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# B.M.S. College of Engineering, Bengaluru-560019

Autonomous Institute Affiliated to VTU

## January 2024 Semester End Main Examinations

**Programme: B.E.**

**Branch: Institutional Elective**

**Course Code: 19BT7IEEEM**

**Course: Ecology and Environmental Management**

**Semester: VII**

**Duration: 3 hrs.**

**Max Marks: 100**

**Instructions:** 1. Answer any FIVE full questions, choosing one full question from each unit.  
2. Missing data, if any, may be suitably assumed.

|   |   |    |   |           |           |              |
|---|---|----|---|-----------|-----------|--------------|
| <b>Important Note:</b> Completing your answers, compulsorily draw diagonal cross lines on the remaining blank pages. Revealing of identification, appeal to evaluator will be treated as malpractice. |   |    | <b>UNIT - I</b>   | <b>CO</b> | <b>PO</b> | <b>Marks</b> |
|   | 1 | a) | What is Biosphere? Discuss various components of biosphere.   | CO 1      | PO 7      | 10           |
|   |   | b) | Brief on<br>i) Concepts of habitat<br>ii) Theory of tolerance   | CO 2      | PO 7      | 10           |
|   |   |    | <b>UNIT - II</b>  |           |           |              |
|   | 2 | a) | With at least 3 suitable population attributes discuss relationship between population and environment.   | CO2       | PO7       | 10           |
|   |   | b) | Using suitable examples give a detailed account on social parasitism and symbiosis.   | CO2       | PO7       | 10           |
|   |   |    | <b>OR</b>   |           |           |              |
|   | 3 | a) | A diversity index is a quantitative measure that reflects the different types of species in a dataset and are useful simplifications to compare different communities or sites. Justify the statement with the help of at least two types of indices. | CO2       | PO7       | 10           |
|   |   | b) | Discuss population dispersion and interactions with case studies.   | CO2       | PO7       | 10           |
|   |   |    | <b>UNIT - III</b>   |           |           |              |
|   | 4 | a) | What is zoogeography? Discuss the importance of zoogeography.   | CO 3      | PO7       | 10           |
|   |   | b) | Elaborate on zonal wise vegetation of India.  | CO 3      | PO7       | 10           |
|   |   |    | <b>UNIT - IV</b>  |           |           |              |
|   | 5 | a) | Write in detail five different strategies for conservation of endangered species.   | CO3       | PO 7      | 10           |
|   |   | b) | What is bioremediation? With suitable examples discuss various classes of Bio indicators.   | CO5       | PO5       | 10           |
|   |   |    | <b>OR</b>   |           |           |              |

|  |   |    |   |      |      |           |
|--|---|----|---|------|------|-----------|
|  | 6 | a) | Bio fertilizers and Bio pesticides are important part of organic farming. Justify.          | CO 5 | PO 5 | <b>10</b> |
|  |   | b) | What are the various ways of preserving germplams. How do they play role in sustainability? | CO 5 | PO 5 | <b>10</b> |
|  |   |    | <b>UNIT - V</b>   |      |      |           |
|  | 7 | a) | Brief on urbanization and its impact on global warming.                                     | CO 4 | PO 7 | <b>6</b>  |
|  |   | b) | Discuss the guidelines (National and International) on climate changes.                     | CO 6 | PO 8 | <b>8</b>  |
|  |   | c) | Write notes on any one category of environmental pollution.                                 | CO 4 | PO 7 | <b>6</b>  |

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B.M.S.C.E. - ODD SEM 2023-24