

2022
M.Sc.
Third Semester
DISCIPLINE SPECIFIC ELECTIVE – 01
ZOOLOGY
Course Code: MZOD 3.11 (B)
(Fish Biology – I)

Total Mark: 70
Time: 3 hours

Pass Mark: 28

Answer five questions, taking one from each unit.

UNIT-I

1. Explain the biogeographic units of freshwater biodiversity. 14
2. Discuss the different types of modern tools use in fish taxonomy. 14

UNIT-II

3. Explain stock assessment and management of fish. 7+7=14
4. Write short notes on the following: 3½×4=14
 - (a) Condition factor
 - (b) Index fitness
 - (c) Ponderal index
 - (d) Relative condition factor

UNIT-III

5. Describe the anatomical differentiation and modification of digestive system of fish. Add a note on the principle of counter current system. 9+5=14
6. Explain the forms and function of swim bladder. Add a note on Weberian ossicles. 8+6=14

UNIT-IV

7. Describe how salt and water balance is maintain in marine and brackish water fishes. Add a note on acid-base balance. 10+4=14
8. With neat labelled diagram explain hypothalamo-hypophyseal system. 14

UNIT-V

9. Explain spermatogenesis and oogenesis. 14
10. Discuss the role of genetics in fish selection and breeding. Add a note on hybridization. 10+4=14
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