



AQUARIUM MAINTENANCE AND FISH BREEDING TECHNIQUES



Course Info

Reviews

About Course

Are you passionate about aquatic life and fascinated by the world beneath the water? Our Certificate Program in Aquarium Maintenance and Fish Breeding is designed to provide you with the knowledge and skills needed to excel in the world of aquariums.

What Will You Learn?

- **Comprehensive Learning:** Dive deep into the art and science of aquarium maintenance, from water quality management to equipment and species care.
- **Breeding Techniques:** Learn the secrets of successful fish breeding, including selecting compatible species, creating ideal breeding conditions, and caring for fry.
- **Hands-On Training:** Gain practical experience in every aspect of aquarium maintenance, from fabrication to setup and ongoing care. You'll also participate in the hands-on breeding of ornamental fish.
- **Entrepreneurship Opportunities:** Learn how to turn your passion into a business. Discover the potential for entrepreneurship in the world of ornamental fish breeding and aquarium maintenance.

CERTIFICATE COURSE ON

AQUARIUM MAINTENANCE AND FISH BREEDING TECHNIQUES

Total Hours: 30

Course Outcome:

At the end of the course, students will be able to:

1. Demonstrate comprehensive knowledge of aquariums and its maintenance.
2. Exhibit proficiency in fish breeding fundamentals, including egg and fry care and addressing common breeding challenges.
3. Showcase advanced aquarium care skills, encompassing disease management, genetics, and aquascaping.
4. Possess the potential to embark on entrepreneurial ventures in the aquarium maintenance and ornamental fish breeding industry.

Unit 1: Introduction to Aquariums and Fish Keeping (5 hours)

- 1.1 Overview of the Aquarium Hobby.
- 1.2 Types of Aquariums: Freshwater, Saltwater, and Brackish.
- 1.3 Understanding aquarium as an ecosystem.
- 1.4 Aquarium Equipment and Essentials.
- 1.5 Understanding Water Parameters: Temperature, pH, Ammonia, Nitrite, Nitrate.

Unit 2: Aquarium Setup and Maintenance (8 hours)

- 2.1 Fabrication and setting up an Aquarium.
- 2.2 Cycling the Aquarium: Establishing Beneficial Bacteria and Nitrogen cycle.
- 2.3 Filtration Systems and Their Function.
- 2.4 Water Changing Techniques and Frequency.
- 2.5 Algae Control and Prevention.

Unit 3: Fish Breeding Basics (10 hours)

3.1 Introduction to the diversity of freshwater ornamental fish.

3.2 Breeding Fundamentals: Selecting Breeding Pairs, brood stock management and spawning in live bearers and egg layers.

3.3 Caring for Eggs and Fry: Feeding, Water Quality.

3.4 Preventing and Managing Common Breeding Challenges.

3.5 Culture of live fish feeds: Moina, Daphnia, Baby brine shrimp and blood worms.

Unit 4: Advanced Topics in Aquarium Care and Fish Breeding (7 hours)

4.1 Disease identification, treatment, prevention and Quarantine Procedures.

4.2 Genetics and Selective Breeding.

4.3 Aqua scaping and Aesthetics.

4.4 Ethical Considerations in Breeding and Fishkeeping.

Practical Experience (ongoing throughout the course)

- Hands-on Aquarium fabrication, Setup and Maintenance
- Observation and Documentation of Fish Behaviour
- Hands-on training in fish breeding and rearing
- Hands-on training in culturing live fish feed
- Problem Solving: Diagnosing common diseases and Implementing Solutions

Course Co-Ordinator: Mr Glavin Thomas Rodrigues

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