

Name:	 UPES UNIVERSITY WITH A PURPOSE
Enrolment No:	

UNIVERSITY OF PETROLEUM AND ENERGY STUDIES
End Semester Examination, December 2019

Course: Global Disaster Scenario and Types of Natural Disaster

Semester: 3

Program: M.Tech HSE- DM

Course Code: HSFS 8009

Time 03 hrs.

Max. Marks: 100

Instructions: All questions are compulsory

SECTION A

S. No.		Marks	CO
Q 1	Define 'disaster management' as per the DM Act 2005.	4	CO1
Q 2	Mention a real-life instance, place and year of occurrence of the following: a) Flood b) Earthquake c) Tsunami d) Epidemic	4	CO1
Q 3	Expand OCHA and UNDAC, what are their key roles?	4	CO1
Q 4	Classify floods according to their duration of occurrence? Give an example of a flood that occurred in India and categorize it according to the above classification.	4	CO2
Q 5	Differentiate between a) Meteoroid and meteorite b) Subsidence and lahar	4	CO2

SECTION B

Q 6	What is a storm hydrograph? Draw a storm hydrograph and explain its main features. Detail the factors affecting storm hydrographs.	10	CO1
Q 7	Write short notes on the earthquake design philosophy and measures to reduce earthquake effects on buildings.	10	CO2
Q 8	'Floods can also be beneficial', justify this statement. Explain the non-structural mitigation measures for floods. OR Bring out at least five points on the lessons learnt from the Seveso disaster. Also mention the steps taken to clean up or manage the effects of the toxic contaminants after the occurrence of the disaster.	10	CO3
Q 9	How are forest fires caused and mention its ill effects? Briefly explain the various techniques to fight forest fires and measures to prevent them from occurring.	10	CO2

SECTION-C

Q 10	<p>Using the key principles of disaster management and the disaster management cycle suggest a disaster management plan in the event of a massive landslide in Bidholi blocking all access from UPES for 2 weeks.</p> <p style="text-align: center;">OR</p> <p>If you were entrusted with the responsibility of preparing a disaster management plan for your town which is susceptible to floods, how would you do it? Elucidate it using the key principles of disaster management, the disaster management cycle and the lessons learnt from previous disasters.</p>	20	CO4
Q 11	<p>Draw the basic structure of the Incident Command System. How is the Incidence Command System different from the Incidence Management System? Elucidate how it came into existence. Give detailed notes about the roles and responsibilities of all the staff under the ICS.</p>	20	CO3