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UNIVERSITY OF PETROLEUM AND ENERGY STUDIES
Online End Semester Examination, May 2021

Course: Health, Safety, Security and Environmental Implications in Oil and Gas Industry Program: B. Tech (Hons) Computer Science and Engineering (Oil and Gas Informatics) Course Code: HSFS 3023	Semester: VI Time: 03 hrs. Max. Marks: 100
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SECTION A

Each Question will carry 05 Marks

S. No.	Question	CO
Q1	Define Process Safety Management and Risk.	CO1
Q2	List any five basic safety rules adopted by visitors when entering /accessing the industrial installation.	CO1
Q3	Briefly discuss Internal HSE audit.	CO1
Q4	Name five sources of air pollution in an oil refinery.	CO1
Q5	Briefly discuss the effects of oil spills on human beings and birds.	CO1
Q6	Expand the following terms a) PSSR..... b) NDMA..... c) PPE..... d) MSDS..... e) OSHA.....	CO1

SECTION B

1. Each question will carry 10 marks
2. Instruction: Write short / brief notes

Q7	Explain different control technologies adopted by an installation to solve noise pollution problems.	CO2
Q8	Briefly assess various benefits of Environmental Management System.	CO3
Q9	Discuss the difference between Level-1 emergency, Level-2 emergency and Level-3 emergency.	CO3
Q10	Explain Checklist, Overlays, Network and Matrix method used in an EIA process.	CO2
Q11	Discuss the salient features of The Static and Mobile Pressure Vessels, (SMPV) (Unfired) Rules, 1981.	CO2
OR Discuss Manufacture, Storage and Import of Hazardous Chemicals Rules, 1989.		

SECTION C

1. Each Question carries 20 Marks.
2. Instruction: Write long answer.

Q12	Explain different elements, use by an ergonomist for developing an ergonomic programme. <p style="text-align: center;">OR</p> Discuss different components of Quantitative Risk Assessment (QRA) used by an auditor for investigating risk of pre-existing facility/ new facility/ new process.	CO4
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