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( July )

FISHERY SCIENCE

( Elective/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** which is compulsory  
and *any four* from the rest

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

- (a) Food chain in lentic system
- (b) Phosphorus cycle and its importance
- (c) Global distribution of water
- (d) Ecological succession
- (e) Bioindicator species

2. Differentiate between lotic and lentic environments. Describe adaptations of benthic communities in lotic systems.

5½+5½=11

3. (a) Describe the process of primary production.

- (b) Explain the methods employed to estimate primary productivity. 6+5=11

4. Describe aquatic pollution with special reference to domestic sewage and industrial pollution. 5½+5½=11

5. State limnological significance of temperature and light. Discuss the importance of thermal stratification and overturn. 5+6=11

6. Describe the following : 5+6=11

- (a) Nitrogen cycle and its significance
- (b) Significance of dissolved oxygen and pH in an aquatic ecosystem

7. Elaborate on the importance of biomonitoring in maintenance of a lotic system. 11

( 3 )

8. Write short notes on any *two* of the following :  $5\frac{1}{2} \times 2 = 11$

- (a) Hydrological cycle
- (b) Importance of hardness and alkalinity
- (c) Causative factors of eutrophication

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