



## UNIVERSITY OF PETROLEUM AND ENERGY STUDIES

End Semester Examination, December 2017

Program: M Tech – HSE & HSE-DM

Subject (Course): Global Disaster Scenario and Types of Natural disasters

Course Code : MDMT 716

No. of page/s:

Semester – VII

Max. Marks : 100

Duration : 3 Hrs.

### Section A

**Answer all the questions:**

**5\* 4 = 20 Marks**

1. What do you understand by structural and non-structural measures for disaster risk reduction?
2. Discuss India's vulnerability to natural disaster.
3. Briefly explain different types of floods and forest fires.
4. Discuss the classification of natural disaster as per Centre for Research on the Epidemiology of Disasters (CRED)
5. A solid waste incinerator located in a large metro area was the target of a radical group of environmentalists, who bombed the incinerator in the middle of the night in order to prevent it from operating. The explosion resulted in the release of dioxins and furans into the ambient air, as well as dust and smoke from fires which would persist for weeks. Identify four relevant agencies that would be involved in this disaster response and their respective roles, in brief.

### Section B

**Answer all the questions:**

**5 \* 8 = 40 Marks**

6. Discuss the paradigm shift in the disaster management in India
7. Explain the four phase approach in disaster management
8. Outline the seismic and Tsunami risk zones in India
9. Discuss the mechanism of tropical cyclone formation and early warning system in India
10. List and explain the causes of landslide and mitigative measures for risk reduction.

### Section C

**Answer both the questions:**

**2 \*20 = 40 Marks**

11. (A) Discuss the different properties of oil that affects the initial spreading in water. Critically examine and compare suitability and effectiveness of different oil spill control techniques (20)

Or

- (B) Explain the causes and mechanism of earthquake. Discuss the six pillar strategy for improving the effectiveness of earthquake management in India (10+10)

12. 'Underlying causes of a disaster are rooted in socio-economic and political processes'.  
Discuss in the wake of recent trends in global disaster scenario. (20)



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### Section A

**Answer all the questions:**

**5\* 4 = 20 Marks**

1. Identify factors which affects the intensity of an earthquake.
2. India is prone to various natural disasters. Discuss our nation's vulnerability to natural disaster
3. Brief on different types of floods and forest fires?
4. What is recovery? Differentiate response and recovery
5. Discuss the classification of natural disaster

### Section B

**Answer all the questions:**

**5 \* 8 = 40 Marks**

6. 'Earthquake don't kill people; buildings do'. Explain
7. Explain the four phase approach in disaster management
8. Discuss the six pillar strategy for improving the effectiveness of earthquake management in India
9. Discuss the mechanism of Tsunami and early warning system in India
10. What is the significance of land use planning and development regulations in disaster management?

### Section C

**Answer both the questions:**

**2 \*20 = 40 Marks**

11. Discuss the different properties of oil that affects the initial spreading in water. Critically examine and compare suitability and effectiveness of different oil spill control techniques
12. Analyze the trends in global disaster scenario. Enlist five UN agencies involved in disaster management and their roles (15+5)