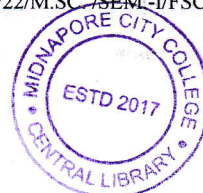


PG CBCS
M.Sc. Semester-I Examination, 2022
FISHERIES SCIENCE
PAPER: FSC-102



Full Marks: 40

Time: 2 Hours

Write the answer for each unit in separate sheet

The figures in the right-hand margin indicate full marks.

Candidates are required to give their answers in their own words as far as practicable.

UNIT - FSC-102.1

TAXONOMY, CLASSIFICATION, BIOLOGY, BIODIVERSITY AND CONSERVATION
OF FISHES

GROUP-A

Answer any TWO questions from the following:

2×2= 4

1. What is sexual dimorphism? Give example.
2. Define index of Biotic Integrity (IBI).
3. What is invasive species? Give two examples of fish in respect to India.
4. State the Linnaean Hierarchy?

GROUP-B

Answer any TWO questions from the following:

2×4= 8

1. Discuss different IUCN categories.
2. Discuss the molecular approaches of taxonomic identification.
3. State the International Code of Zoological Nomenclature.
4. Mention the characters of the following order: Perciformes and Siluriformes.

GROUP-C

Answer any ONE question from the following:

1×8 = 8

1. Discuss Simpson Index of biodiversity with an example, State on the Ex-situ conservation mode of fish diversity
4+4
2. Give an account of aquatic bio diversity of India. Discuss the feeding reproductive biology of *Macrobrachium rosenbergii*.
3+5

P.T.O.

(2)

UNIT - FSC-102.2**GEOGRAPHIC DISTRIBUTION, ADAPTATION AND EVOLUTION OF FISHES****GROUP-A****Answer any TWO questions from the following:****2×2= 4**

1. What do you mean by phylogenic tree?
2. Why Devonian Period is called the "Age of the Fishes"?
3. What is Oceanodromous migration? Give examples
4. Define living fossils with examples.

**GROUP-B****Answer any TWO questions from the following:****2×4= 8**

1. Briefly describe the osmoregulation of fishes.
2. Briefly explain the characteristics and biology of Coelacanth Fish.
3. State the characteristics and distribution of Chimera species?
4. Give a brief account on fish distribution in India.

GROUP-C**Answer any ONE question from the following:****1×8= 8**

1. Define zoogeographical realms. Discuss geographic range fish availability of Australian and Oriental realms. {2+(3+3)}
2. What are the key important purposes of fish migration? Define methods of migration in fishes. What are the properties of biological rhythms? (2+4+2)
