

DIPLOMA IN AQUACULTURE

(DAQ)

Term-End Examination

December, 2025

BAQ-001 : BASICS OF AQUACULTURE

Time : 3 Hours

Maximum Marks : 100

Note : Answer *five* questions in all, including Question Nos. 1 which is compulsory. All questions carry equal marks. Draw a well labelled diagram wherever required.

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1. (a) Define the following terms : 1×5=5
- (i) Closed system
 - (ii) Fry
 - (iii) Incubation
 - (iv) Aquifer
 - (v) Eutrophication

(b) Expand the following abbreviations :

1×5=5

- (i) CIFE
- (ii) CMFRI
- (iii) RAS
- (iv) NBFGR
- (v) KVKs

(c) Choose the correct option from the parentheses :

1×5=5

- (i) The oldest form of (fresh water/ coastal) aquaculture is oyster farming practised in Japan around 2000 years ago.
- (ii) Commercial aquaculture of shrimp came to be practised in India during early (fifties/nineties) under guidance of foreign experts.
- (iii) The (shorter/larger) food chain, the greater is the availability of energy.

- (iv) (Eutrophic/Oligotrophic) lakes are deep often with steep sides.
 - (v) In a thermally stratified water body the lower stratum is called (epilimnion/hypolimnion).
- (d) State whether the following statements are True (T) or False (F) : $1 \times 5 = 5$
- (i) Drying of pond is done to eliminate undesirable species in ponds prior to stocking.
 - (ii) A drying period minimum one month is necessary for bottom of pond.
 - (iii) Tilling exposes the subsoil, helps in oxidation process and release of nutrients.
 - (iv) Pool soil mainly consists of organic matter and a little of mineral soil.
 - (v) Microbial activity of soil is greatest at a pH of 7 to 8.

2. (a) Discuss the scope of aquaculture. 10
(b) Explain the contribution of agriculture to world's aquatic products as a food source. 10
3. (a) Discuss the biotic communities present in the aquatic environment with emphasis on planktons. 10
(b) Explain the factors influencing primary productivity of aquatic environment. 10
4. Describe the candidate species for freshwater aquaculture. 20
5. (a) Explain how aquaculture can be practised in combination with other farming systems. 10
(b) What is industrial aquaculture ? Discuss its different aspects. 10
6. (a) Describe the method for handling of fresh fish for retaining its freshness for a long period. 10

- (b) Define and discuss the hazard analysis critical control point to ensure microbiological safety of aquatic products. 10
- 7. (a) Explain the structure and functions of fisheries co-operatives. 12
- (b) Discuss the constraints in fisheries reduction. 8

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