

DIPLOMA IN AQUACULTURE (DAQ)

Term-End Examination

June, 2018

00015

BAQ-002 : FRESH WATER AQUACULTURE

Time : 3 hours

Maximum Marks : 100

Note : Attempt any five questions. All questions carry equal marks.

1. (a) What is Induced Breeding ? Why is there a need for induced breeding specially in carps ? Give an account of induced breeding in carps by hypophysation. 10
- (b) Name any two types of hatcheries for carps used in various parts of India and describe them in detail. 10
2. (a) What is Integrated Fish Farming ? Illustrate the basic processes involved in integrated fish farming with the help of an example from fish-animal farming system. 10

- (b) Write notes on any *two* of the following : 10
- (i) Sewage fed fisheries in India
 - (ii) Fish toxicants for removal of unwanted fish in the aquafarm
 - (iii) Advantages of small ponds and big ponds in aquaculture
3. (a) Distinguish between live-bearers and egg-layers among ornamental fish. Give two examples of each. Write briefly about any two ornamental fish kept in the aquarium. 10
- (b) How is sewage treatment possible through aquaculture ? Name any two aquatic macrophytes used for the treatment of domestic sewage and explain the role of duckweeds in fish ponds. 10
4. (a) Give an account of breeding habits and culture of catfish *Clarias* (Magur) or *Heteropneustes* (Singhi). 10

OR

List two characteristics that distinguish them from carps.

- (b) Where can you find natural pearls ? How does biomineralisation of pearls take place ? 10

5. (a) Give the scientific name of the giant freshwater prawn of India. State any four features by which the male may be distinguished from the female. 10
- (b) Give an account of the life history of the freshwater mussel *Lamellidens*. For which purposes is it cultured in aquafarms? 10
6. Name two common predatory fish and two other weed fish. Describe the various methods of eradicating them from fish farms. 4+16=20
7. (a) Give an account of feed formulation and feed preparation required for fisheries. 10
- (b) Name the disease and give one symptom of any one bacterial, one protozoan and one fungal disease in freshwater prawn hatcheries. Add a note on diseases in prawn 'grow-out culture' systems. 10
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