

45062

M.Sc. DEGREE EXAMINATION, APRIL 2015.

FOURTH SEMESTER

Microbiology

Paper II — ENVIRONMENTAL MICROBIOLOGY

Time : 3 hours

Maximum : 75 marks

(No additional sheet will be supplied)

PART A — (5 × 3 = 15 marks)

Answer any FIVE questions.

Each question carries 3 marks.

Each answer should not exceed 1 page.

1. Circadian periodicity
2. Anderson sampler
3. Green house gas
4. Anaerobic corrosion
5. Pseudomonas putida
6. Gasification
7. Halophile
8. Composting.

PART B — (4 × 15 = 60 marks)

Answer ALL questions.

Each question carries 15 marks.

Each answer should not exceed 6 pages.

9. Write notes on
 - (a) Ammensalism/Antagonism (8)
 - (b) Parasitism (7)

Or

10. Ecological significance of Ammonification and role of microorganisms in Nitrogen cycle.

11. Write in detailed about Municipal water treatment.

Or

12. Give an account of microbial analysis of air and discuss seasonal periodicity of airborne fungal spores.

13. Discuss the role of microorganisms in degradation of xenobiotics.

Or

14. Write notes on the following

(a) Antifouling paints and its environmental concerns (8)

(b) Replacement of petrochemicals (7)

15. Write notes on

(a) Applications of Extremophiles (8)

(b) Oxidation ponds (7)

16. Describe copper leaching process with diagrammatic representation

