

DIPLOMA IN AQUACULTURE (DAQ)

Term-End Examination

December, 2016

BAQ-002 : FRESH WATER AQUACULTURE

Time : 3 hours

Maximum Marks : 100

Note : Attempt any five questions. All questions carry equal marks. Support your answers with well-labelled diagrams wherever necessary.

1. (a) Describe the morphological characteristics that distinguish male carps from female carps and also the cyclic changes in their gonadal maturity. 10
- (b) Define a hatchery. Discuss the important requirements for running a successful carp hatchery. Give an account of any one traditional method of hatching carp eggs. 10
2. (a) Name six commonly encountered predatory and weed fishes in growout aquaculture. Describe the methods for their eradication. 10
- (b) What is sewage ? Discuss how it is used in fish aquaculture. 10

3. (a) Give a brief account of different culture systems for catfish farming. 12
- (b) Explain why culture of catfishes is not so advanced despite their high commercial value. 8
4. (a) Differentiate natural pearls from artificial and cultured pearls. 5
- (b) Describe the various methods of pearl culture in fresh water mussels. 15
5. (a) List the common diseases of prawn hatcheries and name their causative agents. What precautions must one take in maintaining a healthy hatchery system ? 10
- (b) Describe the various aspects of pond construction and management for grow-out culture of freshwater prawns. 10
6. (a) What are the criteria for selecting the ingredients of a feed formulation ? Describe one method of feed formulation. 10
- (b) Give an account of various organisms used as live feed in fish aquaculture. Add a note on the nutritional value of "live feed" organisms. 10

7. Write short notes on any *two* of the following : 2×10=20

- (a) Integrated cattle-fish system**
 - (b) Parasitic diseases in fish aquaculture**
 - (c) Induced breeding by hypophysation**
 - (d) Harvesting and marketing of prawns**
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