PG Even Semester Exam, 2023

Ecology & Environmental Science

2nd Semester

COURSE NO. ECG-551

[Freshwater Ecology]

Full Marks : 70
Pass Marks : 28

Time : 3 hours

The figures in the margin indicate full marks for the questions

Answer five questions, taking one from each Unit

UNIT-I

1. How are lakes formed? Mention four special types of lakes with their characteristic features. 6+8=14

2. Write short note on: 7x2=14

   a. Zonation pattern in lakes

   b. Provisioning ecosystem services of lakes

UNIT-II

3. What are the objectives of the National Wetlands Conservation Programme (NWCP)? Discuss the Industrial Framework of NWCP at central level. Give a brief note on Management Action Plan (MAP). 3+6+5=14

Turn over

4. Write notes on the following: 7x2=14

   a. Importance of Mission of Convention on Wetlands and types of wetlands covered under the Mission.

   b. Role of Ramsar convention in regulation and conservation of biodiversity.

UNIT-III

5. Explain briefly about lotic ecosystem. What are the characteristics of a river ecosystem? Briefly describe about the zonation in lotic ecosystem. 4+5+5=14

6. Write notes on: 7x2=14

   a. Problems and constraints related to conservation and management of Indian rivers and future research strategy.

   b. Anthropogenic disturbance to temporary streams.

UNIT-IV

7. What is meant by environmental factors? Describe briefly the various environmental factors operative in freshwater ecosystems. 2+12=14

8. What do you mean by productivity? What are the various factors of secondary productivity in freshwater ecosystem? What is the importance of understanding the concept of primary productivity in freshwater ecosystem? 2+7+5=14

UNIT-V

9. What are macrophytes? Describe the macrophyte communities growing in littoral zone in a lake ecosystem highlighting their characteristics features. 2+12=14

10. Write notes on: 7x2=14

    a. Economic importance of fishes.

    b. Aquatic insect orders and their characteristic features.

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