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(February)

FISHERY SCIENCE

(Honours)

(Fish Biology and Taxonomy)

FIRST PAPER (Paper—1A)

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) Accessory respiratory organs of *Clarias batrachus* and *Heteropneustes fossilis*
 - (b) Cutaneous senses of fish
 - (c) Lateral line system of fish
 - (d) Parts of the alimentary canal of fish
 - (e) Non-swimming locomotion in fish

2. Discuss the structure and function of skin in fishes. 11
3. (a) Describe allopatric and sympatric speciations.
(b) Write in brief on evolution of fishes. 3+8=11
4. Describe the structure and function of teleostean kidney. 11
5. Describe the origin of paired fins. Mention the fin functions. 6+5=11
6. Differentiate between the following : 6+5=11
- (a) Penaeid prawn and Non-penaeid prawn
 - (b) Median fins and Paired fins
7. Give a detailed account of autonomic nervous system of fish. 11
8. Write short notes on any *two* of the following : 5½×2=11
- (a) Electric organs
 - (b) Compensation factors
 - (c) Air bladder of fish

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