

16017(D) 1 DEC 2016

**B. Tech 1st Semester Examination**

**Disaster Management and Environmental Science (NS)**

**HS-101**

**Time : 3 Hours**

**Max. Marks : 100**

*The candidates shall limit their answers precisely within the answer-book (40 pages) issued to them and no supplementary/continuation sheet will be issued.*

**Note :** Candidates are required to attempt five questions in all selecting one question from sections A, B, C, D and all the subparts of question in section E.

**SECTION - A**

1. (a) Identify the different types of disasters and describe three natural disasters which you are familiar with.  
(b) Identify and describe three man-made disasters you have learnt about. (2×10=20)
2. (a) Explain what you understand by the term Vulnerability.  
(b) Describe the various tools to reduce Vulnerability.  
(c) Differentiate between a hazard and a disaster.  
(d) Differentiate between Risk and Disaster risk. (4×5=20)

**SECTION - B**

3. Step by step explain the following mechanisms:  
(a) Cyclone forecasting.  
(b) Flood forecasting. (2×10=20)
4. (a) Explain the aims and objectives of disaster preparedness. (5)  
(b) List the various safety tips to be followed:  
(i) Before the earthquake  
(ii) During the earthquake and  
(iii) After the earthquake. (15)

**SECTION - C**

5. (a) Explain the various possible sources of soil pollution.  
(b) Suggest some of the methods to control the soil pollution. (2×10=20)
6. (a) What do you understand by Gaseous pollutants in Particulate? Give examples of each.  
(b) What are the different control measures for air pollution resulting from particulate matter? (2×10=20)

**SECTION - D**

7. (a) What is Global Warming? How it is responsible for climate change?  
(b) What will be the expected change in climate if the quantity of CO<sub>2</sub> gets doubled in the atmosphere? (2×10=20)
8. (a) Write short notes on the following:  
(i) Ozone Hole.  
(ii) CO<sub>2</sub> fertilisation effect.  
(b) Explain the different strategies which can lead to reduction in global warming. (2×10=20)

**SECTION - E**

9. Briefly answer all the following questions.  
(a) Define Disaster Risk and Hazard.  
(b) List five main features of Disaster.  
(c) What is relationship between Disaster Risk, Hazard and Vulnerability.  
(d) What are tsunamis?  
(e) Can the earthquake be predicted? Explain.  
(f) Do the earthquake cause volcanoes? Explain.  
(g) Who discovered Global Warming?  
(h) What are two type of air pollutants?  
(i) "Climate change is almost certainly being caused by human activities". Comment.  
(j) What is the unit of sound measurement? (10×2=20)