

Roll No. Total No. of Printed Pages : 3

Code No. B04-107

Fourth Semester Online Examination, May-June, 2022

M. Sc. MICROBIOLOGY

Paper I

ENVIRONMENTAL MICROBIOLOGY

Time : Three Hours] [Maximum Marks : 80

Note : (i) Part A and B of each question in each Unit consist of very short answer type questions which are to be answered in one or two sentences.

(ii) Part C (Short answer type) (Word limit 200-250) and Part D (Long answer type) of each question should be answered within the word limit (400-450 words) mentioned.

UNIT-I

1. (A) What are Aerosol ? 2
(B) Write the name of any *two* air borne transmitted bacterial diseases with causal organism. 2
(C) Write note on Bioremediation. 4

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Or

Write note on biodeterioration of leather.

- (D) Write a detailed note on mode of deterioration of metal and mode of prevention. 12

Or

Describe air borne diseases caused by Fungi and their preventive measures.

UNIT-II

2. (A) What is Mangroves ? 2
(B) What is Eutrophication ? 2
(C) Write note on aquatic microbiology of pond ecosystem. 4

Or

Write note on water purification.

- (D) Write a detailed note on water borne diseases and their control measures. 12

Or

Write a detailed note on zonation of water ecosystem.

UNIT-III

3. (A) What are niF genes ? 2

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- (B) What is Competition ? 2
- (C) Write note on mutualism and commensalism. 4

Or

Write note on symbiotic microbes.

- (D) Describe the microbiology of rumen. 12

Or

Describe carbon and nitrogen cycle.

UNIT-IV

- 4. (A) What is Saccharification ? 2
- (B) What is Gasification ? 2
- (C) Write note on SCP. 4

Or

Write note on utilization of solid wastes in mushroom production.

- (D) Describe the process of liquid waste treatment. 12

Or

Describe the chemical and biological treatments of waste.

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