

Reg. No.



Manipal Institute of Technology, Manipal

(A Constituent Institute of Manipal University)



III SEMESTER M.TECH (ENVIRONMENTAL ENGINEERING)

END SEMESTER EXAMINATIONS, MAY /JUNE 2016

SUBJECT: OCCUPATIONAL SAFETY AND HEALTH (ELECTIVE)

[CIE 579]

REVISED CREDIT SYSTEM

Time: 3 Hours

MAX. MARKS: 50

Instructions to Candidates:

- ❖ Answer any **FIVE FULL** questions.
- ❖ Write the neat flowchart/sketches wherever it is necessary

1A.	Briefly explain the role of organized labor in safety movement.	4
1B.	What are the fundamental legal principles (list the major six) with which safety and health should be familiar with? Explain any two in detail	6
2A.	Explain Systems theory of Accident Causation	4
2B.	What are the three factors associated physical stress in Ergonomics? Briefly explain	6
3A.	Describe the role of Engineering control in Hazard prevention.	4
3B.	What are OSHA's requirement for machine guarding?	6
4A.	What are the hazards of High Pressure system and list the strategies for reducing these hazards?	6
4B.	Explain the procedure for Fault Tree Analysis.	4
5A.	What are the major causes of insulation failure?	6
5B.	Explain hazard control in Iron and steel Industry	4
6A.	Identify the potential Hazard in Municipal Solid Waste.	6
6B.	Explain i) OSHA Citation ii) NIOSH	4