Name: Enrolment No:	

UPES
End Semester Examination, December 2023

Course: Occupational and Safety Engineering　　　　　　Semester: III
Program: B.Tech.-Sustainability Engineering　　　　　　Time : 03 hrs.
Course Code:　SUEN2002　　　　　　　　　　　　　　　Max. Marks: 100
No. of page(s)　　:　1
Instructions: Read the question properly and give the most relevant answer.

SECTION A
(5Qx4M=20Marks)

S. No.		Marks	CO
Q 1	Write the importance of illumination	4	CO1
Q 2	Differentiate chronic and acute effects with examples.	4	CO4
Q 3	Explain the significance of measuring Particulate Matter 2.5 micrometers (PM.2.5).	4	CO2
Q 4	Summarize any two air sampling techniques of your choice.	4	CO2
Q 5	Differentiate local effect and systemic effect.	4	CO4

SECTION B
(4Qx10M= 40 Marks)

Q 6	Discuss the different types of chemical hazards with example	10	CO2
Q 7	Examine silicosis and phenomena of causation elaborately.	10	CO4
Q 8	Prepare a write up on chromium metal as an occupational safety expert.	10	CO3
Q 9	Discuss the ill effects of ionizing radiation and explain any 3-ionizing radiation. (OR) Recall the importance of personal hygiene and prepare a personal hygiene practice to be followed by a employee working in sewage treatment plant in your industry.	10	CO1

SECTION-C
(2Qx20M=40 Marks)

Q 10	Analyze the importance of medical surveillance and the importance of emergency response in industry. (OR) Write about the noise hazard and its control measures in detail	20	CO4
Q 11	Write a detailed report on importance of thermal heat stress and explain how will you convince your employer to implement heat stress management plan.	20	CO3