

2015

AQUACULTURE MANAGEMENT

[**Honours**]

PAPER – I (New)

Full Marks : 90

Time : 4 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

[**NEW SYLLABUS**]

I. Answer any ten questions from the following : 2 × 10

(a) What is oral disk ?

(b) Mention the function of lateral line.

- (c) What do you mean by homocercal and heterocercal tail ?
- (d) What is tunica albugenia ?
- (e) Define major and minor carp.
- (f) What is mariculture ?
- (g) What are decapod crustacea ?
- (h) What is haematopoiesis ?
- (i) Write the functions of gill racker.
- (j) Define α -and β -taxonomy.
- (k) What is infundibulum ?
- (l) Mention the functions of rectal gland.
- (m) What do you mean by gonado somatic Index ?
- (n) What is bulbus arteriosus ?
- (o) Mention the important features of epipelagic zone.

GROUP – A

2. Answer any *two* questions : 10 × 2

(a) Mention the distinctive characters and Indian example of the following order of fishes : $2\frac{1}{2} \times 4$

(i) Cypriniformes

(ii) Clupeiformes

(iii) Perciformes

(iv) Siluriformes.

(b) Describe the associated digestive glands in fishes. 10

(c) Describe the structure of gill in fishes with diagram. 10

(d) (i) Distinguish between condrichthyes and osteichthyes.

(ii) Mention the characters of the order Dipnoi. 6 + 4

3. Answer any *one* from the following : 15 × 1

(a) (i) Describe the male reproductive system of any one teleost fishes.

(ii) Discuss the osmoregulation process of anadromous fishes.

(iii) Define osmoregulator and osmoconformer. 6 + 5 + 4

(b) What is meant by length-weight relationship in fishes. Write significance of L/W relationship. How would you determine the age of fishes? Add a note on sex ratio. 2 + 3 + 6 + 4

GROUP – B

4. Answer any *two* questions from the following : 10×2

(a) Define culture and capture fishery. State the potentiality and problems of inland capture fishery resources of India. 2 + 4 + 4

(b) Explain the importance of marking and tagging procedure in fish population survey. 10

(c) (i) What do you mean by offshore fisheries?

(ii) Write a note on brackish water fisheries in West Bengal 3 + 7

(d) Comment on brood fish care and its significance. 10

5. Answer any *one* question from the following : 15 × 1

(a) (i) Classify fish on the basis of feeding habit.

(ii) Define crafts and gears. Discuss in detail on the common crafts and gears used in West Bengal. 5 + 2 + 8

(b) Write short notes on : 5 × 3

(i) EEZ

(ii) PFZ

(iii) CRZ.
