

2022

B.F.Sc. 3rd Semester Examination

Physiology of Finfish and Shell fish

PAPER — BFSC-307

Full Marks : 50

Time : 2 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.*

Illustrate the answers wherever necessary.

1. Answer **any ten** questions from the following :
2×10=20

- (a) What do you mean by Arthrobranch gills?
(b) State the functions of labyrinthine organ in fishes.
(c) What are the functions of accessory respiratory organ? /
(d) Define type-II and type-III kidneys in fishes with example.

/123

(Turn Over)



(2)

- (e) State the functions of chloride cell. ✓
 - (f) Define osmoregulation in fishes. ✓
 - (g) What is eye stalk ablation? ✓
 - (h) What do you mean by euryhaline and stenohaline fishes? ✓
 - (i) Write a note on gonopodium in fishes. ✓
 - (j) What are the male reproductive organs in fishes? ✓
 - (k) What do you mean by gametogenesis? ✓
 - (l) Define viviparous mode of reproduction with example. ✓
 - (m) Write down the names of two important endocrine glands in fishes. ✓
 - (n) What are the functions of thyroid glands in fishes? ✓
 - (o) Write a note on the functions of Neurohypophysis in fishes. ✓
2. Answer any six questions from the following :
5×6=30
- (a) Write the structures and functions of the ultimo-branchial gland in fishes.
 - (b) Describe the energy utilization process in fish.

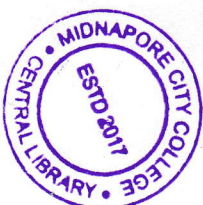
/123

(Continued)

(3)

- (e) Write down the structure of heart in a typical teleost with suitable diagram. ✓
- (d) Briefly describe the accessory respiratory organ in *Clarias* sp. ✓
- (e) State the functions of fish blood. ✓
- (f) Discuss the structure of neuro-endocrine gland of prawn. ✓
- (g) Give an account on organogenesis process of any fish. ✓
- (h) What do you mean by Chemoreception in fishes? Give examples of two organs associated with Chemoreception. ✓
- (i) Write a note on intermittent organ in fishes with examples. ✓
- (j) Describe briefly the ovarian cycle in female fish with suitable diagram. ✓

★ ★ ★



B.F.Sc./3rd Sem/BFSC-307/23

BL23—60