

2021

INDUSTRIAL FISH AND FISHERIES — MAJOR

Paper : CC-13

(Aquatic Ecology)

Full Marks : 50

The figures in the margin indicate full marks.

*Candidates are required to give their answers in their own words
as far as practicable.*

Answer **any ten** questions.

1. Differentiate between sympatric and allopatric species. What is ecological equivalent? 3+2
 2. Define population. What do you mean by age structure in a population? 2+3
 3. What is carrying capacity? How does carrying capacity control population growth? 2+3
 4. Write three characteristics of community. What is alpha and beta diversity? 3+2
 5. What do you mean by species dominance and species richness? How species dominance and species evenness are related? 2+3
 6. Define Ecological Succession. Write the stages of hydrosere. 1+4
 7. What is food chain? Elaborate the idea of an aquatic food chain. 1+4
 8. How ecological pyramids are constructed? Name the basic types of ecological pyramids. 3+2
 9. What is eutrophication? Comments on the dissolved oxygen status of a water body having low BOD. 2+3
 10. How are laws of thermodynamics applicable to energy flow in an ecosystem? 5
 11. Differentiate between r-selection and k-selection. What do you mean by minimum mortality and ecological mortality? 3+2
 12. State the difference between lotic community and lentic community. What are the limiting factors of freshwater ecology? 2+3
 13. State any four significance of wetland conservation. How many Ramsar sites are present in India? Give any two examples. 2+1+2
 14. State any three important features of GAP. What do you mean by Red Tide? 3+2
 15. What is productivity? Differentiate between Gross Primary Productivity and Net Primary Productivity. 2+3
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