

2023

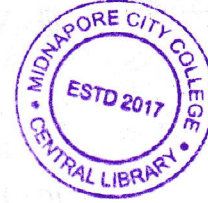
BFSC 2nd Semester Examination

Anatomy and Biology of Finfish

PAPER — BFSC-206

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.*

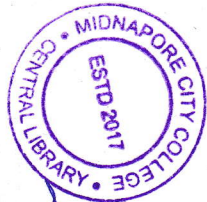
Illustrate the answers wherever necessary.

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

- (a) Write down the functions of nares in fish.
- (b) What are the functions of gall bladder in fish digestive system?
- (c) Write down the function of Gill rakers.
- (d) What is pineal gland?
- (e) Write down the name of the fish having skin as respiratory organ.

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(Turn Over)



(2)

- (j) Write the name and structure of accessory respiratory organ found in *Clarias*. 5
- (g) What is gonado-somatic index? 5
- (h) What is ponderal index? 5
- (i) How do you differentiate between male and female Indian Major Carps? 5
- (j) What is anadromous migration? Give example. 5
- (k) What is the function of the swim bladder in finfish? 5
- (l) Define the term 'annulus' in the context of age determination and explain its significance. 5
- (m) What do you mean by hypophysis? 5
- (n) How does the thyroid gland in fish contribute to metabolic regulation? 5
- (o) Describe the role of the hormone cortisol in fish and its involvement in the stress response. 5

2. Answer any six from the following questions : 5×6=30

- (a) Describe the digestive system of any omnivorous fishes with suitable diagram. 5
- (b) How to determine growth in finfishes with hard parts? 5

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Temperature

(3)

- (c) Fish heart is called venous heart — explain. 5
- (d) Discuss the importance of the intestinal microbiota in the digestion and absorption of nutrients. 5
- (e) Describe in brief the endocrine system of finfish. 5
- (f) What are the common factors that trigger fish migration? 5
- (g) Discuss the concept of trophic levels in a fish food web. 5
- (h) Describe the feeding habit of IMC. 5
- (i) Write a note on sensory organs of fishes. 5
- (j) Describe the function of the kidneys in osmoregulation and waste excretion in fish. 5

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