

**PC- 507**  
**(554) M.Sc. ZOOLOGY (FOURTH SEMESTER)**  
**Semester Examination June-2020**  
**Group – A (Optional)**  
**Paper -III**

**Name/Title of Paper – FISH – STRUCTURE AND FUNCTION**

Time : Three Hours]

[Maximum Marks : 80  
[Minimum Passing Marks : 29

नोट : दोनों खण्डों से निर्देशानुसार उत्तर दीजिए। प्रश्नों के अंक उनके दाहिनी ओर अंकित हैं।

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

**SECTION-A**

**1. Answer the following questions:**

- (a) Write number of layers of Teleost skin.
- (b) What is Venus heart ?
- (c) Which type of jaw suspension is forced in paleodermi .
- (d) Which type of gill is forced in osteichthyes.
- (e) Write zoological name "Mahaseer" .
- (f) Which muscle is responsible for birding of body during swimming in scoliodom .
- (g) Write to source of coloration in fishes.
- (h) Which type of kidney is found in fishes.
- (i) Write number of classes in pisces according to Berg (1940).
- (j) Give example of viviparity in fishes.

**1×10 = 10**

**2. Answer the following questions**

- (a) Describe adhesive devices of Hill stream fishes.
- (b) Write about weberian oscicles
- (c) Write method of Bioluminescence in benthopelagic fishes.
- (d) Describe structure of protocercal tail.
- (e) Explain structure and example of Lamelliform gill.

**2×5 = 10**

**SECTION-B**

**Answer the following questions**

**15×4 = 60**

**UNIT-I**

- 3. Give an detail account on origin and evolution of fishes.**

**OR**

Describe structure and modification in alimentary canal of various class of fishes.

**UNIT-II**

- 4. Describe basic structure of Air bladder, their origin, types and functions.**

**OR**

What is Acoustico – laterals system ? describe structure type and arrangement in fishes.

- 5. Describe structure, type and working mechanism of luminous organs in fishes.**

**OR**

Write notes on the following :

- (a) Sound producing organs.
  - (b) Deep sea adaptations.
- 6. Give an detail account on parental care in fishes.**

**OR**

Write notes on the following :

- (a) Cata dormouse migration with examples.
- (b) Notes on poisonous fishes.