

6/H-36 (vii) (Syllabus-2015)

2 0 2 3

(May/June)

FISHERY SCIENCE

(Honours)

Paper : 7A

(Advanced Aquaculture)

Marks : 56

Time : 3 hours

*The figures in the margin indicate full marks
for the questions*

Answer Question No. 1 and any four from the rest

- 1. Write short notes on any three of the following : 4×3=12**
- (a) Seaweed resources in India**
 - (b) Antinutritional factors in plant-based fish feed**
 - (c) Common air-breathing fishes of India**
 - (d) Exotic ornamental fishes of India**
 - (e) Pen culture**

(2)

2. What are raceways in aquaculture? Describe the management of trout farming in raceways with reference to water quality, stocking density and feeding. 2+9=11
3. (a) What is cage culture? What are the advantages and constraints of cage culture? 1+3=4
(b) Explain site and species selection criteria for cage culture. 7
4. What is fish nutritional bio-energetics? Describe energy partitioning patterns associated in utilization of food energy in fish. 2+9=11
5. (a) Differentiate oviparous and ovoviviparous ornamental fishes giving suitable examples. 4
(b) Explain captive breeding technique of gold fish, *Carassius auratus*. 7
6. Discuss the types of natural and artificial feeds used in aquaculture. 11
7. (a) Write the benefits and constraints of using sewage in fish culture. 6
(b) Explain the sewage treatment process carried out before using for fish farm. 5

(3)

8. Write short notes on any *two* of the following : $5\frac{1}{2}\times 2=11$
- (a) Broodstock nutrition with reference to Indian major carp
- (b) Edible and pearl oyster of India
- (c) Native ornamental fishes of NE India
