

Course Code	Course Name	Credits
26ZY902	ORNAMENTAL FISH CULTURE	04

Course Objectives

- To understand the principles and scope of ornamental fish culture.
- To study breeding and management of ornamental fishes.
- To develop knowledge on aquarium maintenance and fish health.
- To understand live feed culture and marketing.
- To enhance entrepreneurial skills in ornamental fisheries.

Learning Outcomes

- Explain the importance of ornamental fish culture.
- Identify commercially important ornamental fishes.
- Demonstrate aquarium setup and fish breeding techniques.
- Analyze fish nutrition and disease management.
- Apply ornamental fish culture methods commercially.

Unit 1 - Introduction to Ornamental Fish Culture (12 Hrs.)

Scope and importance of ornamental fish culture; freshwater and marine ornamental fishes; indigenous and exotic species; ornamental fish industry in India and abroad; economic importance and export potential.

Unit 2 - Breeding and Rearing Techniques (12 Hrs.)

Biology and breeding of ornamental fishes; reproductive behaviour; breeding of live bearers and egg layers; induced breeding techniques; hatchery management and larval rearing.

Unit 3 - Aquarium Management (12 Hrs.)

Types of aquaria; aquarium construction and maintenance; water quality management; filtration and aeration systems; aquarium plants and decoration; lighting systems and feeding practices.

Unit 4 - Fish Nutrition and Health Management (12 Hrs.)

Live feed culture including Artemia and Daphnia; nutritional requirements of ornamental fishes; formulated feeds; common bacterial, fungal and parasitic diseases; prevention, quarantine and treatment methods.

Unit 5 - Marketing and Entrepreneurship (12 Hrs.)

Packaging and transportation of ornamental fishes; export potential and international trade; ornamental fish marketing strategies; establishment of aquarium units; entrepreneurship opportunities and economic prospects.

Reference Books:

1. Axelrod, H.R. (2016). Tropical Fish Keeping. TFH Publications.
2. Francis-Floyd, R. (2017). Ornamental Fish Health. Wiley.
3. Ghosh, A. (2019). Ornamental Fish Farming. Narendra Publishing House.
4. Rath, R.K. (2017). Aquaculture. Scientific Publishers.
5. Ramachandran, A. (2018). Aquarium Management. Daya Publishing House.

Websites and eLearning Sources:

1. <https://www.cifa.hc.in/>
2. <https://www.fao.org/>
3. <https://www.agrimoon.com/>

