

Roll No. ....

Total Pages : 03

007407

May 2024

B.Tech (Fourth) Semester)

Environmental Science (MC-03)

Time : 3 Hours]

[Maximum Marks : 75

**Note :** It is compulsory to answer all the questions (1.5 marks each) of Part A in short. Answer any *four* questions from Part B in detail. Different sub-parts of a question are to be attempted adjacent to each other.

**Part A**

1. (a) Define HIV/AIDS. 1.5
- (b) Differentiate contaminants and pollutants. 1.5
- (c) Why is India considered a mega-biodiversity nation ? 1.5
- (d) What is the process of ecological succession ? 1.5
- (e) How many national parks, sanctuaries and biosphere reserves in India ? 1.5
- (f) What are the Articles 48A and 51A ? Explain its importance. 1.5

- (g) What is Ozone ? Explain its importance in the stratosphere. 1.5
- (h) Name three diseases that are caused by heavy metals. 1.5
- (i) Explain in detail about the holocaust. 1.5
- (j) What is the difference between an earthquake and a cyclone ? 1

### Part B

2. (a) Write short notes on the following :  $4 \times 2.5 = 10$
- (i) Acid rain
- (ii) Global warming.
- (b) Discuss the government's and individuals' roles and steps for natural resource conservation and management. 5
3. (a) What is a red data book ? Write about extinct, endangered, vulnerable and rare species in detail.
- (b) Explain biodiversity and its values and conservation approach. 10
4. What is Solid waste management ? Explain its causes, effects, rules, and control measures. 15

5. (a) Write short notes on the following :  $2 \times 2.5 = 5$
- (i) Food web
- (ii) Ecological pyramid.
- (b) What is a biogeochemical cycle ? Explain the carbon cycle in the environment. 10
6. (a) Write short notes on the following :  $2 \times 5 = 10$
- (i) Bhopal gas tragedy
- (ii) Biomagnification.
- (b) What are the major sources of air pollution ? Discussed its effects and control measures.. 5
7. (a) Discuss the role of information technology in the environment and human health. 5
- (b) Write short notes on the following : 10
- (i) Family welfare program
- (ii) Rainwater harvesting.