

DIPLOMA IN AQUACULTURE (DAQ)

Term-End Examination

February, 2021

BAQ-002 : FRESH WATER AQUACULTURE

Time : 3 hours

Maximum Marks : 100

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

1. (a) Define spawning and describe what is injected in the mature brood fish to induce spawning. Name four substitutes of this extract used for mature carp breeding and write a sentence on each. 2+8
- (b) What is 'Composite fish culture' ? State the basic principle and advantages of this method of carp culture. Substantiate your answer by giving suitable examples. 2+4+4
2. (a) Give an account of cattle cum fish system of integrated fish farming **OR** pig cum fish farming in India. 10

- (b) What is a hatchery ? List the components of a hatchery along with their usage. Also describe the differences in their construction. 10
3. (a) Write an essay on 'Trout Fisheries' in India. 10
- (b) What are Ornamental fish ? Give three examples of 'live bearers'. How are they different from egg layers in their reproductive habits ? Specify the role of gonopodium. 4+6
4. (a) What is 'Live Feed' ? Name any three kinds of organisms which are cultured to provide live feed to fisheries. Describe any one method of culturing any live feed organisms. 4+6
- (b) Name any four catfishes. What are the different 'culture systems' for catfish farming ? Explain. 2+8
5. (a) Give a brief account of diseases of prawns under culture in hatcheries and their prevention measures. 10
- (b) Give a brief account of biomineralisation of pearls during their culture. 10

6. (a) Name the various nutritional constituents required in the diet of fish under culture. Add a note on their importance and mention deficiency symptoms of any two vitamins. 6+4
- (b) What is 'Pearson's Square' ? Enlist factors that determine success of formulated feed when applied in ponds and tanks. 10
7. Write notes on any *two* : 2×10=20
- (a) Floating Hapa Hatchery
- (b) Culture of *Trapa bispinosa* (Singhara)
- (c) Parasitic diseases of fish (any two)
- (d) Biology of Murrels
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