H-4/0	8(B)/22
-------	------------	------

Roll No.

IV Semester Examination, 2022

M.Sc.

BOTANY

Paper IV (Limnology-II)

Time: 3 Hours]

[Max. Marks: 80

Note: All questions are compulsory. Question Paper comprises of 3 sections. Section **A** is objective type/multiple choice questions with no internal choice. Section **B** is short answer type with internal choice. Section **C** is long answer type with internal choice.

SECTIONA

 $1 \times 8 = 8$

P.T.O.

(Objective Type/Multiple Type Questions)

Choose the correct answer:

- **1.** Phytoplanktons are:
 - (a) Producer of forest
 - (b) Primary producer of lake ecosystem
 - (c) Decomposers of Land ecosystem
 - (d) Consumer of marine ecosystem

2. A plankton is :

- (a) Layer of aquatics
- (b) Sea scum
- (c) Floating vegetation
- (d) Floating microscopic plants and animals
- **3.** Eutrophic Lakes means :
 - (a) Lake poor in nutrients
 - (b) Lake rich in nutrients
 - (c) Lake poor in flora and fauna
 - (d) Lake lacking water
- **4.** Pollution can be controlled by :
 - (a) Sewage treatment
 - (b) Manufacturing electrically operated vechicles
 - (c) By checking atomic blast
 - (d) All the above
- **5.** Air pollution casuses :
 - (a) Globle warming
 - (b) Respiratory problem
 - (c) Soil erosin
 - (d) None of above

H-4/08(B)/22

- **6.** Green house gas is:
 - (a) N_2

(b) O_2

(c) CH₄

- (d) CO_2
- 7. The process of nutrient enrichment in environment termed as:

 - (a) Eutrophication (b) Limiting Nutrient
 - (c) Enrichement
- (d) None of these
- **8.** The percentage of nitrogen in atmosphere is :
 - (a) 21%

(b) 78%

(c) 12%

(d) 87%

SECTION B

 $6 \times 4 = 24$

(Short Answer Type Questions)

Note: Attempt *one* question from each unit.

Unit-I

1. Write a note on classification of phytoplankton.

Or

Write a concise note on spatial distribution of phytoplankton.

Unit-II

2. Write a note on predation of algae.

Or

Write a note on categories of aquatic trigher plants.

H-4/08(B)/22

P.T.O.

Unit-III

3. Write a note on chemical oxygen demand (COD)?

Or

Describe the estimation of primary productivity?

Unit-IV

4. Write a note on agriculture sewage.

Or

Describe the Industrial effluent.

SECTION C

 $12 \times 4 = 48$

(Long Answer Type Questions)

Note: Attempt *one* question from each unit.

Unit-I

1. Write a detail note on phytoplankton and their inter-relationship with zooplankton.

Or

Write a detail note on seasonal distribution and species composition of phytoplankton.

Unit-II

2. Describe the Ecological classification of squatic plants and their significance.

H-4/08(B)/22

[5]

Or

Write a detail note on impact of human being on algae.

Unit-III

3. Discuss the primary production in fresh water lakes.

Or

Discuss the aquatic flora and fauna in an aquatic environment.

Unit-IV

4. Discuss the causes of pollution of aquatic resources and their management.

Or

Define the sewage and its composition in details.

* * * * * C * * * * *