

Name:

Enrolment No:



**UNIVERSITY OF PETROLEUM AND ENERGY STUDIES**

**Online End Semester Examination, May 2021**

**Course: Safety in Engineering Industry**

**Program: B.TECH FSE**

**Course Code: HSFS 4004**

**Semester: VI**

**Time 03 hrs.**

**Max. Marks: 100**

**Section A**

**1. Each Question will carry 5 Marks**

**2. Instruction: Complete the statement / Select the correct answer(s)**

S.No		CO
Q 1	List out the hazards in handling and using lubricants in Industry	CO1
Q 2	Apply the safety Precautions to be taken while entering in any machinery workshop	CO3
Q 3	Define Zero Mechanical State	CO2
Q 4	List the sources for generation of fumes in welding	CO1
Q 5	Discuss the factors affecting the selection of Material handling equipment.	CO2
Q 6	Examine and list any 5 physical and 5 chemical agents that cause occupational disease in the engineering industry	CO4

**SECTION B**

**1. Each question will carry 10 marks**

**2. Instruction: Write short / brief notes**

Q 1	List the hazards and safety precaution of Lathe and grinding machine	CO1
Q 2	Classify Engineering Industry in detail.	CO3
Q 3	Explain the Hot rolling and cold rolling process, examine the hazards and safety measures to be followed during operation	CO2
Q 4	Explain in the detail the Configuration, Types, safe handling and other important measures to be taken while handling Wire rope slings and Fiber rope slings in detail.	CO2
Q 5	Analyze the hazards in heat treatment and recommend safe methods of operation. <b>(OR)</b> Analyze the Power press operation and recommend safe methods to perform the operation.	CO3

**SECTION-C**

**1. Each Question carries 20 Marks.**

**2. Instruction: Write long answer**

Q 1	a) Foundry is the most hazardous place to work, Examine the foundry operations, examine the hazards in each operation and recommend suitable control measures <b>(OR)</b> a) Being a safety officer explain in detail the dangerous areas of attention for any machine with possible examples b) You have found a industry where the hazardous areas in the machines are unguarded, as a safety officer what are principles of guarding you follow while implementation of guarding system, what are the different types of guards and guarding devices options you have for implementation (any 6 with possible pictorial representation)	CO4
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