

M.Sc.(Biotechnology) (CBCS Pattern) Semester - IV  
**PSBIT-114 - Paper-II : Applied Environmental Biotechnology and Ecology**

P. Pages : 1

Time : Three Hours



**GUG/S/23/11352**

Max. Marks : 80

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1. Discuss in detail laboratory methods used for detection of pathogenic organisms. **16**

**OR**

- a) Write in brief about composition and types of waste water.
- b) Describe the process of BOD used for measurement of water pollution.

2. Explain in detail methods used for Biological waste water treatment. **16**

**OR**

- a) Discuss about role of Biofilms in waste water treatment.
- b) Explain treatment scheme of sugar industries.

3. Discuss in detail process of Bioleaching of Heavy metals. **16**

**OR**

- a) Discuss about biodegradation of hydrocarbons.
- b) Explain the genetic aspects of heavy metals resistance in fungi.

4. Explain in detail methods used for conservation of Biodiversity. **16**

**OR**

- a) Write in brief about wildlife management.
- b) Discuss process of forest conservation.

5. Write a short note on-

- a) IMViC test. **4**
- b) Treatment scheme of petroleum industries. **4**
- c) Biomethylation of Mercury. **4**
- d) Ecological aspects of mining. **4**

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