



Name:			
Enrolment No:			
<b>UNIVERSITY OF PETROLEUM AND ENERGY STUDIES</b> End Semester Examination, December.2018			
Programme Name: M.TECH. (PE)		Semester : III	
Course Name : HSE Challenges in Petroleum Operations of Program M. Tech. (Petroleum Engineering)		Time : 03 hrs	
Course Code : HSFS 8012		Max Marks : 100	
Nos. of page(s) :2(Two Pages)			
Instructions:		Assume any missing data.	
<b>SECTION A</b>			
S. No.		Marks	CO
Q 1	<p>Indicate True or False</p> <p>i) HSE Decision is a support tools <span style="float: right;">True/False</span></p> <p>ii) The sequential component of HSE LADDER are <span style="float: right;">True/False</span></p> <p>a) Security b)Safety c) Health and d)Environment <span style="float: right;">True/False</span></p> <p>iii) Code of conduct is an integral process of HSE Policy <span style="float: right;">True/False</span></p> <p>iv) Specific HSE topics and tasks are regulated countrywide because of the inherent high risks. <span style="float: right;">True/False</span></p>	4	CO1
Q 2	<p>Fill in the blanks:</p> <p>i) HSE Management System is based on the continual improvement methodology _____ <i>HSE Policy</i>.</p> <p>ii) The Chief Risk Officer is responsible to _____ support the efficient and effective monitoring of <i>HSE Policy</i>.</p> <p>iii) The GLOBAL DIRECTIVE is mandatory for (a) _____ (b) _____ (c) _____</p> <p>iv) HSE performance shall regularly be measured, monitored, recorded, analyzed and reported by the Competent authority, _____ the Corporate Management Board.</p>	4	CO-2
Q 3	<p>Briefly describe the HSE related <u>Accountabilities / Responsibilities of:</u></p> <p>i) Group Manager HSE</p> <p>ii) HSE Managers</p>	4	CO-3
Q 4	Describe the principle of Process Safety Management with reference to Assurance & Key Benefits.	4	CO4
Q 5	Describe Mandatory Requirements of the Following: I) CD04-03-1 – 7 II) GP04-02 III) GP04-03 IV) GP06-07	4	CO1

<b>SECTION B</b>			
<b>Q 1</b>	<b>The monitoring of audit reports is an essential requirement from compliance point of view of an HSE activity. Detail the 6(SIX) POINTER ACTIVITIES along with vital conclusions related to it.</b>	<b>8</b>	<b>CO4</b>
<b>Q 2</b>	<b>Discuss the salient features and other details PSM Sensors / Elements.</b>	<b>8</b>	<b>CO-2</b>
<b>Q 3</b>	<b>What do you understand by the term- Integrated HSE Management? Also describe the principle &amp; objectives IMS.</b>	<b>8</b>	<b>CO-3</b>
<b>Q 4</b>	<b>RESOURCE MANAGEMENT in terms of Human Resources, Infrastructure &amp; Working environment is a critical issue directly linked with the success of an environment project. Justify the same</b>	<b>8</b>	<b>CO-4</b>
<b>Q-5</b>	<b>Discuss the role of R&amp;D activities in the area of HSE with special reference R&amp;D Committee for the various R&amp;D tools.</b> <b>OR</b> <b>Discuss the term-Control of Non – Compliant Products and its role in Effective Management of HSE.</b>	<b>8</b>	<b>CO-3</b>
<b>SECTION-C</b>			
<b>Q 1</b>	<b>Explain in details the role ergonomists? Also discuss the existing Guidelines as envisaged OSHA.</b> <b>OR</b> <b>What do you understand by Musculo-Skeletal Disorder (MSD). Also discuss the impact of Impact of MSDs in the Workplace</b>	<b>20</b>	<b>CO4</b>
<b>Q-2</b>	<b>Explain in details the “SAFETY DATA SHEET” (SDS) and its salient features together with all the 16 Sections related to it.</b>	<b>20</b>	<b>CO-2</b>

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<b>Mid Semester Examination, September/ October 2018</b>			
<b>Programme Name:</b> M.TECH. (PE)		<b>Semester : III</b>	
<b>Course Name : HSE Challenges in Petroleum Operations of Program M. Tech (Petroleum Engineering)</b>		<b>Time : 03 hrs</b>	
<b>Course Code : HSFS 8012</b>		<b>Max. Marks : 100</b>	
<b>Nos. of page(s) : 2(Two Pages)</b>			
<b>Instructions: Assume any missing data.</b>			
<b>SECTION A</b>			
S. No.		Marks	CO
Q 1	<p><b>Indicate True or False</b></p> <p>i) The SA 8000 is an International workplace-quality standard. T/F</p> <p>ii) Security – Protecting our people , physical assets and ensuring business continuity T/F</p> <p>iii) Industries can set stricter requirements, which need to be authorized by competent line management. T/F</p> <p>iv) Process safety management is a rule. T/F</p>	4	CO1
Q 2	<p><b>Fill in the blanks:</b></p> <p>i) _____protecting our people , physical and intellectual assets and ensuring business continuity</p> <p>ii) _____Ensure that HSE aspiration is achievable and embrace the responsibility for supporting it.</p> <p>iii) In 1994, OSHA issued Instruction CPL _____</p> <p>iv) Environmental Management Systems(EMS) is represented by- _____</p>	4	CO-2
Q 3	<p><b>Describe briefly the following sections of Safety Data Sheets:</b></p> <p>Section – 6</p> <p>Section – 11</p>	4	CO-3
Q 4	<b>Describe any five different forms of Physical Hazards</b>	4	CO4
Q 5	<b>Describe the Risk Assessment and vital Risk Assessment Factors</b>	4	CO1

<b>SECTION B</b>			
<b>Q 1</b>	<b>What do you understand the term-Disaster? Discuss the same with respect to following issues/points: i) Phases of Disaster ii) Essentiality of Disaster Plan iii) Key Elements of a Disaster Prevention Plan iv) Rules for Disaster Prevention and Recovery Plan .</b>	<b>8</b>	<b>CO4</b>
<b>Q 2</b>	<b>What do you understand Standardized colour coding in with the view HSE management in oil industry? Differentiate between the following systems: i) The Band System and ii) The Labelling System</b>	<b>8</b>	<b>CO-2</b>
<b>Q 3</b>	<b>Discuss OSHA-Guidelines related to Right and Responsibilities for persons working in or around Confined Space.</b>	<b>8</b>	<b>CO-3</b>
<b>Q 4</b>	<b>Write a descriptive note on Hazard Identification with the special reference to the following: i) Deficiency of oxygen in air. ii) Flammable spaces iii) Chemical substances.</b>	<b>8</b>	<b>CO-4</b>
<b>Q-5</b>	<b>“Safety is the most critical issue related with Oil Exploration and Production” Please justify the above statement and detail all the detail 16 (sixteen) sections of Standard Data Sheets(SDS). OR Prepare a hypothetical Disaster Management Plan including The basic approach may be classified in the four parts – Part- A , Part- B, Part-C, and Part D..</b>	<b>8</b>	<b>CO-3</b>
<b>SECTION-C</b>			
<b>Q 1</b>	<b>What do ergonomists do? Also discuss the existing Guidelines as envisaged OSHA. OR What do you understand by Muscular-Skeletal Disorder (MSD). Also discuss the impact of Impact of MSDs in the Workplace</b>	<b>20</b>	<b>CO4</b>
<b>Q-2</b>	<b>Describe any Case Study related to HSE Management in Oil Industry and also discuss the applicability of all the sections related to Integrated Management System in the proposed Case Study.</b>	<b>20</b>	<b>CO-2</b>