



WEST BENGAL STATE UNIVERSITY

B.Sc. Honours 2nd Semester Examination, 2021

IFFACOR03T- INDUSTRIAL FISH AND FISHERIES (CC3)

FRESH WATER AQUACULTURE AND AQUATIC ECOLOGY

Time Allotted: 2 Hours

Full Marks: 40

The figures in the margin indicate full marks.

Candidates should answer in their own words and adhere to the word limit as practicable.

1. Answer any **seven** questions from the following: 2×7 = 14
 - (a) Briefly describe chemical control of aquatic weed in pond management.
 - (b) Describe sexual dimorphism in *Macrobrachium rosenbergii*.
 - (c) Write the major features of limnetic zone of a freshwater pond.
 - (d) Define meromixis.
 - (e) Briefly explain the objectives of polyculture.
 - (f) Define thermocline.
 - (g) What is the principle of integrated fish farming?
 - (h) Explain the role of mahua oil cake in pond management.
 - (i) What are the advantages of Cage culture?
2. Write short notes on any **two** of the following: 3×2 = 6
 - (a) Merits and demerits of pen culture
 - (b) Bioconcentration and Biomagnification
 - (c) Potamon zone of river
 - (d) Freshwater pearl culture in India.
3. Answer any **four** questions from the following: 5×4 = 20
 - (a) Write an account of Raceway culture with a note on its merits and demerits. 5
 - (b) Briefly describe the major threats for Ganga river system. Comment on its management. 3+2
 - (c) Describe the life cycle of *Macrobrachium rosenbergii* with illustrations. 5
 - (d) Describe the biotic factors in a pond ecosystem. Add a note on significance of decomposers. 4+1
 - (e) Explain summer stratification in a lake with proper illustration. 5
 - (f) Write an account of Cold water fish culture in India. 5

N.B. : *Students have to complete submission of their Answer Scripts through E-mail / Whatsapp to their own respective colleges on the same day / date of examination within 1 hour after end of exam. University / College authorities will not be held responsible for wrong submission (at in proper address). Students are strongly advised not to submit multiple copies of the same answer script.*

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