



K. K. Wagh Institute of Engineering Education & Research, Nashik
(An Autonomous Institute From A.Y. 2022-23)

WINTER-2025	
Exam Seat No.:	
Academic Year:2025-2026	Semester:VII
Class:FINAL	Program:B.Tech
Branch Code:CHE	Pattern:2022
Name of Course:Chemical Process Safety	Course Code:CHE224006C
Max. Marks:30	Duration:2.30 Hrs.

Instructions: Candidates should read carefully the instructions printed on the Question Paper and on the cover page of the Answer Book, which is provided for their use.

1. This question paper contains ____ page(s).
2. Answer to each new question is to be started on a new page.
3. Assume suitable data wherever required, but justify it.
4. Draw the neat labelled diagrams, wherever necessary.
5. The last columns indicates the Course Outcome and level of Blooms Taxonomy of the Question/sub-question.

Marks CO

Question No. 1

- 1 What are entry route of Toxicants in Biological Organisms? Explain in detail. (3) 1

Question No. 2

- 2 Write Case study on Accident Happened in Flixborough , England. (3) 2

Question No. 3

- 3.a) Explain in detail flammability limits with proper graph. (4) 3

OR

- 3.b) Describe in detail fire triangle with proper example. (4) 3

- 3.c) Define (4) 3

Auto-ignition temperature AIT

Flash point .

OR

- 3.d) Explain in detail Minimum oxygen concentration or limiting oxygen concentration. (4) 3

Question No. 4

- 4.a) Explain in detail about Vapor Cloud Explosion (VCE). (4) 4

OR

- 4.b) Explain Sweep-Through Purging process for Inerting. (4) 4

- 4.c) Describe in detail the Explosion Apparatus for Vapors. (4) 4

OR

- 4.d) Describe Review of probability theory for Risk Assessment (4) 4

Question No. 5

5.a) Write a short note on Event trees and fault trees. (4) 4

OR

5.b) Explain the procedure for HAZOP Study. (4) 4

5.c) Write a short note on Plan for Emergency. (4) 4

OR

5.d) Describe in detail Safety Vs Production. (4) 4

..... End of question paper.....