



**WEST BENGAL STATE UNIVERSITY**  
B.Sc. Honours 4th Semester Examination, 2020

**IFFACOR10T- INDUSTRIAL FISH AND FISHERIES (CC10)**

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) Define protandry and protogyny.
  - (b) Comment on control measures of snails in aquarium.
  - (c) Describe the basic constructional difference between home and public aquaria.
  - (d) To which orders Gouramies and Barbs belong?
  - (e) Describe the steps to be followed to reduce pH level of aquarium water.
  - (f) Provide examples along with the scientific names of two indigenous ornamental fishes of India.
  - (g) Specify the reason of using feeding ring for feed dispensing in aquarium.
  - (h) Classify the formulated feed types available for ornamental fishes.
  - (i) Specify the difference between permanent and temporary dimorphism.
2. Write short notes on any **two** of the following: 3×2 = 6
- (a) Live rock
  - (b) Working principle of a biological filter
  - (c) Parental care in fighter fish
  - (d) Gas bubble disease.
3. Answer any **four** questions from the following: 5×4 = 20
- (a) Explain the importance and process of quarantine measures and temperature acclimation of ornamental fish. Provide the names of anaesthetics used for transportation of ornamental fish. 4+1
  - (b) Describe larval rearing of angel fish. Mention the reason of putting spawning mops in the breeding tank of gold fish. 4+1
  - (c) Mention the generic name of clown fish. Describe its habitat and breeding behaviour. 1+4
  - (d) Describe asexual propagation of aquarium plants in nature. Give two examples of aquarium plants which can be propagated through cutting. 4+1

- (e) Comment on nutritional requirement of aquarium fish. Add a note on *Artemia nauplii*. 4+1
- (f) Describe the steps to be followed for the construction of all-glass aquarium. What is New tank syndrome? 4+1

**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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