

Name:	
Enrolment No:	

UNIVERSITY OF PETROLEUM AND ENERGY STUDIES
End Semester Examination, December 2021

Course: M.Tech.-HSE
Semester: I **COURSE CODE: HSFS 7003**
Programme: Occupational Health and Safety Management
Time: 03 hrs. **Max.**
Marks: 100

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

SECTION A

S. No.	Question	Marks	CO
Q01	Define routes of entry of different gases and other harmful substances.	4	CO1
Q02	Identify various PPE's used in oil & gas sector.	4	CO2
Q03	Describe your understanding about asbestosis.	4	CO2
Q04	What are different uses of chromium? Explain in brief its uses and harmful effects.	4	CO2
Q05	List out arrangement you wish to use in industry, which can play important role in avoiding of occupational diseases/accidents in industries.	4	CO3

SECTION B

Q06	First aid is playing an important role in minimizing severe health issues by providing immediate medical assistance. Discuss in detail first aid procedure.	10	CO4
Q07	In coal handling yard, a worker works for 4 hours 40 minutes and he is exposed to coal dust, which is hazardous to health. The average exposure during that period is measured as 9.40 mg.m ⁻³ . Remaining time, he was working on cleaning activities of his workplace. Average exposure during that period is measured as 2.50 mg.m ⁻³ . Calculate TWA for 8 hrs. exposure.	10	CO4

Q.08	During COVID-19, pandemic worldwide people have understood importance of decontamination. Describe in detail decontamination procedures.	10	C05
Q.09	Describe the role of employer in controlling workplace hazard, and methods to control workplace hazard.	10	C05
SECTION-C			
Q10	Discuss in detail major toxic gases released from refinery operations and their various properties and treatment options. Or Due to the COVID-19 pandemic, in 2020-2021, many employees were required to work from home (WFH). During this WFH period, number of employees encountered health issues related to sprains and neck or back pain owing to poor working conditions at home. Analyze your ergonomics knowledge which can help in reduction of these problems.	20	C05
Q11	Number of fatalities occurring in industries due to presence of physical and chemical hazards in most of the industries. Describe in detail various physical & chemical hazards. What are common methods of eliminating, minimizing and controlling these hazards?	20	C05