

16017(D)

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)