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**NY—205—2023**

**FACULTY OF SCIENCE**

**M.Sc. (Fourth Semester) EXAMINATION**

**NOVEMBER/DECEMBER, 2023**

**(CBCS/New Pattern)**

**MICROBIOLOGY**

**Paper–XVIII (MB-303)**

**(Environmental Microbiology)**

**(Monday, 11-12-2023)**

**Time : 2.00 p.m. to 5.00 p.m.**

*Time—Three Hours*

*Maximum Marks—75*

*N.B. :— (i) All questions are compulsory.*

*(ii) Draw neat labelled diagram wherever necessary.*

*(iii) All questions carry equal marks.*

1. What is an ecosystem ? What roles do the microorganisms play in ecosystem ? 15

*Or*

(a) Trophic structure of ecosystem 8

(b) Microbial communities in soil. 7

2. Describe in detail various sources of water pollution. 15

*Or*

Write notes on :

(a) Oxidation pond 8

(b) COD 7

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3. Take a detailed account on biotransformation of mercury. 15

Or

Write notes on :

(a) Bioextraction of copper 8

(b) Biodeterioration of paper. 7

4. What is eutrophication ? How is it controlled ? 15

Or

Write notes on :

(a) Prevention and control of biocorrosion 8

(b) Acid rain. 7

5. Solve any *three* : 15

(a) Oil pollution

(b) Hydrosphere

(c) Biomagnification

(d) Succession

(e) UASB.

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