

M.Sc.(Biotechnology) (CBCS Pattern) Fourth Semester CBCS
PSBIT-114 - Applied Environmental Biotechnology & Ecology Paper - II

P. Pages : 1

Time : Three Hours



GUG/W/18/11352

Max. Marks : 80

Notes : 1. All questions are compulsory and carry equal marks.

1. Describe in detail laboratory methods for the detection of pathogenic organism from water. **16**

OR

Write note on following.

- a) IMViC test to differentiate faecal and nonfaecal coliforms. **8**
b) Biological oxygen demand as a measure of water pollution. **8**

2. Describe in detail biofilms for the treatment of waste water. **16**

OR

Discuss about treatment scheme of industries with respect to dairy waste water and distillery waste. **16**

3. Describe in detail biomethylation of mercury. **16**

OR

Discuss about:

- a) Biodegradation of Pesticides. **8**
b) Genetic aspects of heavy metal resistance in cyanobacteria. **8**

4. Describe in detail conservation of terrestrial mineral resources. **16**

OR

Discuss about

- a) Wildlife management in India. **8**
b) Ecological aspects of mining. **8**

5. Write short note on following.

- a) Composition of waste water. **4**
b) Trickling filter. **4**
c) Advantages of bioleaching. **4**
d) Afforestation. **4**
