

Enrollment No: _____

PARUL UNIVERSITY
FACULTY OF ENGINEERING & TECHNOLOGY
B.Tech Mid Semester Exam

Semester: 8th
 Subject Code: (203120485)
 Subject Name: (HSEPI)

Date: (30/01/2024)
 Time: (1hr: 30min)
 Total Marks: 40

Sr. No.		Marks
Q.1	(A) Five One line Questions	05
	1. A confined space is one that? a) Has limited means of access and exit b) Is not designed for continuous occupation c) Has limited natural ventilation d) All of the above	
	2. Confined spaces are common in oil and gas industry, particularly in processing operations. Confined spaces include a) Storage tanks, process and reaction vessels, b) Boilers, Ventilation and Exhaust Ducts c) Tunnels and pits and Pipelines d) All of the above	
	3. Which of the following is FALSE about a typical deepwater oil spill? a) Using boom boats to prevent the spilled oil from spreading b) Allowing the spill to reach the shore before clearing c) Burning of Spilled Oil d) Using a Skimmer to collect oil	
	4. Select ALL the safety system(s) that is/are required in an offshore platform a) Permit to Work b) Fire and Gas Alarms c) Lock out-tag out d) Financial Monitoring System	
	5. A mixture of a flammable gas and air can ignite only if a) The gas concentration is below the limiting oxygen concentration b) The gas concentration is above the upper flammable limit c) The gas concentration is between the upper and lower flammable limits d) The gas concentration is below the lower flammable limit	
	(B) Five Fill in the blanks	05
	1. Oil slick can be broken by surface turbulence from wind and wave action into a floating water in oil emulsion called _____	
	2. Oil slick can be broken by surface turbulence from wind and wave action into a floating water in oil emulsion called _____	

	3. Which catalyst is used to break the hydrocarbon bonds and accelerate? a. Polyurethane b. Titanium Oxide c. Polypropylene d. Titanium Dioxide	
	4. Booms and skimmers are most effective when waves, winds and currents are__- -----	
	5. Gelling agent also known as _____	12
Q.2	Attempt any four (Short Questions)	
	(1) Explain chemical dispersants method, also advantage and disadvantage	
	(2) what are the cause of oil spill and also explain the effect oils spill in environment	
	(3) Explain Volatilization	
	(4)What do understand by solidification ?	
	(5) Explain Gravity separation and Hydro-cyclones	
Q.3	Attempt any two questions	08
	(1) what are the methods used in oil spill	
	(2) What are the methods used for removal of dissolved HC	
	(3) Explain how you are going to remove solid from HC	
Q.4	(A) Explain RCRA	05
	(B) what are criteria to determine whether a waste is hazardous or not?	05
	OR	
	(B) Why do we need fire and gas detection system, Explain	05