

Roll No. .... Total No. of Printed Pages : 4

**Code No. : B04-404 (A)**

Fourth Semester Online Examination, May-June, 2022

**M. Sc. BOTANY**

**Paper - IV**

**MICROBIAL ECOLOGY**

Time : Three Hours ] [ Maximum Marks : 80

**Note :** • 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.

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

**Unit-I**

1. (A) Define marine microbiology. 2
- (B) Write about disinfection of potable water. 2
- (C) Write down MPN test. 4

**Or**

Write short notes on water microorganisms.

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- (D) Write in detail the different methods of water purification. 12

**Or**

Write a brief note on different types of water found in the environment.

**Unit-II**

2. (A) Define outdoor aeromicrobiology ? 2
- (B) Write down phylloplane pathogens ? 2
- (C) Write short note on microflora of floral part. 4

**Or**

Write short note on microflora of floral part.

- (D) Write an essay on aeromicrobiology in India with special reference to fungi and algae. 12

**Or**

What is indoor microbiology ? Write in brief aeromicroflora of hospitals, library and storage materials.

**Unit-III**

3. (A) Define methanogens. 2
- (B) What is meant by vermicompositing ? 2

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(C) Write short note on microbial plastics. 4

**Or**

Write short note on organic fertilizer.

(D) Write the primary, secondary and tertiary treatment processes used in waste water treatment. 12

**Or**

Write an essay on Biodegradation ?

**Unit-IV**

4. (A) Define Pathogenicity ? 2

(B) Distinguish between downy mildew and powdery mildew. 2

(C) Describe any one fungal disease of human beings in detail. 4

**Or**

Write short note on wilt disease of Arhar.

(D) Describe Rust disease of wheat in detail. 12

**Or**

Give an account on general symptoms of plant diseases.

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