Name:

**Enrolment No:** 



: 03 hrs.

## **UPES**

## **End Semester Examination, May 2024**

**Course: Behaviour Based Safety and Human factors Engineering Semester: IV Program: B.Tech.-Fire and Safety Engineering** Time

**Course Code: HSFS 2009** Max. Marks: 100

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

## **SECTION A** (**5Qx4M=20Marks**)

	( )		
S. No.		Marks	СО
Q 1	Recall the concepts: Lost time injury, accident and near miss	4	CO1
Q 2	Discuss the hierarchy of control in safety engineering.	4	CO2
Q 3	Differentiate Traditional safety and behavior-based safety.	4	CO4
Q 4	Explain the different cost of accident.	4	CO3
Q 5	Explain safety sampling and safety inspection	4	CO3
	SECTION B		
	(4Qx10M= 40 Marks)		
Q 6	Write about PDCA cycle in detail.	10	CO3
Q 7	Explain Job safety analysis in detail with an example of your choice	10	CO2
Q 8	List the duties of safety officer as per legal regulation.	10	CO1
Q 9	Explain ABC analysis with an example of your choice.  (or)  Do you think leadership is important for safety profession. Justify your stand with example of your choice.	10	CO3
	SECTION-C		
	(2Qx20M=40 Marks)		1
Q 10	Prepare a writeup of OSHA's PSM elements with example	20	CO4
Q 11	Explain the concept of accident investigation in detail. Investigate an accident/incident you have gone through using 5W1H technique.  (OR)  As a safety engineer you have to promote safety in your organization by conducting events, prepare a plan to conduct safety week celebration in your organization.	20	CO2 & CO3