## DEPARTMENT OF HORTICULTURE

# **COURSE OUTCOMES**

## **SEMESTER - I**

## **CORE-I PRINCIPLES OF HORTICULTURAL CROPS**

#### **LEARNING OUTCOMES**

- Understand the significance of horticulture, and know about botanical Names.
- Production in national and international level.
- Know about Definitions and science terminology of plants
- advantages and disadvantages of propagation
- Understand about Purpose of nurseries
- Know and understand about types of gardens
- Understand about significance and maintenance of lawn, plants
- Know about orchard cultivation
- Learn about types of culture, irrigation process etc.,

#### CORE-II FUNDAMENTS OF PLANT PHYSIOLOGY

### **LEARNING OUTCOMES**

- Understand about objectives of plant physiology
- Understand about relation water and plants
- Role of plants hormones Understand about differences between C3, C4, and CAM with examples.
- Learn about definitions, science terminology
- Understand about Seed dormancy
- Provide hands-on-experience

## CORE-III FLORICULTURE MANAGEMENT AND PLANT PATHOLOGY

- Understand the floriculture management.
- Know and learn about plant pathology.
- Understand about causes of diseases in various crops.

## **SEMESTER-II**

# CORE- I METHODS OF PLANT BREEDING TISSUE CULTURE ORNAMENTAL HORTICULTURE AND LANDSCAPING

#### **LEARNING OUTCOMES**

- Learn Understand about definitions, know about methods of plants breeding
- Understand the significance of tissue culture and in vitro culture
- Production of ornamental horticulture in AP
- Know about ornamental flowers and plants
- Understand the design of landscaping and its maintenance in various Scaping places.

## CORE-II PRODUCTION TECHNOLOGY OF FRUIT CROPS

#### **LEARNING OUTCOMES**

- Know and understand about Climatic and Non climatic fruits
- Learn about morphology of various fruits
- Know Understand about Culture practice of fruits

# CORE-III SILVI HORTICULTURE MEDICINAL &AROMATIC PLANTS AND PEST

- Know Understand about Silviculture of important agroforestry species
- Understand the role of Medicinal & Aromatic Plants
- Identification and Description of Pests and observe in various c

## **SEMESTER-III**

## CORE - I INTRODUCTION TO SOIL SCIENCE

#### LEARNING OUTCOMES

- On successful completion of this course, the student will be able to"
- Understand basic principles of Soil science
- Understand the soil formation, soil profile, and soil physical properties
- Understand the elementary knowledge of soil taxonomy
- Understand s the problematic soils and their management
- Understand soil organic matter composition and its influence on soil microorganisms

#### CORE- II DISEASES OF HORTICULTURAL CROPS AND THEIR

#### MANAGEMENT

#### **LEARNING OUTCOMES**

- The students should understand the importance of the course as it deals with crop management and yields of the crop.
- The nature of damage, extent of damage, ETLs remedial measures for crop protection.
- The students should identify the casual organism by seeing the symptoms and nature of damage.
- The student should know the spraying and spraying equipment and precautions to be taken while dealing with plant protection equipment.
- Quick diagnosis, Quick decision, and correct action are very important Lecture outlines.

### CORE- III PRODUCTION TECHNOLOGY OF VEGETABLE CROPS

### **LEARNING OUTCOMES**

On successful completion of this course, the students will be able to:

Distinguish the growing of vegetables according to season and climate

- Get detailed knowledge on cultivation aspects of different vegetables
- Understand and explain the special intercultural operations done in vegetable crops
- Study of morphology and taxonomy of different vegetable crops
- Study of different varieties of vegetable crops
- Identify the diseases and pests of vegetable crops and their management

# SEMESTER - IV

### CORE - I ORGANIC FARMING

#### **LEARNIG OUTCOMES**

- Helps in understanding the role of an organic grower.
- Help in understanding the scope and opportunities of organic farming.
- Can develop all organic production system.

# CORE –II PRODUCTION TECHNOLOGY OF FLOWERS MEDICINAL AND AROMATIC PLANTS

- Important comprehensive knowledge about the production technology of medicinal and aromatic crops.
- Study of herbal industry Indian system of medicine indigenous traditional Knowledge, IPR issues classification of medicinal crops system of cultivation organic production, role of institutions and NGOs in production, GAP in medicinal crops production.
- Knowledge of production technology for senna periwinkle, coleus, Lily, aloe vera.

# CORE – III PESTS OF HORTICULTURAL CROPS AND THEIR MANAGEMENT

#### **LERNING OUTCOMES**

- The students will learn about the types of insects attacking different horticultural crops and their appropriate management. For example, for vegetable crops, the students will recommend botanical pesticides or green label chemical pesticides to avoid residue problems in vegetables.
- similarly, the students will learn the sense of beautification of the environment through ornamental horticulture.
- This course also lays the foundation for higher studies in the field of entomology The students will also develop skills in apiculture, sericulture, and lac culture which leads to the entrepreneurship opportunities.

# CORE – IV PRODUCTION TECHNOLOGY OF SPICES AND PLANTATION CROPS

### **LEARNING OUTCOMES**

- Understand scope, processing and production of spices and plantation crop.
- Know about processing methods for value addition of spices and condiments.
- Discuss standards, adulteration and packaging of spices and condiments.

# CORE – V MANURES, FERTILIZERS AND SOIL FERTILITY MANAGEMENT

- The students get knowledge about different kind of manures, fertilizers
- **❖** The students will learn how to maintain the soil health.
- The students acquire practical knowledge of nutrient analysis soil.

# CORE - VI MUSHROOM CULTURE AND TECHNOLOGY

- Identify edible types of mushroom
- Gain the knowledge of cultivation of different types of edible mushroom sand spawn production
- Manage the diseases and pests of mushrooms
- Learn a means of self-employment and income generation