

2019

B. Sc. Major

2nd Semester Examination

INDUSTRIAL FISH AND FISHERIES

Paper—C3T

Fish Anatomy and Biology

Full Marks : 40

Time : 2 Hours

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

1. Answer any five questions from the following :

5×2

- (a) Enlist cellular components of any shell fish blood.
- (b) State the functions of gill racker.
- (c) Distinguish between gut of herbivorous fish and carnivorous fish.
- (d) What is oxyntic cell ?
- (e) Define bimodal respiration with example.

[Turn Over]

- (f) Compare between male and female prawn.
- (g) What is venous heart ?
- (h) Mention typical features of any fish teeth.

2. Answer any *four* of the following : 4×5

- (a) Briefly narrate the structure and functions of associate digestive gland of fishes.
- (b) Describe the lymphatic system of any fish with diagram.
- (c) Discuss the digestive system of any fin fish.
- (d) Briefly explain the osmoregulation in catadromous fish.
- (e) Describe the respiratory system of any shell fish.
- (f) Discuss briefly the mechanism of age determination of fishes.

3. Answer any *one* from the following : 1×10

- (a) (i) What is spawning ?
- (ii) How would you calculate the fecundity of fishes ?

(iii) Briefly describe the developmental process of a cypriniformes fish.

(b) Short Note :

$4 \times 2 \frac{1}{2}$

(i) Sex ratio.

(ii) Excretion of fish.

(iii) Length-weight relationship.

(iv) Gonado-somatic index.



