Seat No. : _____

AF-133

April-2025

B.Sc., Sem.-VI

CC-310 : Biotechnology
(Environmental Biotechnology)

Time : 2:30 Hours] **[Max. Marks : 70**

1. Explain with diagrams the process treatment of waste water. **14**

OR

1. (A) Discuss the treatment of solid waste materials by Landfills. **7**

   (B) Discuss the anaerobic sludge digester. **7**

2. Describe the microbial approach for the bioremediation of heavy metals and dye wastes. **14**

OR

2. (A) Write a note on Biopiles, listing its advantages and drawbacks. **7**

   (B) Discuss the causes and effects of biomagnification. **7**

3. Write a detailed account of production of hydrogen as a fuel. **14**

OR

3. (A) Write a short note on 'Heap Percolation' for mineral recovery. **7**

   (B) Describe the production of methane for fuel. **7**

4. Discuss different methods for the conservation of biodiversity. **14**

OR

4. (A) Write a short note on microbial risk assessment. **7**

   (B) Write a short note on 'Integrated pest management'. **7**

5. Short questions : (Any **7**) **14**

(1) Enlist the names of tests for drinking water.

(2) What is MOER ?

(3) What is Bioslurping ?

(4) What are recalcitrant compounds ?

(5) What are algal blooms ?

(6) List the measures to control acid rain.

(7) Give an example of a microbe used to remove heavy metals.

(8) Write the names of greenhouse gases.

(9) Write the uses of cellulose and lignin.

(10) Give one step to control ozone depletion.

(11) Give one example of biomedical waste.

(12) Define TS and TDS.