UTKALMANI GOPABANDHU INSTITUTE OF ENGINEERING, ROURKELA



SUBJECT-PLANT SAFETY MANAGEMENT

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ENGINEERING			
	Topics covered		
WEEK 1	Fundamental of safety		
	Unsafe act and unsafe condition		
	Integration of Safety, Health and Environment		
	Objective of Safety Management		
WEEK 2	Principle of Safety Management		
	Terms and definition used in safety management		
	Classification of accidents		
WEEK 3	Revision		
	Good Housekeeping practice		
	Work place safety		
WEEK 4	Safe working environment		
	Spot a hazard to stop an accident		
	Case Study- Spot a hazard to stop an accident		
	Precaution in use of ladder		
WEEK 5	Safety instruction during maintenance		
	Safety measures during handling of compressed system, cylinders		
	Safety measures during handling of painting Equipments.		
	Permit to work system		
WEEK 6	Requirement of personal protective equipment		
	Classification of Hazards		
	Types of Personal protective equipments		
	Types of Personal protective equipments		
WEEK 7	Personal protective equipments for different parts of body		
	Guideline to use personal protective equipment		
	Safety practices in using personal protective equipment		
WEEK 8	Revision		
	Fundamentals of fire		
	Elements of fire		

WEEK 9	Terms and definition in Fire Management
WEEK 9	Classification of fire
	Classification of fire extinguishing technique
WEEK 10	Causes of fire and its prevention
	Different types of fire extinguisher and their application
	Precaution for prevention of fire
WEEK 11	Definition of Chemical Hazards
	Classification of Chemical Hazards
	Case study- Chemical Hazards
WEEK 12	Factors influencing effects of toxic chemicals
	Terms related to industrial hygiene
	Guidelines and norms for level as per industrial hygiene
	Control measure for Chemical hazards
WEEK 13	Control measure for Chemical hazards
	Revision
	Quiz test
WEEK 14	Introduction to electrical safety
	Precaution in use of electricity
	Safety in use of electricity
	Electrical hazards in Industrial system
WEEK 15	Electrical safety, prevention in Industrial system
	Safety provision to prevent electrical hazards
	Safety provision to prevent electrical hazards
	Revision
WEEK 16	Revision
	Quiz test
	Sources of mechanical hazards
	Machine Guard and Safety devices
WEEK 17	Pressure hazards and pressure vessel
	Safety measures in use of gas cylinders
	Types of maintenance (example- Breakdown, preventive)
	Revision

BOOKS FOR REFERENCE:

- Industrial safety Health and Environment System by R.K. Jain, Sunil Rao, Khanna Publication.
- Industrial, Safety and Environment by Amit Gupta, Laxmi Publication.

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SESSION	2021-2022	