

PRODUCTION OF ORNAMENTAL FISH

ISCED UNIT CODE: 0831 451 06A

TVETCDACC UNIT CODE: AQ/CU/AM/CR/02/5/MA

UNIT DURATION: 180 Hours

Relationship to Occupational Standards

This unit addresses the Unit of Competency: Produce ornamental fish

Unit Description

This unit covers the competencies required in the production of ornamental fish. It involves breeding fresh water and marine water ornamental fish, constructing aquarium tanks and carrying out aqua scaping.

Summary of Learning Outcomes.

By the end of the unit, the trainee will be able to:

1. Breed fresh water and marine water ornamental fish
2. Construct aquarium tanks
3. Carry out aqua-scaping

Learning Outcomes, Content and Suggested Assessment Methods

Learning Outcomes	Content	Suggested Assessment Methods
1. Breed fresh water and marine water ornamental fish	<p>Theory</p> <p>1.1 Carrying out selection of ornamental fish brooders</p> <ul style="list-style-type: none">• Type Species• Intensity of colour• Reproduction mode• Courtship behaviour• Type of eggs produced <p>1.2 Breeding unit water conditioning</p> <ul style="list-style-type: none">• Dechlorination• Degassing• Aeration• Temperature stabilization• pH control <p>1.3 Ornamental fish brooders pairing</p> <p>1.4 Fertilized ornamental fish eggs incubation</p>	<ul style="list-style-type: none">• Practical• Project• Third party report• Portfolio of evidence• Written tests• Oral questioning

	1.5 Ornamental fish hatchlings stocking	
3. Construct aquarium tanks	<p>3.1 PPEs</p> <p>3.2 Selection of tools, materials and equipment</p> <ul style="list-style-type: none"> • Breeding tanks • Thermostat heaters • Kakabans/Egg trays • Graders • Suction pipes, • Desiccators, • Dechlorinators • Magnetizers • Aquarium lighting • Aquarium filters • Submersible pump <p>3.3 Designing of aquaria</p> <p>3.4 Cutting of glass sheet for fish aquaria</p> <p>3.5 Mounting of cut-glass sheets for fish aquaria</p> <p>3.6 Test run of constructed aquaria leakages</p> <p>Practice</p> <p>4. Construct a simple aquarium</p>	<ul style="list-style-type: none"> • Practical • Project • Third party report • Portfolio of evidence • Written tests • Oral questioning
4. Carry out aqua-scaping.	<p>Theory</p> <p>4.1 PPEs</p>	<ul style="list-style-type: none"> • Practical • Project

	<p>4.2 Selection of tools and equipment</p> <p>4.3 Aquaria layout design</p> <p>4.4 Aqua-scaping materials installation</p> <ul style="list-style-type: none"> • Aqua Soils • Artificial/Natural Aquatic Plants • Aquarium driftwood • Aquarium rocks • Aquarium substrate • Gravel • Wall papers • Aqua-scaping styles implementation • Dutch • Jungle • Iwagumi • Nature Aquarium <p>Practice</p> <p>4.5 Carry out aqua-scaping.</p>	<ul style="list-style-type: none"> • Third party report • Portfolio of evidence • Written tests • Oral questioning
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Suggested Methods of Instruction

- Project
- Demonstration
- Practicals
- Discussions
- Direct instruction

Recommended resources for 25 trainees.

S/NO	Category/Item	Description/specification	Qty	Recommended ratio (item: trainee)
	Projector	EPSOM	1	1:25
	Whiteboard/smartboard	2.5 By 1.5.M	1	1:25
	Desktop/computer		1	1:25
	Classroom	Well-lit with 25 seats	1	1:25
	Business plan templates		25	1:25

	Business Journals		5	1:5
	Sets of Writing materials		25	1:25
	Newspapers and Handouts		5	1:25
	Video clips		5	1:25
	Human resource	Trainer and Technician	2	1:25
	Library	Equipped with ornamental fish production books and E- section	1	1:25

MODULE IV