FISC—101 (Syllabus–2015)

2015

(October)

FISHERY SCIENCE

(Honours)

FIRST PAPER, Paper—1A

(Fish Biology and Taxonomy)

(Theory)

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) Function of heart in fishes

(b) Accessory respiratory organ in *Anabas* and *Clarias* species

(c) Importance of Fishery Science

(d) Types of scales in fishes

(e) Air bladder and its functions

2. Discuss in detail the different types of locomotion in fish. Describe non-swimming locomotion in fish. 7+4=11

3. Give accounts of the following :

(a) Diversity of body forms among fishes 7

(b) Compensation factor involved in diversity of body forms 4

4. Answer/Write about the following :

(a) Different types of classification of fish 4

(b) How fishes have evolved? 4

(c) Affinities of fishes 3

5. Describe the following :

(a) Structure and function of lateral line system and neuromast cells in fishes 6

(b) Sense of temperature, salinity and touch 5

6. Explain the following :

(a) Poison glands in fishes and their significance 4

(b) Mechanism of electric discharge and significance of electric organs of fishes 4

(c) Structure and significance of photophores in fishes 3

7. Give a detailed account of colouration in fish. Differentiate between physiological and morphological colour change among fishes. 5+3+3=11

8. Write short notes on any *two* of the following : 5½×2=11

(a) Central nervous system of fish

(b) Autonomous nervous system of fish

(c) Sense of hearing and balance in fish

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