Name: Enrolment No:	UPES UNIVERSITY WITH A PURPOSE

UNIVERSITY OF PETROLEUM AND ENERGY STUDIES
End Semester Examination, May 2019
Course: SAFETY, HEALTH AND ENVIRONMENT MANAGEMENT
Semester: VIII Semester
Program:B.Tech(APE with Gas Specialization)
Time 03 hrs.
Course Code: ENVO405 **Max. Marks: 100**

Instructions:

SECTION A

S. No.		Marks	CO
Q 1	What do you mean by plume model and puff models in dispersion of toxicants in the atmosphere?	4	CO1
Q2	Define good program and outstanding program.	4	CO1
Q3	Define and compare different engineering ethics.	4	CO2
Q4	What do you mean by Fatality Rate?	4	CO2
Q5	Interpret in brief toxicological studies.	4	CO3
	SECTION B		
Q 6	Describe and relate in details identification in chemical process safety.	8	CO4
Q7	Elucidate OSHA and Process Safety Management.	8	CO4
Q8	Interpret in details Risk Management Plan.	8	CO3
Q9	Discuss and describe in details HAZOP and HAZAN analysis. OR Analyse in details FMEA and Fault Tree Analysis.	8	CO4
Q10	Estimate worker exposures in vessel filling operations. OR Explain different types of hazards.	8	CO4
	SECTION-C		
Q11	Analyse different types of toxic release and dispersion models.	20	CO5
Q12	Describe ergonomics and human factor engineering. OR Discuss and describe parameters affecting dispersion and fire triangle.	20	CO5

Name: Enrolment No:	UPES UNIVERSITY WITH A PURPOSE

UNIVERSITY OF PETROLEUM AND ENERGY STUDIES
End Semester Examination, May 2019
Course: SAFETY, HEALTH AND ENVIRONMENT MANAGEMENT
Semester: VIII Semester
Program:B.Tech(APE with Gas Specialization)
Time 03 hrs.
Course Code: ENVO405 **Max. Marks: 100**

Instructions:

SECTION A

S. No.		Marks	CO
Q 1	Define and interpret the role of skin for toxicants entering biological organisms.	4	CO1
Q2	What do you mean by Fault Tree Analysis?	4	CO1
Q3	What do you mean by lost workdays?	4	CO2
Q4	Interpret in brief the nature of the accident process.	4	CO2
Q5	Define risk analysis and risk assessment.	4	CO3
	SECTION B		
Q 6	Elucidate in details Process Safety Management.	8	CO4
Q7	Analyse identification in Industrial Hygiene.	8	CO4
Q8	How will you estimate worker exposure to dusts?	8	CO3
Q9	Interpret in details puff and plume models. OR Describe effect of release momentum and buoyancy on release characteristics of a puff and plume.	8	CO4
Q10	How will you find out the mass discharge rate in flow of liquid through a hole in a tank? OR Discuss flow of gases through pipes.	8	CO4
	SECTION-C		
Q11	Elucidate in details toxic release and dispersion models. OR Explain source models in details.	20	CO5
Q12	Discuss and explain in details release mitigation approaches. Describe in details the	20	CO5

	fire triangle.		