UNIVERSITY OF PETROLEUM AND ENERGY STUDIES
Online End Semester Examination, December 2020
Semester: III

Course Name: Concept of Fire Safety in Building   **Semester: III**
Programme: M Tech- HSE   **Time: 03 Hours**
Course Code: HSFS 8005   **Max. Marks: 100**

SECTION A

1. Each Question will carry 5 Marks
2. Instruction: Complete the statement / Select the correct answer(s)

Sr. No.	Question	CO
Q 1	Discuss the need of building classification.	CO1
Q 2	Name various classes of building.	CO1
Q 3	Justify the need of refuse areas.	CO4
Q 4	In what condition, partitions are to be provided in an occupancy/ workplace?	CO2
Q 5	What is fire load density and its application at workplace?	CO2
Q 6	Comment on "enforcement of legal provisions" for a hospital building.	CO4

SECTION B

1. Each question will carry 10 marks
2. Instruction: Write short / brief notes

Q 7	Being a fire safety in-charge, review the fire safety condition of workplace reflecting the need of compartmentation.	CO3
Q 8	Explain in detail of fire doors and list out their general requirements.	CO1
Q 9	Enlist the design consideration for the smoke management control in a high-rise building.	CO2
Q 10	Explain mass loss rate and its applicability. Also discuss the role of essential variables while predicting or calculating mass loss rate of a fuel.	CO1
Q 11	Calculate the heat release rate from a ventilation control fire burning inside an enclosure of having a window 2.4 m wide and 1.2 m high.	CO3

SECTION C

1. Each Question carries 20 Marks.
2. Instruction: Write long and appropriate answer.

Q 12	Develop a fire safety plan for an occupancy (Commercial building) of low hazardous categories. **OR** For a 10 storey building, create an emergency evacuation plan including the emergency control team (chart).	CO5