

Name:	
Enrolment No:	

UNIVERSITY OF PETROLEUM AND ENERGY STUDIES
End Semester Examination, December 2019

Course: Safety in Engineering Industry

Semester: III

Program: M.Tech (HSE)+ M.Tech (HSE-DM)

Time 03 hrs.

Course Code: HSFS 8002

Max. Marks: 100

Instructions: Read the question paper properly and give the most relevant answer

SECTION A

S. No.		Marks	CO
Q 1	Is soldering a hot or cold work? Explain your stand.	4	CO3
Q 2	Discuss the safe operating procedure for table saw when you carryout angle cut.	4	CO2
Q 3	Define Zero Mechanical State	4	CO1
Q 4	List any 5 fumes arising foundry and their potential health effects	4	CO1
Q 5	Discuss the hazards and control measures of beta and Gamma radiation	4	CO2

SECTION B

Q 6	Discuss the hazards and safety precaution of Lathe and grinding machine	10	CO2
Q 7	Explain the structure of Acetylene cylinder, list hazards in handling and filling of acetylene cylinder.	10	CO2
Q 8	Differentiate hot rolling and cold rolling, hazards and safety precautions in the rolling operation.	10	CO1
Q 9	Explain interlock guard, restraint device, pull back device and two hand switch device (or) Write the hazards and safety precautions of pressure testing of vessels.	10	CO3

SECTION-C

Q 10	Write about machinery risk assessment in detail	20	CO3
Q 11	Consider you are working NDT facility as a safety officer, Prepare a safety program on how will you detect, measure, control the ionized radiation in your facility consider you are using x ray radiation. (Or) a) Discuss in detail the danger areas of attention for any machine with possible examples. b) Discuss elaborately about arc welding process, its hazards and control measures	10+10	CO1 & CO2