

- (b) What is the effect of Dam construction on tribal people ? 4

**Section D**

7. (a) What is Ozone Layer ? What are the causes, effect of ozone layer depletion ? 6  
(b) Define greenhouse effect. Write the factors that are responsible for the cause of greenhouse effect. 4
8. (a) Explain the effect of climate on economy and natural resources. 6  
(b) What is acid rain ? Give its causes and effects on human being. 4

**(Compulsory Question)**

9. Answer briefly the following questions :  $10 \times 2 = 20$
- (i) Mention five phases of disaster management programme  
(ii) Role of IT in Disaster Management  
(iii) Hurricane

Roll No. ....

Total Pages : 05

**July-22-00206**

B.Tech. EXAMINATION, 2022

Semester I (CBCS)

DISASTER MANAGEMENT AND  
ENVIRONMENTAL SCIENCE

HS-103

*Time : 3 Hours*

*Maximum Marks : 60*

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

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**Note :** Attempt *Five* questions in all, selecting *one* question from each Sections A, B, C and D. Q. No. 9 is compulsory.

**Section A**

1. (a) Discuss about the vulnerability of India to earthquake related hazards. Give examples

including the salient feature of major disasters caused by earthquake in different parts of India during last three decades. 6

(b) What are the principles of disaster management? State difference between natural calamity and man-made disaster. 4

2. (a) Discuss the factors responsible for the occurrence of Tsunami and its effect of life and economy. In the light of guidelines of NDMA (2010) describe the preparedness to reduce the risk during such events. 6

(b) Give an account of classification and causes of forest fires. 4

### Section B

3. (a) With reference to the National Disaster Management Authority (NDMA) guidelines, discuss the measures to be adopted to mitigate the impact of recent incidents of cloudbursts in many places of Himachal Pradesh/Uttarakhand. 6

(b) Name the voluntary Agencies and explain their role in disaster management. 4

4. (a) Disaster preparedness is the fastest step in any disaster management process. Explain, how hazard zonation mapping will help disaster mitigation in the case of landslides. 6

(b) Give an account of different emergency support functions in detail. 4

### Section C

5. (a) What is Sustainability ? Discuss the role of individual in conservation of natural resources for sustainable life-style. 6

(b) What do you understand by deforestation ? What are the problems caused by deforestation ? Suggest remedial measures. 4

6. (a) Discuss the strategies which may be adopted for river water pollution control and management of hazardous waste in India. 6

- (iv) Photochemical smog
- (v) Major ways to conserve water on a personal level
- (vi) Nuclear terrorism
- (vii) Kyoto Protocol
- (viii) Eutrophication
- (ix) Terrestrial natural disaster
- (x) What is the purpose of ECF (Emergency Support Functions) ?

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