Name: Enrolment No:	

UNIVERSITY OF PETROLEUM AND ENERGY STUDIES

End Semester Examination, December 2022

Course Name: Concept of Fire Safety in Building **Semester: III**
Programme: M Tech- HSE **Time: 03 Hours**
Course Code: HSFS 8005 **Max. Marks: 100**
No of pages: 01

SECTION A
Attempt all questions. Each question carries 4 Marks

Sr. No.	Question	CO
Q 1	Highlights the main function of local government units in fire safety assurance	**CO1**
Q 2	Differentiate between storage and hazardous building.	**CO3**
Q 3	Brief the general requirements of refuse areas as listed in NBC.	**CO1**
Q 4	List out the essential components to be considered while designing of staircases.	**CO2**
Q 5	Explain the need for Heat Release Rate in fire phenomenon.	**CO3**
	SECTION B **Attempt all questions. Each question carries 10 Marks**	
Q 6	Emphasize the requirements of fire zoning and its futuristic consideration in urban planning.	**CO3**
Q 7	Enlist the fire safety consideration in the design of compartmentation.	**CO2**
Q 8	Evaluate the probable condition of a fire outbreak in a building. Being an HSE expert, enlist the design requirements for the smoke management control system in a building ensuring smooth evacuation. **OR** Explain the heat release rate for ventilation control fire. Calculate the heat release rate from a ventilation control fire burning inside an enclosure of having a window 2 m wide and 1.5 m high.	**CO4**
Q 9	Discuss fire curtain and their types. Highlight the benefits of providing water curtain at workplace.	**CO2**
	SECTION C **Attempt all questions. Each question carries 20 Marks**	
Q 10	Discuss fire partition and its types. Share your learnings on the purpose of providing partitions in a building/ workplace. **OR** Explain the salient features of the national building code and highlight the important aspects in connection to the exit requirements.	**CO1**
Q 11	Being a fire safety officer/ expert create a fire safety inspection checklist for 10 storey building (200 occupant) keeping in mind of any fire emergency when needed to evacuate occupants to the assembly point.	**CO5**