Name:

Enrolment No:

UNIVERSITY OF PETROLEUM AND ENERGY STUDIES
End Semester Examination, May 2023

Course: Chemical Process and Plant Safety **Semester: VI**
Program: B. Tech. (CE+RP) **Time: 3 hours.**
Course Code: CHCE3015P **Max. Marks: 100**
Instructions : Attempt all the questions

SECTION A
(5Qx4M=20Marks)

S. No.		Marks	CO
Q 1	Discuss in brief the Pasadena USA disaster and its consequences	**4**	**CO1**
Q2	Define dose- response models.	**4**	**CO2**
Q3	Explain control techniques in industrial hygiene.	**4**	**CO3**
Q4	Elucidate on Security Vulnerability Analysis.	**4**	**CO5**
Q5	Define Layer of Protection analysis..	**4**	**CO6**
	SECTION B **(4Qx10M= 40 Marks)**		
Q 6	Discuss different aspects of source models in brief.	**10**	**CO3**
Q7	Discuss how toxicants are eliminated in biological organisms.	**10**	**CO2**
Q8	Explain the concept of preliminary hazard analysis?	**10**	**CO4**
Q9	Describe and discuss different toxic release and dispersion models OR Write in details 2-K method in source models.	**10**	**CO5**
	SECTION-C **(2Qx20M=40 Marks)**		
Q10	Discuss fires and explosion concept in chemical process safety. OR Describe in details what-if analysis.	**20**	**CO6**
Q11	Elucidate in details Material Safety Data Sheets and also dose response models.	**20**	**CO4**