

**M.Sc. II Semester Degree Examination, Sept./Oct. - 2024****MICROBIOLOGY****Environmental Microbiology****(NEP)**

Time : 3 Hours

Maximum Marks : 70

**Note :** Answer **any five** of the following questions with question no. **1** is **Compulsory**, each question carries **equal** marks.

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| 1. | Discuss the structure and function of microbial communities.           | 14 |
| 2. | Discuss the MPN technique for Water Quality Testing.                   | 14 |
| 3. | Explain the complete process of Wastewater Treatment.                  | 14 |
| 4. | Discuss the sources of greenhouse gases and its environmental effects. | 14 |
| 5. | Explain the sources, characteristics and management of soil waste.     | 14 |
| 6. | (a) Microbiological Indicators in Environmental Pollution.             | 5  |
|    | (b) Halophilic adaptations.  | 5  |
|    | (c) Eutrophication.  | 4  |
| 7. | (a) Discuss radiation hazards and safety standards.                    | 5  |
|    | (b) Climate change.  | 5  |
|    | (c) Degradation of lignin.   | 4  |
| 8. | (a) Types of bioremediation.   | 5  |
|    | (b) Discuss the methods for handling and treating solid wastes.        | 5  |
|    | (c) Microbial leaching of iron.  | 4  |

