

**SKILL ENHANCEMENT (SE)
COURSE DEPARTMENT OF
ZOOLOGY
BHATTADEV UNIVERSITY, BAJALI**

Course Name: ORNAMENTAL FISH AND FISHERIES

1st Semester

Paper Code: ZOO1103SE

CREDITS: 3(2+1)

Total lectures: 30(L+T)

Credits: 3 (Theory: 02, P: 01)

Course Objective:

- To impart hands on training on feed and feeding technology
- To impart hands on training on setting up of aquaria and maintenance
- To generate export oriented employment in rural and urban households through ornamental fish production.
- To impart hands on training on culture, breeding of commercially important ornamental fishes
- To mass-produce a large number of varieties of ornamental fish species to create a large supply of ornamental fish and increase the overall exports.
- To promote employment and entrepreneurship in the ornamental fish sector by graduates in fisheries, aquaculture and biological sciences.

Learning Outcome:

After the completion of this course, the students will be able to:

- Define, comprehend, scope and significance of aquaculture
- Acquire knowledge on taxonomy and morphology of fishes.
- Understand food, feeding, growth, digestion and respiration in fishes.
- Examine the types and practices of Aquaculture.
- Construct aquariums and plankton cultures
- Enhance collaborative learning, communication and technical skills through practical sessions, team work, group discussions, assignments and projects

THEORY

CREDITS- 02

SECTION -1.

08L

Introduction to Ornamental Fish Industry;Ornamental Fish Diversity of North East India.

Construction and management of Home Aquarium.

SECTION -2

06L

Natural feed of Ornamental Fish, Strategies for maintenance of natural colour of Ornamental Fish

Natural Breeding of *Tricogaster* species

SECTION -3

08L

Nutrition of Ornamental Fish: Feed formulation of Ornamental Fish

Development of Biological filtration in Aquarium, Pure culture of planktons, Disease and treatment of Ornamental Fish.

Natural feed of Ornamental Fish, Live Food culture for tropical ornamental fish, Health management in Ornamental Fish Farming.

ORNAMENTAL FISH AND FISHERIES

PRACTICAL

CREDIT- 01

1. Identification of Ornamental Fish
2. Identify and describe the aquarium accessories with their use and maintains
3. Culture of Indigenous ornamental fish in Aquarium
4. Estimation of Physio-chemical characteristics of Aquarium water
5. Identify and describe an aquarium plants (any five).
6. Culture of Plankton

SUGGESTED READINGS

- Jhingran, V.G. (1985) Fish and Fisheries of India
- Rath, R.K. (2000) Freshwater Aquaculture
- Gupta, S.K and Gupta, P.C (2008) General and applied ichthyology (Fish and Fisheries)
- Ayyappan, S (2010) Handbook of Fisheries and Aquaculture
- Pillay, T.V.R (1993) Aquaculture Principles and Practices
- Srivastava, C.B.L (2006) A textbook of fishery science and Indian fisheries
- Paulraj, R (1997) Aquaculture feed
- 10. Agarwal, S.C. (2007) A Handbook of Fish Farming
- 10. Zaidi, S.G.S (2002) Ornamental fish culture
- 11. Mahapatra, B.K., Dutta S., Pailan, G.H.(2015) Ornamental Fish Breeding, Culture and Trade
- 12. Ahilan, B., Felix, N., Santham, R., (2008) A text book of Aquaculture
- 13. Dholakia A.D. (2010)Ornamental Fish culture and Aquarium Management