



# **A.S.D. Government Degree College for Women** **An Autonomous Institution**

**Jagannaickpur, Kakinada, Andhra Pradesh-533002**  
**Affiliated to Adikavi Nannaya University, Rajamahendravaram**



**2.6.1. The institution has stated learning outcomes (programme and course outcome)/graduate attributes which are integrated into the assessment process and widely publicized through the website and other documents and the attainment of the same are evaluated by the institution.**

## **ACQUACULTURE TECHNOLOGY** **COURSE OUTCOMES** **(2018-23)**

**A.S.D GOVT. DEGREE COLLEGE FOR WOMEN (A), KAKINADA.**  
**DEPARTMENT OF ZOOLOGY & AQUACULTURE TECHNOLOGY**  
**AQUACULTURE TECHNOLOGY COURSE OUTCOMES**  
**(2018-2019)**

**COURSE OUTCOMES (CO)**

**SEMESTER-I**

**BASIC PRINCIPLES OF AQUACULTURE**

- CO1:** Understand and analyze the different aquaculture systems
- CO2:** Understand the pond eco system and nutrient cycles.
- CO3:** Acquire the knowledge on functional classification of ponds.
- CO4:** Understand and analyze the lay out and construction of fish pond.
- CO5:** Acquire the knowledge on need of fertilizers and manures for pond and Physico-chemical conditions of pond

**SEMESTER-II**

**BIOLOGY OF FIN FISH & SHELLFISH**

- CO1:** Understand the general characters, classification and commercial importance of cultivable fin and shell fish.
- CO2:** Acquire the knowledge on feeding habits and factors effecting growth in fish
- CO3:** Understand the breeding in fin fish and shell fish.
- CO4:** Acquire the knowledge on parental care in fish and embryonic and larval development of fin fish and shell fish.
- CO5:** Understand the different endocrine hormones.

*H. Suvachala*  
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**AQUACULTURE TECHNOLOGY COURSE OUTCOMES**

**(2019-2020)**

**COURSE OUTCOMES (CO)**

**SEMESTER-I**

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**CO5:** Understand the different endocrine hormones and molting process.

**SEMESTER-III**

**FISH NUTRITION AND 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)**

### **FRESH WATER AND 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.

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**AQUACULTURE TECHNOLOGY COURSE OUTCOMES**

**(2020-2021)**

**COURSE OUTCOMES (CO)**

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#### **SEMESTER-V (Paper-V)**

### **FISH HEALTH MANAGEMENT**

#### **Course Outcomes:**

On the completion of the course the student should be able to –

**CO1:** Understand and apply the fish pathology

**CO2:** Identify different pathogens affecting the fin fish and give solutions to diseases

**CO3:** Solve problems related to the pathogens affecting the shell fish

**CO4:** Differentiate between nutritional and environmental diseases

**CO5:** Analyze the fish health management strategies

#### **SEMESTER-V (Paper-VI)**

### **FISHERIES EXTENSION, ECONOMICS & MARKETING**

#### **Course Outcomes:**

On the completion of the course the student should be able to –

**CO1:** Identifies the importance of fisheries in Economics

**CO2:** Understands the marketing techniques of fish products

**CO3:** Analyze the socio-economic conditions of fisherman in their vicinity

**CO4:** understands the importance of fisheries extension methods in rural development

**CO5:** Understand and apply the new trends in aquaculture through aqua farmers

## **SEMESTER-VI (Paper- VII A ELECTIVE)**

### **ORNAMENTAL FISHERY**

#### **Course Outcomes:**

On the completion of the course the student should be able to –

**CO1:** Understand the present status of the aquarium trade and different aquarium accessories.

**CO2:** Understand and apply the management of freshwater ornamental fishes.

**CO3:** Understand and analyze the management of marine ornamental fishes

**CO4:** understand and apply the aquarium management of aquarium.

**CO5:** Identify the commercial importance of aquarium fish and plants.

## **SEMESTER-VI**

### **Cluster Elective Paper- VII-IA: FISH PROCESSING TECHNOLOGY**

#### **Course Outcomes:**

On the completion of the course the student should be able to –

**CO1:** Understand and apply the principles of fish preservation

**CO2:** Understand and apply the different methods of fish preservation.

**CO3:** Differentiate between traditional and advanced methods of preservation.

**CO4:** Understand and apply the standard procedures for packing and storage.

**CO5:** Analyze the prospects and constraints in exporting of fish products

## **SEMESTER-VI**

### **Cluster Elective Paper-VII-IB: FISHERY MICROBIOLOGY AND FISHERY BY-PRODUCTS**

#### **Course Outcomes:**

On the completion of the course the student should be able to –

**CO1:** Understand the different types of microbes and their life cycles.

**CO2:** Understand different types of aquatic microflora and culture techniques.

**CO3:** Understand the microflora which can spoil the fish.

**CO4:** Understand and apply the information about fish By-products.

**CO5:** Understand the information of fish value added products.

## SEMESTER-VI

### Cluster Elective Paper-VII-IC: QUALITY CONTROL IN PROCESSING PLANTS

#### Course Outcomes:

On the completion of the course the student should be able to –

**CO1:** Understand the importance of quality management in processing plants

**CO2:** Analyze the different statistical methods of quality control

**CO3:** Understand the importance of certification of exporting the fish products

**CO4:** Understand and identify the infections and their identification techniques of fish

**CO5:** Understand the importance of quality control in processing plants

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**AQUACULTURE TECHNOLOGY COURSE OUTCOMES**

**(2021-2022)**

**COURSE OUTCOMES (CO)**

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**CO5:** Communicate various schemes available for the welfare of fishermen's community

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**(2022-2023)**

**COURSE OUTCOMES (CO)**

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#### **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 to 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.

  
Principal

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