

2023

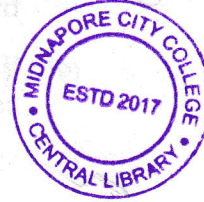
BFSC 4th Semester Examination

Finfish Hatchery Management

PAPER — BFSC-403

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** from the following questions :

2×10=20

- (a) Write down the disadvantages of natural fish seed collection
- (b) What do you mean by ecohatchery?
- (c) What do you mean by monoculture?

(2)

- (d) Write the name of two inland fishing gears used for fish seed collection in West Bengal. *Shooby net, Drift net*
- (e) What are the benefits of bundh breeding?
- (f) Write down the importance of induced breeding in fish.
- (g) What do you mean by multiple breeding of carps?
- (h) How do you preserve pituitary gland after extraction?
- (i) Distinguish between fry and fingerling.
- (j) Write a note on hapa hatchery system for fish breeding. *Sodium amylose*
- (k) Write down the names of two anaesthetic drugs used in fish seed transportation. *TMS-222*
- (l) Write the names of four natural food of carp larvae.
- (m) Write the features of selecting broodstocks for fish breeding programs.
- (n) Write notes on record-keeping and data management practices in a fish hatchery.
- (o) Mention the causes of egg mortality in a fish hatchery.

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(Continued)

(3)

2. Answer any six from the following questions : $5 \times 6 = 30$
- (a) What are the common challenges encountered in maintaining water quality in fish hatcheries, and how can these be managed? $2\frac{1}{2} + 2\frac{1}{2} = 5$
- (b) Write the induced breeding of sea bass. 5
- (c) Briefly explain broodstock management of fish pond. 5
- (d) Write down the major advantages and disadvantages of glass jar hatchery system used in aquaculture. $2 + 3 = 5$
- (e) Write two methods of the transportation of fish fries from a hatchery to grow-out stocking locations. 5
- (f) Write notes on fish seed certification and quarantine measures. 5
- (g) State the challenges related to genetic management and inbreeding in fish hatcheries. 5
- (h) Explain the factors to consider when

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(Turn Over)

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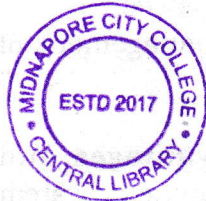
(4)

selecting suitable collection sites for fish seed in rivers. 5

(i) Write notes on environmental factors affecting spawning. 5

(j) What are the features of catfish breeding technique? 5

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