

G-3/391/22

Roll No.

III Semester Examination, January, 2022

M.Sc.

ZOOLOGY

Paper III

(Limnology)

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.*

SECTION A

1×8=8

(Objective Type Questions)

Fill in blanks :

1. Area of shallow and fast moving water in river is called
2. Lake Baikal (Russia) is the example of origin of lake by
3. Lakes that mix from top to bottom during one mixing period each year is called lakes.

P.T.O.

[2]

4. Water does not move in orderly manner is known as
5. The zone that contains least quantity of dissolved oxygen is
6. If water is anoxic then iron will exist in the form.
7. Type of lake which is formed due to the ceased eruption of magma from volcano is called
8. Formula of Renolds number

SECTION B

4×6=24

(Short Answer Type Questions)

Note : *Answer the following questions in 250 words.*

Unit-I

1. Give non point and point sources of Eutrophication.

Or

Classify lakes according to their mixing pattern.

Unit-II

2. Give any *two* examples of protozoan zooplankton.

Or

Give description of stream biota.

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Unit-III

- 3.** Describe seasonal thermal stratification of lake.

Or

Give four steps of hydrological cycle.

Unit-IV

- 4.** Describe silica cycle in lake.

Or

Describe seasonal variation in CO₂ in lake and its effect on organisms.

SECTION C

12×4=48

(Long Answer Type Questions)

Note : Answer the following questions in **500** words.

Unit-I

- 1.** Describe properties of water and its significance in relation to lake biota.

Or

Explain different methods of origin of lake.

Unit-II

- 2.** Explain zonation of river. Abiotic and Biotic factors of river.

Or

What do you mean by Estuaries ? Give Biotic and abiotic factors effecting estuaries.

[4]

Unit-III

- 3.** Explain water movement seiche and Langumuir circulation.

Or

Describe the following :

(a) Light in lake

(b) Eddy diffusion

Unit-IV

- 4.** Describe phosphorous cycle in lake.

Or

Describe nitrogen cycle inlake.

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