

S.No. 6914

P 16 MB 22

(For candidates admitted from 2016–2021 Batch)

M.Sc. DEGREE EXAMINATION, NOVEMBER 2023.

Microbiology

**ENVIRONMENTAL AND AGRICULTURAL
MICROBIOLOGY**

Time : Three hours

Maximum : 75 marks

PART A — (10 × 2 = 20)

Answer ALL questions.

1. Biological indicators
2. Air sanitation
3. Eutrophication
4. BOD and COD
5. SCP
6. Bioleaching
7. Mycorrhizae
8. Nitrogen Fixation
9. Phenolics
10. Phytoalexins

PART B — (5 × 5 = 25)

Answer ALL questions, choosing either (a) or (b).

11. (a) Explain the Enumeration of Bacteria from air.

Or

- (b) Give an account of biogeochemical cycle of Phosphorous.

12. (a) Describe the waste water treatment.

Or

- (b) Give an account on pyrolysis.

13. (a) Explain the mushroom production from waste.

Or

- (b) Give a brief account on bioleaching.

14. (a) Detail account on symbiotic nitrogen fixation.

Or

- (b) Write the applications of bio fertilizers in agriculture.

15. (a) Write short notes on Morphological changes in plants by Phytopathogens.

Or

- (b) Give the advantages of microbial pesticides.

PART C — (3 × 10 = 30)

Answer any THREE questions.

16. Brief account on airborne diseases.
17. Give full details on water quality assessment.
18. Discuss in full detail about biodegradation of complex polymers.
19. Explain in full details about rhizosphere bacteria and their significance.
20. Write a detailed account on plant pathogens.