

National Institute of Technology, Jamshedpur  
Department of Civil Engineering  
B.Tech(II), 2<sup>nd</sup> sem Mid Semester Examination, 2023-24  
Branch: UG ME/MME/PIE and ECM  
Paper: Environmental Science (CE 1201)  
Course Instructor: Sri S.K. Paswan, Dr. J. Jayapal, Dr D Swargiary  
Date: 15/03/2024 (B Shift:3:00 P.M. to 5:00 P.M.)

Maximum Marks: 30

Time: 120 Minutes

- Answer all the questions.

(Try to avoid writing long paragraphs; instead use bullet points, flow charts, underlining and pictorial presentation wherever possible)

**Answer all the Questions**

**Marks**  
(5X2 = 10)

1. Define the following terms:
  - a) Food web
  - b) Biomes
  - c) Ecosystem
  - d) Biodiversity hotspot
  - e) Genetic diversity
2. Describe the structure of an ecosystem with necessary examples. (5)
3. Describe the various biogeographic zones of India. (5)
4. Explain the conservation techniques of biodiversity. Discuss the values of biodiversity. (3+2)
5. What are the different types of ecosystems found in India? what are the uses of desert ecosystem? How can we conserve the desert ecosystem? (2+1+2)

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**National Institute of Technology, Jamshedpur**  
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**B.Tech(II), 2<sup>nd</sup> Sem, End Semester Examination, 2023-24**  
**Branch: UG /ME/MME/PIE & ECM**  
**Paper: Environmental Science (CE 1201)**  
**Course Instructor: Dr. Debshri Swargiary Sri. S.K Paswan, Dr. J. Jayapal**  
**Date: 02/05/2024 (Shift: 4:00 P.M. to 7:00 P.M.)**

**Maximum Marks: 50**

**Time: 180 Minutes**

**All the questions are compulsory**

(Try to avoid writing long paragraphs; instead use bullet points, flow charts, underlining and pictorial presentation wherever possible)

**Questions**

**Marks**

**1. Differentiate the following:**

**(5x 2 = 10)**

- a. Food chain and Food Web with a diagram
- b. Genetic and Species Biodiversity
- c. Social values and ethical values
- d. Municipal wastes and Industrial wastes with examples
- e. Resettlement and Rehabilitation of people

2. Discuss in detail the most suitable and least expensive solid waste disposal method for rural area. Give reasons to support your answer **(3+2)**

3. Elaborate on the causes, effects and solutions to ozone layer depletion. **(5)**

4. What is a grassland ecosystem? Discuss in detail on the different types, their potential uses and threats. **(10)**

5. Discuss the causes, effects and solutions to soil pollution **(5)**

6. Define the term watershed. What the objectives and technical steps towards watershed management. **(2+3)**

7. What are the initiatives from the Indian Government to protect the environment? Discuss in detail **(10)**

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