

# ANDHRA CHRISTIAN COLLEGE : GUNTUR

(Day, Evening & P.G.)

## NOTICE

Date: 20-6-2018

All the I and II year M.Sc. students are here by informed to express their willingness by submitting their names for the certificate course on **ORNAMENTAL FISH AND MAINTENANCE** to the H.O.D of Zoology on or before 22-06-2018. The course will commence from 25-6-2018 and the duration of the course is 30 hours.

  
20/06/2018  
Head HOD  
Dept. of P.G. Zoology  
ANDHRA CHRISTIAN COLLEGE  
GUNTUR

  
Principal  
PRINCIPAL  
ANDHRA CHRISTIAN COLLEGE  
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GUNTUR

### Copy to

1. The Coordinator, IQAC
2. The office Manager

Syllabus for Certificate Course  
**ORNAMENTAL FISH AND MAINTENANCE**

Paper No.	Title of the paper	Marks allotted
		Theory
I	Construction of aquarium	25
II	Maintenance of aquarium	25
Total		50

**ANDHRA CHRISTIAN COLLEGE : GUNTUR**  
 DEPARTMENT OF PG ZOOLOGY

TITLE OF THE PAPER: ORNAMENTAL FISH AND MAINTENANCE

CREDITS: 02

NO OF HOURS: 30

**Objectives**

1. To understand the industry trends and opportunities.
2. To impart the skill of fabricating an aquarium.
3. To understand health aspects of aquarium fish.
4. To understand the nutritional requirements of fish.
5. To gain knowledge of various water parameters and their control

**Course Outcomes**

By the end of the course students will be able to

CO1	Achieve competence to identify the fish of ornamental importance
CO2	Plan for aquarium making as a small scale industry
CO3	Exhibit the knowledge to design and fabricate an aquarium
CO4	Develop aquarium fish keeping as a hobby and as a source of livelihood
CO5	Diagnose and treat common diseases of aquarium fishes.

**UNIT –I (6 HOURS)**

- 1.1. The potential scope of aquarium fish industry as a cottage industry
- 1.2. Exotic and Endemic species of Aquarium fishes

2Hours  
4 Hours

**UNIT –II (9 HOURS)**

- 2.1. Freshwater Aquarium: Purpose, Construction, Preparation and Maintenance  
 Aquatic Plants and Animals and Food for Aquarium Fishes
- 2.2. Aquarium Maintenance Tips and Fish Care Guidelines- Aquarium Water Changes, Testing the

5 Hours

4 Hours

Aquarium water and filter maintenance.

**UNIT-III (15 HOURS)**

- |   |         |
|---|---------|
| 3.1. Equipment used in the Maintenance of Aquarium, Essential Equipment, Aerator or Air-Pumps and Diffuser Stones, Aquarium Heaters and Thermostats, Various types of filters | 4 Hours |
| 3.2. Conditions for an Ideal Aquarium   | 2 Hours |
| 3.3. Common diseases of aquarium fishes- diagnosis and treatment  | 5 Hours |
| 3.4. Use of pigments for colour enhancement   | 2Hours  |
| 3.5. Control of Algal blooms  | 2 Hours |

**Suggested Readings**

1. Ornamental Fish Culture and Aquarium Mangamen, A.D.Dholakia, DayaPublishinh house
2. Fresh water Aquarium Models, John Tullock, Turner Publishing company
3. Setting up a Tropical Aquarium. By Stuart Thraves, Firefly Books Publication
4. Fresh water Aquarium Fish, Greg Gennings, Firefly Books Publication
5. Aquarium Fish, Mary Bailey and Gina Sandford, Anness publishing

**WEB LINKS:**

**UNIT -1**

[https://www.youtube.com/watch?v=eDA\\_idFXfT0](https://www.youtube.com/watch?v=eDA_idFXfT0)

[https://www.youtube.com/watch?v=i5fSu0VT\\_lg](https://www.youtube.com/watch?v=i5fSu0VT_lg)

**unit -2**

<https://www.youtube.com/watch?v=BV4QG06OhSI>

<https://www.youtube.com/watch?v=zMWNrltGbiE>

<https://www.youtube.com/watch?v=fU8xwLNzPmc>

<https://www.youtube.com/watch?v=6G0xmycWMtg>

**unit-3**

<https://www.youtube.com/watch?v=HcjRICio4Y8>

<https://www.youtube.com/watch?v=vVQhauCOlxY>

<https://www.youtube.com/watch?v=xwsI7kH5Jyc>

<https://www.youtube.com/watch?v=qE8dk1gi6RY>