

**M.Sc. 2nd Semester Examination, 2025**

**FISHERIES SCIENCE**

*(Fish Breeding, Hatchery Design and Management)*

PAPER — FSC-205

*Full Marks : 25*

*Time : 1 hour*

**Answer all questions**

*The figures in the right hand margin indicate marks*

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

**GROUP — A**

1. Answer any *two* of the following questions :

2 × 2

(a) What is GnRH analogue ? State its importance.

( Turn Over )

- (b) Mention at least two criteria of quality fish seed.
- (c) What is the use of diluent in cryopreservation ?
- (d) Write two sanitary measures essential in hatchery systems.

**GROUP – B**

2. Answer any *two* of the following questions :

4×2

- (a) Mention essential parameters for establishment of fish hatchery.
- (b) Describe the process of natural breeding and bundh breeding in carps.
- (c) Discuss the suitable practices to reduce the risk of pathogen spread in a hatchery system.

- (d) Explain the parts of Eco-carp hatchery complex with appropriate diagram.

**GROUP – C**

3. Answer any *one* of the following questions :

8 × 1

- (a) Calculate the dimension of a Chinese circular spawning pool to produce 0.8 crore eggs. Calculate the broodfish and brood rearing pond area requirement for the production of one crore spawn of *Labeo rohita* in a season.

4 + 2 + 2

- (b) Give an account of alternate inducing agents used for fish breeding. Write the management practices followed during spawning and incubation pool operation.

4 + 2 + 2

**[ Internal Assessment – 5 Marks ]**

