

Reg. No.


MANIPAL INSTITUTE OF TECHNOLOGY
 MANIPAL

A Constituent Institution of Manipal University

VII SEMESTER B.TECH. (CHEM.ENG)
END SEMESTER EXAMINATIONS, DEC 2023

SUBJECT: Risk and safety Management in Process Industries
[CHE 4071]

REVISED CREDIT SYSTEM

Time: 3 Hours

MAX. MARKS: 50

Instructions to Candidates:

- ❖ Answer **ALL** the questions.
- ❖ Missing data may be suitable assumed.

1A.	Discuss the steps and tasks involved in core system safety process- CO1	4
1B.	Explain the various types of risk assessments -CO2	3
1C.	Describe the phases associated with conventional safety program – CO1	3
2A.	What are some things to be concerned about in selecting eye protecting equipment – CO4	3
2B.	Explain the general principles of Fault Tree Analysis – CO2	3
2C.	What rights does OSHA confer to employers- CO4	4
3A.	Elaborate the provisions that should be made under Housekeeping so as to maintain the premises safe from hazards?- CO2	4
3B.	Task and equipment characteristics are concerned with the degree of difficulty of performing an activity. Discuss – CO4	3
3C.	Explain the relationship between fuel-air mixtures and flash point.-CO1	3
4A.	Elaborate hazard theory with water as an example-CO2	3
4B.	Explain how chemicals should be stored so as to prevent and extinguish fire-CO1	4
4C.	What is meant by “hold-off” system in connection with pressure vessels.- CO1	3
5A.	Elucidate the details that can be acquired from health hazard section of MSDS -CO2	3
5B.	Discuss the hazard reduction precedence program-CO2	3
5C.	Describe the Seveso disaster and identify the Hazard causal factors of the disaster– CO3	4