environmental safety ii) Risk and hazard assessment in industry iii) Protocols of safety management in industry |
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