



বিদ্যাসাগর বিশ্ববিদ্যালয়

**VIDYASAGAR UNIVERSITY**

**B.F.Sc. 1st Semester Examination 2021**

**PAPER—BFSC-101**

**PRINCIPLES OF AQUACULTURE**

*Full Marks : 70*

*Time : 3 Hours*

*The figures in the right-hand margin indicate full marks.*

*Candidates are required to give their answers in their own words as far as practicable.*

*Illustrate the answers wherever necessary.*

**THEORY**

1. Answer any *ten* questions. 10×2
- (a) What are the basic criteria for selecting candidate species in paddy cum fish culture?
- (b) What are the disadvantages of cage culture?
- (c) Write difference between monoculture and polyculture.
- (d) Write the name of two candidate species from brackish water and marine water.

- (e) Write two advantages of pen culture.
- (f) What is organic aquaculture? What are the benefits of this type of culture?
- (g) Why control of aquatic weed is necessary in aquaculture?
- (h) What are the benefits of partial harvesting from pond?
- (i) Give definition of weed fish and predatory fish with suitable example.
- (j) Write four beneficial roles of liming in pond.
- (k) What is integrated fish farming? Give suitable example of this type of farming.
- (l) Write short note on zero water exchange system.
- (m) What are the drawbacks of super intensive aquaculture?
- (n) Write the steps followed during pre-stocking management in the pond.
- (o) Write two methods for increasing DO in pond water.

**2.** Answer any six questions.

6×5

- (a) Write the differences between cage and pen culture.
- (b) Describe the physical factors effecting pond productivity.
- (c) What are the objectives of aquaculture? Discuss about the scope of aquaculture in India.
- (d) Write the advantages and disadvantages of aquaculture.

- (e) Write the differences between intensive and semi-intensive aquaculture.
- (f) Write in brief about duck cum fish farming.
- (g) What are the biological and economical factors considered during site selection and construction of fish farm?
- (h) What are the objectives of fertilizing in fish culture pond? Discuss about different types of fertilizer used in aquaculture.
- (i) Write the criteria for selecting candidate species in aquaculture.
- (j) Write the chemical water quality parameters affecting productivity of fish pond.

### PRACTICAL

Answer any *two* questions. 2×10

1. Write down the prestocking and post stocking management of nursery pond and rearing pond. 5+5
  2. Draw and describe the components of aquaculture farm. 10
  3. Write down the principle and procedure of determination of organic carbon of pond soil. 5+5
  4. Write down the principle and procedure of determination of free CO<sub>2</sub> content of waste water. 5+5
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