PG Even Semester (CBCS) Exam., May—2017

LIFE SCIENCE AND BIOINFORMATICS

(4th Semester)

Course No. : LS–401 (Z) (C)

(Limnology and Wetland Biology)

Full Marks : 75
Pass Marks : 30

Time : 3 hours

The figures in the margin indicate full marks for the questions

1. Differentiate between limnology and fresh-water biology. How is it related to fishery science? Write a note on the contributions of Indian scientists in the field of limnology. 15

OR

2. What are the characteristic features of a lotic system? Discuss the biodiversity of major lotic habitats of North-East India with special reference to Assam. Add a note on the management and conservation of their habitats. 15

3. Give a detailed classification of the wetlands of Assam. Describe the physicochemical characteristics of any one of the major lentic water bodies in Assam. 15

OR

4. Write notes on the following : 7½×2=15

(a) Potentials and problems of wetlands of Assam

(b) Management and conservation of wetlands

5. Describe the productivity and the flow of energy in an aquatic system. 15

OR

6. Write notes on the following : 7½×2=15

(a) Palaeolimnology

(b) Community structure of a lentic system

7. Write notes on the following : 7½×2=15

(a) Factors influencing light penetration

(b) Thermal stratification

OR

8. Discuss the major physicochemical parameters of water bodies. 15

9. Write notes on the following : 7½×2=15

(a) Dissolved oxygen

(b) Chemical oxygen demand

OR

10. Define hardness and conductivity. Discuss the relationship between conductivity on the total dissolved solids. Write a note on the impact of hardness and conductivity on aquatic life. 15

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