

ZOOLOGY Paper-II, Opt. (iii) (ZOO-503C)

[(Applied Zoology) Inland Fisheries and Aquaculture]

Time Allowed : 3 Hours

Maximum Marks : 36

Note : Attempt five questions in all, Question No. 1 is compulsory. Select at least one question from each Unit. Draw diagrams wherever necessary.

1. Explain the following briefly :

- (a) How are the weeds growing in a fish pond useful for fishes ?
- (b) Write the scientific names of three food fishes consumed in Punjab.
- (c) What is the aim of fish culture ?
- (d) What do you understand by carrying capacity of the pond ?
- (e) Why liming of pond is done at the time of construction of pond ?
- (f) What is Composite Fish Culture ?
- (g) What is Cage Fish Culture ?
- (h) What is Ovaprim ?

1×8=8

UNIT-I

2. (a) Explain the morphology of a catfish, *Mystus seenghala*.
- (b) Name a few salt water and air breathing culturable fishes and explain the criteria of suitability of fish species for culture. 3,4
3. Describe the various fish culture, practices and discuss the advantages of culture fishery. 7

UNIT-II

4. (a) Discuss how fish meat is of more value than that of other animals.
- (b) What are the advantages of preservation of Fish ? 4,3

5. (a) Give the important features and bionomics of *Catla catla* and *Cirrhina mrigala*.
- (b) Write briefly the methods of preservation of fish. 4,3

UNIT-III

6. (a) Discuss the technique of preparation and preservation of pituitary extract for induced breeding.
- (b) Explain the management of rearing pond. 4,3
7. (a) Name three important exotic fishes and discuss their role in fish culture.
- (b) Discuss the factors which influences induced breeding. 4,3

UNIT-IV

8. (a) Give brief account of physico-chemical conditions of water of a fish cultivation pond.
- (b) Write the various components of a fish pond. 4,3
9. (a) Explain the chemical methods to control the aquatic weeds.
- (b) What is the need for controlling the growth of weeds in fish culture ponds ? 4,3