

**A.S. D GOVT.DEGREE COLLEGE FOR WOMEN (A), KAKINADA**

**DEPARTMENT OF ZOOLOGY & AQUACULTURE TECHNOLOGY**

**2023-2024**

**Aquaculture Technology Courses offered**

| <b>Year</b> | <b>Semester</b>     | <b>Paper</b>                      | <b>Title of the Course</b>                             | <b>Course type (T/L/P)</b> |
|-------------|---------------------|-----------------------------------|--|----------------------------|
| <b>II</b>   | <b>Semester-III</b> | <b>Paper-III</b>                  | Fish Nutrition & Feed Technology                       | <b>T</b>                   |
|             |                     |                                   | Fish Nutrition & Feed Technology - Practical           | <b>P</b>                   |
|             | <b>Semester-IV</b>  | <b>Paper-IV</b>                   | Freshwater & Brackish water Aquaculture                | <b>T</b>                   |
|             |                     |                                   | Freshwater & Brackish water Aquaculture Practical      | <b>P</b>                   |
|             |                     | <b>Paper-V</b>                    | Fish Health Management & Fisheries Economics           | <b>T</b>                   |
|             |                     |                                   | Fish Health Management & Fisheries Economics Practical | <b>P</b>                   |
| <b>III</b>  | <b>Semester-V</b>   | <b>Paper-6A</b>                   | Soil and Water Quality Management                      | <b>T</b>                   |
|             |                     |                                   | Soil and Water Quality Management Practical            | <b>P</b>                   |
|             | <b>Paper-7A</b>     | Ornamental Fish Culture           | <b>T</b>   |                            |
|             |                     | Ornamental Fish Culture Practical | <b>P</b>   |                            |

**AQUACULTURE TECHNOLOGY**

**Course Outcomes**

**Semester: III paper-III**

**Fish nutrition & feed technology**

**Course Outcomes:** By the completion of the course the graduate should able to–

**CO1:** Understand and analyze the nutritional requirements of cultivable fin fish and shell fish

- CO2:** Identify different types of feed in nature and compare different feeding methods of fish
- CO3:** Understand and analyze the techniques of fish feed manufacturing and storage methods
- CO4:** Understand the importance of different fish feed additives and non-nutrient ingredients.
- CO5:** Apply the knowledge of different nutritional deficiency symptoms of fish in culture practices.

#### **Semester-IV, paper-IV**

##### **Freshwater & Brackish water aquaculture**

**Course Outcomes:** By the completion of the course the student should be able to –

- CO1:** Understand the scope of aquaculture and apply systems of aquaculture.
- CO2:** Understand the culture practices involved in carp culture
- CO3:** Differentiate the culture of cold water and air breathing fish
- CO4:** Understand and apply the culture practices of prawn
- CO5:** Understand and apply the culture practices of brackish water species.

#### **Semester-IV, Paper-V**

##### **Fish health management & fisheries economics**

**Course Outcomes:** By the completion of the course the student should be able to –

- CO1:** Identify different pathogens effecting the fin fish and give solutions to diseases
- CO2:** Solve problems related to the pathogens effecting the shell fish
- CO3:** Analyze the fish health management strategies
- CO4:** Understand the different fisheries economic policies
- CO5:** Communicate various schemes available for the welfare of fishermen community

#### **Semester: V Paper-6A**

##### **Soil and water quality management**

**Course outcomes:**

- CO1:** Understand and analyze various types of soil and their properties
- CO2:** Acquire the skills of assessment of parameters of water and analyze their importance in culture practices.
- CO3:** Apply different methods of soil and water amendments of aquaculture practices
- CO4:** Analyze recent trends in water quality management techniques.
- CO5:** Assess the different methods of pond treatments

**Semester: V paper-7A**  
**Ornamental fish culture**

**Course Outcomes:**

Students after successful completion of the course will be able to:

**CO1:** Understand the importance of ornamental fishes in Global and Indian trading

**CO2:** Identify various commercially important freshwater and marine ornamental organisms

**CO3:** Acquire the skill of aquarium management

**CO4:** Apply the knowledge of breeding in ornamental fishes

**CO5:** Understand and apply the commercial production of aquarium fishes and plants.