


Name:			
Enrolment No:			
UNIVERSITY OF PETROLEUM AND ENERGY STUDIES End Semester Examination, May 2022			
Course: Safety, Health, and Environment in Petroleum Industry Program: B.Tech APE Gas Course Code: ENVO 405		Semester: VI Time : 03 hrs. Max. Marks: 100	
Instructions: All Questions are compulsory			
SECTION A (5Qx4M=20Marks)			
S. No.		Marks	CO
Q 1	What is ergonomics? List out the main ergonomics hazards in the oil and gas industry.	4	CO1
Q 2	For the Fertilizer industry list out the major pollutants.	4	CO3
Q 3	Write the principle of working of the electrostatic precipitator.	4	CO4
Q 4	What is the dispersion model? List out the types of dispersion models.	4	CO2
Q 5	Classify various biological wastewater treatment methods.	4	CO4
SECTION B (4Qx10M= 40 Marks)			
Q 6	Explain with the help of a suitable diagram the trickling filter process.	10	CO4
Q 7	Classify in detail the various types of personal protective equipment used in the petroleum industry?	10	CO3
Q 8	ASME A13.1 has six fixed colors and 4 users define colors that can be used to identify the hazardous material in the pipeline. Draw the table with the columns mentioning Fluid type, Background color, Letter color, and Color and Letter sample.	10	CO3
Q 9	What is MSDS? List out the sixteen sections of MSDS by explaining one line of each section.	10	CO2
SECTION-C (2Qx20M=40 Marks)			
Q 10	Why Health safety and Environmental Management is important in Petroleum and offshore industries? Explain with the help of an industrial disaster its causes and consequences.	20	CO2
Q 12	Write a note on the effluent treatment plant essential components at an integrated chemical process industry of your choice.	20	CO4