

## U.G. 5th Semester Examination - 2021

**ZOOLOGY**

[HONOURS]

Discipline Specific Elective (DSE)

Course Code : ZOOL-H-DSE-T-01

(Fish &amp; Fisheries)

Full Marks : 40

Time : 2½ Hours

*The figures in the right-hand margin indicate marks.**Candidates are required to give their answers in their own words as far as practicable.*

1. Answer any **five** questions:  $2 \times 5 = 10$
- Classify fishes on the basis of trophic niche with example.
  - What is the role of rectal glands in osmoregulation?
  - Write two important environmental factors that regulate fish catches in Bay of Bengal.
  - What do you mean by Sustainable aquaculture?
  - What is Ichthyophthiriusiasis? Mention its probable treatment measure.
  - Write scientific names of two exotic cold water fishes.
  - What is knoch trap net? When is it used?
  - What is Isinglass? Write its importance.

2. Answer any **two** questions:  $5 \times 2 = 10$
- Write an essay on the environmental influence on fish gonadal activity
  - Briefly describe different types of caudal fins with their modifications.
  - Define swim bladder. Mention its important functions.  $1+4$
  - What is the role of water quality in aquaculture?
3. Answer any **two** questions:  $10 \times 2 = 20$
- Describe the structure of a typical gill with detailed diagram. Write the mechanism of gill respiration in fishes.  $4+2+4$
  - Give an account of the marine fisheries resources available in India. Briefly describe the stratification of marine habitat with a suitable diagram.  $6+4$
  - Give the reasons for spoilage of fishes. Describe the different methods of fish preservation. Write the demerits of fish preservation.  $2+6+2$
  - Write short notes on (any **four**):  $2 \frac{1}{2} \times 4 = 10$ 
    - Homocercal Tail
    - Ganoid Scale
    - Electric organ
    - Breeding hapa
    - Polyculture
    - Transgenic Fish