

Name:

Enrolment No:



UNIVERSITY OF PETROLEUM AND ENERGY STUDIES

Online End Semester Examination, December 2020

**Course: Safety in Engineering Industry
Programme: B.Tech-Fire and safety Engg.**

**Semester: VII
Time: 03 hrs.**

Course Code: HSFS 4004

Max. Marks: 100

SECTION A

Each Question will carry 5 marks

S. No.	Question	CO
Q01	Explain the sources of fumes in welding operation.	CO2
Q02	As a safety officer recommend general safety rules to be followed in engineering workshop.	CO3
Q03	List any 10 occupational diseases caused by physical and chemical agents in engineering industry (5 each)	CO1
Q04	Summarize the principles of guarding.	CO1
Q05	Classify heavy engineering sector with example	CO2
Q06	List the different damages that happen during improper usage of rope.	CO1

SECTION B

1. Each Question will carry 10 marks

2. Write short/Brief notes

Q07	Explain the hazards and safety precautions to be followed while operating power press machine	CO2
Q08	Differentiate the following guarding devices with its possible application- Interlocking device, Two hand switch, Laser scan, safety mats, pullback device.	CO4
Q09	Slings play a major role in material handling summarize the safe operation of fiber and wire rope slings in detail.	CO1
Q10	Consider you are a production engineer in steel plant who is incharge of rolling operation analyse the rolling operation and enumerate the hazards, hazardous scenarios and safety measures to be followed to avoid accident.	CO4
Q11	Summarize the hazards of grinding machine and safety precautions to be followed while handling milling machine. (OR) Explain the hazards and safety precautions to be followed in ETP.	CO2

SECTION-C

1. Question carries 20 marks

2. Instruction: Write long answer

Q12	Foundry plays an important role in manufacturing sector. find the hazards in the various operations in foundry and apply the most feasible control measures (OR) Consider you are material handling expert consulting an industry which has lot of issues in material handling execute the material handling plan by considering the various factors that you know.	CO3
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