2019

M.Sc.

# 2nd Semester Examination FISHERIES SCIENCE

Paper - FSC 204

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.

### Unit - 1

## (Fundamentals of Fisheries Science)

- 1. Write briefly any *two* questions of the following: 2×2=4
  - (a) State the typical characteristics of fishes.
  - (b) Write down the causes of declining trend of riverine fish stock.
  - (c) What is living fossil? Give example from fish.
  - (d) What is pokkali fish culture?

[ Turn Over ]

2. Answer any two questions of the following:

 $2 \times 4 = 8$ 

- (a) Give an idea about the morphometry study of a fish.
- (b) Discuss suitable management practices to enhance fisheries in small reservoir.
- (c) Briefly narrate the advantages and disadvantages of paddy cum fish culture.
- (d) Give an over view of fisheries in West Bengal.
- 3. Answer any *one* question of the following:  $1 \times 8 = 8$ 
  - (a) (i) State the basic concept of aquaculture vs agriculture.
    - (ii) What are the challenges faced by inland aquaculture?
    - (iii) Add a note on fisheries resources in India. 3+3+2
  - (b) (i) Differentiate chondrichthyes from osteichthyes.
    - (ii) Mention characteristics feature and examples
      (two) of following order of fishes —
      cypriniformes, Siluriformes.

(iii) Add a note on the origin of modern 2+4+2 aquaculture.

#### Unit - 2

## (Aquaculture Management)

- 4. Answer any two questions from the following:  $2 \times 2 = 4$ 
  - (a) What is cage culture?
  - (b) How would you control the aquatic macrophytes?
  - (c) Write a brief note on natural fish food.
  - (d) Mention the important characteristics of omamental fishes.
  - 5. Answer any two questions from the following:  $2 \times 4 = 8$

- (a) Write a note on intensification of aquaculture system.
- (b) Briefly explain pre-stocking management of fish pond.
- (c) State the advantages and disadvantages of penculture system.

[Turn Over ]

- (d) Classify ornamental fishes on the basis of spawning habit with examples.
- 6. Answer any one question from the following:

 $1 \times 8 = 8$ 

- (a) (i) What are the criteria to be considered before selecting a suitable site for cage culture?
  - (ii) Briefly discuss on composite fish culture. 4
  - (iii) Briefly explain the health problems in sewage-fed fish.
- (b) (i) What do you mean by indigenous and exotic ornamental fishes? Cite two examples from each.
  - (ii) Make a list of ornamental objects used in home aquarium.