

PE-507-CV-19
M.Sc. ZOOLOGY (4th Semester)
Examination, June 2022
FISH: STRUCTURE & FUNCTION

Time : Three Hours]

[Maximum Marks : 80
[Minimum Pass Marks : 29

Note : Answer from both the Sections as directed. The figures in the right-hand margin indicate marks.

Section-A

- 1. Answer the following short answer questions:** **1x10=10**
- (a) What are locomotor organs of fish?
 - (b) What are the 2 main classes of fish?
 - (c) What is the accessory respiratory organ in clarias batrachus?
 - (d) In which fish air bladder's present?
 - (e) What are 4 adaptations of deep sea of fish?
 - (f) What is the significance of coloration of fish?
 - (g) What are the types of migration in fishes?
 - (h) What is nest building in fish?
 - (i) Which fish is most poisonous?
 - (j) What is the process of osmoregulation in fish?
- 2. Answer the following short type questions:** **2x5=10**
- (a) Describe general characters of fishes?
 - (b) Describe the function of air bladders?
 - (c) Describe the osmotic regulation in freshwater fishes?
 - (d) Define luminous organs?
 - (e) Define poisonous fishes?

Section-B

15x4=60

Answer the following Long-Answer questions:

Unit-I

- 3. Give an account of different adaptive modification in the digestive tract of fishes?**

OR

Give the histomorphology of the skin of fishes and describe its functions?

Unit-II

- 4. Describe the various types of accessory respiratory organs met in bony fishes?**

OR

Give an account of lateral line system and its significance in fishes?

Unit-III

- 5. Write an essay on sound producing organs and its significance in the fishes?**

OR

Describe adaptation and define hill stream adaptational features in fishes.

Unit-IV

- 6. Describe the parental care in fishes?**

OR

Write notes on the following:

- a). Migration in fishes
- b). Early development and hatching.