

Name: Enrolment No:			
UNIVERSITY OF PETROLEUM AND ENERGY STUDIES End Semester Examination, December 2022			
Programme Name: M.TECH-HSE- Spz. in Fire and Safety		Semester : III	
Course Name : Safety in Engineering Industry		Time : 03 hrs	
Course Code : HSFS 8009		Max. Marks: 100	
Nos. of page(s) : 2			
Instructions: Read the question properly and give the most relevant answer.			
SECTION A (5Qx4M=20Marks)			
S. No.		Marks	CO
Q 1	Explain the hazards in handling milling Machine	4	CO1
Q 2	List the principles of guarding	4	CO1
Q 3	Recall the use of flash back arrestor.	4	CO2
Q 4	Discuss the hazards in 3D printing machine	4	CO2
Q 5	Consider you got a contract to establish a paint shop in a garage what are the hazards you will consider and the control measures to be followed while setting up a garage.	4	CO3
SECTION B (4Qx10M= 40 Marks)			
Q 6	Explain any two wood working machine, list the hazards and control measures to be followed.	10	CO2
Q 7	Analyze the following guarding and guarding device and prescribe their potential applications. a) Two hand control b) Safety mat c) Restraint device and pull back device d) Adjustable guarding	10	CO4
Q 8	You are working in a welding contracting company where acetylene cylinder is used, one of the labors is asking you about whether acetylene cylinder is different from other gas cylinders. Explain him with proper sketch and make a document to educate others also.	10	CO3
Q 9	List the hazards and safe operating procedure of power press machine (OR) Rolling is the most hazardous operation explain the different rolling process, its hazards and control measures in detail.	10	CO1

SECTION-C
(2Qx20M=40 Marks)

Q 10	Foundry is one of the most hazardous work place, consider you are joining as a safety officer. Prepare a plan of action to be implemented in order to make the foundry safe. (you should analyze the process and hazards thoroughly) <p style="text-align: center;">(OR)</p> Prepare a tool box talk in the form of document to be given to your employees who are performing underwater welding.	20	CO4
Q11	You are working in a LED Television manufacturing company assess the workplace and prepare a safety report to be submitted to your CEO who is unaware about the safety.	20	CO3