

2/EH-36 (ii) (Syllabus-2015)

2016

(April)

FISHERY SCIENCE

(Honours)

Paper-2A

(Aquatic Ecology)

Marks : 56

Time : 3 hours

*The figures in the margin indicate full marks
for the questions*

Answer Question No. 1 and any four from the rest

1. Write short notes on any three of the following : **4×3=12**

(a) Adaptation of benthic organisms in lotic ecosystem

(b) Role of carbon dioxide in aquatic ecosystems

(c) Lindemann trophic dynamic model of energy flow

(d) Salient features of oligotrophic and eutrophic water bodies

(e) Biomonitoring

(Turn Over)

2. Discuss the physicochemical composition of freshwater and estuarine water. Compare the diversity of aquatic life of both systems.
 $7+4=11$
3. Explain the phenomenon of thermal stratification and overturns in temperate lakes.
 $6+5=11$
4. What are biogeochemical cycles? Discuss in detail the phosphorus cycle.
 $4+7=11$
5. Define biological productivity. Briefly describe the methods of measurement of primary productivity.
 $2+9=11$
6. What is eutrophication? Describe the different ecological and anthropogenic processes leading to eutrophication. Add a note on control measures to prevent eutrophication.
 $2+6+3=11$
7. What is pollution? Describe the various causative factors leading to water pollution and mention the impact of pollution on aquatic biota.
 $1+6+4=11$
8. What are biological indicators? Explain the different biological indicator species and the role they play in determining the health of an ecosystem.
 $2+9=11$
