

<b>Name:</b>	
<b>Enrolment No:</b>	

**UNIVERSITY OF PETROLEUM AND ENERGY STUDIES**  
**End Semester Examination, December 2018**

<b>Course: Concept of Fire Safety in Building, Structure Installation</b>	<b>Semester: III</b>
<b>Programme: M Tech- HSE</b>	<b>Max. Marks: 100</b>
<b>Time: 03 hrs.</b>	<b>Subject Code: MEEG 743</b>

**Instructions:**

**SECTION A**

S. No.		Marks	CO
Q 1	Name different types of “partitions” used in compartments.	4	CO1
Q 2	Extend your views on “building fire areas”.	4	CO2
Q 3	Define fire safety audit and highlight its objective.	4	CO1
Q 4	Justify the need of building classification and its general requirements.	4	CO3
Q 5	Elaborate “speed of motion” and its consideration in building evacuation process.	4	CO2

**SECTION B**

Q 6	Fire risk assessment is a tool used to evaluate fire safety condition of any workplace. Prepare a checklist evaluating fire safety condition at work place with respect to NBC requirements.	10	CO4
Q 7	Concept of fire resistance in any compartmentation is most important factor and considerations for fire & life safety measures. Discuss various parameters, which are considered while providing fire resistance compartmentation in a building.	10	CO1 CO3
Q 8	Analyze the role of partition and its effectiveness in any building. Also discuss its types with example.	10	CO2 CO5
Q 9	List out the purpose of providing fire towers in a high-rise building. Enumerate design consideration required for installation of fire towers. <b>OR</b> Means of access plays important roles in emergency evacuation. Discuss in detail about planning and design consideration during constructing means of access.	10	CO3 CO4

**SECTION-C**

Q 10	Demarcations of zones are important while implementing fire safety measures in urban areas. Discuss in detail about designation of different fire zones and role of concern authority while deciding about different fire zoning.	20	CO5
Q 11	Based on design criteria of fire & life safety, explain in detail about salient features of national building code 2016. <b>OR</b> Explain in detail about planning and designing aspect of emergency evacuation paths. Also, Highlight major considerations for smoke proof staircases.	20	CO1 CO2 CO3

<b>Name:</b>	
<b>Enrolment No:</b>	

**UNIVERSITY OF PETROLEUM AND ENERGY STUDIES**  
**End Semester Examination, December 2018**

<b>Course: Concept of Fire Safety in Building, Structure Installation</b>	<b>Semester: III</b>
<b>Programme: M Tech- HSE</b>	<b>Max. Marks: 100</b>
<b>Time: 03 hrs.</b>	<b>Subject Code: MEEG 743</b>

**Instructions:**

**SECTION A**

S. No.	Question	Marks	CO
Q 1	Define institutional building and give its classification.	4	CO1
Q 2	Extend your views on purpose of calculating “building fire areas”	4	CO2
Q 3	Share various disadvantage of external staircase.	4	CO1
Q 4	Elaborate efficiency of joints.	4	CO3
Q 5	List out the purpose of considering densities of stream, of stream of people in designing of evacuation paths.	4	CO2

**SECTION B**

Q 6	Fire risk assessment is a tool used to evaluate fire safety condition of any workplace. Prepare a checklist evaluating fire safety condition at work place with respect to NBC requirements.	10	CO4
Q 7	Enumerate “stack effect” used in a building. Highlights various characteristics of stack or smoke vents in a building.	10	CO1 CO3
Q 8	Analyze the purpose and its effectiveness of building by laws. Name its members with their roles.	10	CO2 CO5
Q 9	Justify the need of general requirements of NBC applicable to various classes of building based on occupancy. Highlight a few general requirements with respect to planning & design. <b>OR</b> Summarize integrity of structures. Extend your view on the factors influencing integrity of structures.	10	CO3 CO4

**SECTION-C**

Q 10	Demarcations of zones are important implementing fire safety measures in urbans areas. Discuss in detail about designation of different fire zones and role of concern authority deciding about different fire zoning.	20	CO5
Q 11	Based on design criteria of fire & life safety, explain in detail about salient features of national building code 2016. <b>OR</b> Means of access plays important roles in emergency evacuation. Discuss in detail about planning and design consideration during constructing means of access.	20	CO1 CO2 CO3

