

2022

B.F.Sc. 3rd Semester Examination

Aquaculture Engineering

PAPER — BFSC-309

Full Marks : 50

Time : 2 hours



The figures in the right-hand margin indicate marks.

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

Illustrate the answers wherever necessary.

1. Answer any **ten** questions from the following :
2×10=20

- (a) Mention salinity ranges of freshwater, brackish water and marine water.
- (b) State the scope of aquaculture in India.
- (c) What is seepage?
- (d) In between cage and pen culture, which one is advantageous and why?

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(Turn Over)

(2)

- (p) What is raceway fish culture? ✓
- (q) Enlist the major problems faced by shrimp farmers of West Bengal.
- (g) Differentiate monoculture system from polyculture system.
- (h) What is non-food aquaculture? ✓
- (i) Why is Chinese circular hatchery called as eco-hatchery? ✓
- (j) What is periphyton? Cite example. ✓
- (k) Mention different outlet canals or draining systems installed in pond culture system. ✓
- (l) State the merits of spiral aerator. ✓
- (m) What are the importances of diversion canal of aquaculture pond? ✓
- (n) State the functions of hapa.
- (o) What are the demerits of paddle wheel aerators? ✓

2. Answer **any six** questions from the following :
5×6=30

- (a) Write a brief note on management of water quality in rearing pond. ✓
- (b) Describe the steps to be followed for construction of pond dyke. ✓

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(Continued)

(3)

- (c) Briefly narrate the layout and planning of drainage system in aquaculture.
- (d) Explain the process of leveling. ✓
- (e) State the criteria for selection of suitable site for construction of an ideal aqua farm. ✓
- (f) Briefly narrate chain and compass surveyings. ✓
- (g) Explain the significance of soil in fish pond. ✓
- (h) Discuss the suitable criteria for site selection of hatchery construction. ✓
- (i) Illustrate the mode of operation of Chinese circular hatchery.
- (j) Write short notes on Glass jar and FRP hatchery.

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