SRI S.RAMASAMY NAIDU MEMORIAL COLLEGE
SATTUR- 626 203
(An Autonomous institution affiliated to the Madurai Kamaraj University, Madurai)
(Re-Accredited with Grade ‘A’ by NAAC)

DEPARTMENT OF BOTANY
(For those who are joining in 2016-2017 and after)

Allied - BOTANY

(Syllabus for III and IV Semesters)
(Effective from the academic year 2016 – 2017)
## THIRD SEMESTER

<table>
<thead>
<tr>
<th>Course components</th>
<th>Subjects</th>
<th>Subject Code</th>
<th>Inst. Hrs./Week</th>
<th>Credits</th>
<th>Exam Hours</th>
<th>Max. Marks</th>
<th>Int. marks</th>
<th>Ext. marks</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Part - III Allied Subject II</td>
<td>Paper - I Plant Diversity Part –I (CRYPTOGAMS) &amp; Plant Anatomy</td>
<td>U16BOA31</td>
<td>4</td>
<td>4</td>
<td>3</td>
<td>25</td>
<td>75</td>
<td>100</td>
<td></td>
</tr>
<tr>
<td>Botany Practical - I</td>
<td></td>
<td>U16BOA4P1</td>
<td>2</td>
<td>-</td>
<td>-</td>
<td>Examination will be held in IV Semester</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

## FOURTH SEMESTER

<table>
<thead>
<tr>
<th>Course components</th>
<th>Subjects</th>
<th>Subject Code</th>
<th>Inst. Hrs./Week</th>
<th>Credits</th>
<th>Exam Hours</th>
<th>Max. Marks</th>
<th>Int. marks</th>
<th>Ext. marks</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Part - III Allied Subject II</td>
<td>Plant Diversity Part II (PTERIDOPHYTES &amp; PHANEROGAMS) &amp; PLANT PHYSIOLOGY</td>
<td>U16BOA41</td>
<td>4</td>
<td>4</td>
<td>3</td>
<td>25</td>
<td>75</td>
<td>100</td>
<td></td>
</tr>
<tr>
<td>Botany Practical - I</td>
<td></td>
<td>U16BOA4P1</td>
<td>2</td>
<td>2</td>
<td>3</td>
<td>40</td>
<td>60</td>
<td>100</td>
<td></td>
</tr>
</tbody>
</table>
SYLLABUS

Programme: B.Sc., Zoology
Sememster: III
Part III: Allied Subject II – Paper I

Subject Code: U16BOA31
No.of Hours allotted: 4 / Week
No.of Credits: 4

Title of the Paper: Plant Diversity Part –I (CRYPTOGAMS) & Plant Anatomy

OBJECTIVES
To enable the students to

- understand the character and life cycle of Algae
- understand the various forms of Fungi
- know the characters of Bryophytes
- understand the structure of various tissues and their functions
- study the internal structure of stem and root

UNIT – I Algae

1. Introduction
2. General Characters
3. Structure and life cycle of the following (need not study the development of sex organs)
   a) Cyanophyceae - Oscillatoria
   b) Chlorophyceae - Oedogonium
   c) Phaeophyceae - Sargassum
4. Economic Importance of Algae

UNIT – II Fungi

1. Introduction
2. General Characters
3. Structure and life cycle of the following
   a. Ascomycetes - Aspergillus
   b. Basidiomycetes - Agaricus
4. Economic Importance of Fungi (brief study)
UNIT – III  Bryophytes

1. Introduction
2. General Characters
3. Structure and life cycle of *Funaria* (need not study the development of sex organs)

PLANT ANATOMY
UNIT – IV

1. Simple and Permanent tissues
   a) Parenchyma
   b) Collenchyma
   c) Sclerenchyma
   Structure and functions
2. Complex permanent tissues
   Structure, composition and functions of Xylem and Phloem

UNIT – V

1) Primary structure of Dicot stem and Dicot root
2) Normal secondary thickening in Dicot stem and root
3) Structure of Typical Dicot leaf.

Text Books:


Reference Books:


Prepared by:

Signature :
SRI S.RAMASAMY NAIDU MEMORIAL COLLEGE
(Affiliated to Madurai Kamaraj University, An Autonomous and a Linguistic Minority Institution Re-Accredited with ‘A’ Grade by NAAC with CGPA of 3.22 in 2012)
SATTUR-626203
DEPARTMENT OF BOTANY
(For those who are joining in 2016-2017 and after)
SYLLABUS
Programme : B.Sc., Zoology                      Subject Code : U16BOA41
Sememster : IV                                  No.of Hours allotted : 4 /Week
Part III : Allied Subject II – Paper II         No.of Credits : 4

Title of the Paper : Plant Diversity Part II (PTERIDOPHYTES & PHANEROGAMS) & PLANT PHYSIOLOGY

OBJECTIVES :
To enable the students to
- Understand the characters of Pteridophytes and Gymnosperms
- Understand the classification of Bentham and Hooker’s system
- Identify various angiospermic plants
- Understand the mechanism of absorption of water
- Acquire knowledge on photosynthesis

PHANEROGAMS
UNIT – I  PTERIDOPHYTES
* Introduction
* General Characters
* Structure and life cycle of *Selaginella.* (need not study the development of sex organs)

UNIT – II  GYMNOSPERMS
* Introduction
* General Characters
* Structure and life cycle of *Pinus.* (need not study the development of sex organs)

UNIT – III  TAXONOMY
* Bentham and Hooker’s system of classification
* Study of the following families and economic importance
  * Annonaceae
  * Rutaceae
  * Caesalpiniaeae

UNIT – IV
* Study of the following families and economic importance
  * Asclepiadaceae
  * Lamiaceae
  * Euphorbiaceae
  * Poaceae
UNIT – V

PLANT PHYSIOLOGY:

* Absorption of water
* Ascent of sap (Dixon’s cohesion theory only)
* Photosynthesis – mechanism of light reaction – cyclic & non cyclic photophosphorylation, dark reaction C3 & C4 cycle only.
* Growth hormones – A brief account – physiological role of Auxins, Gibberellins, Cytokinins, ABA and Ethylene.

Text Books


Reference Books:


Prepared by:

Signature:
SRI S. RAMASAMY NAIDU MEMORIAL COLLEGE
(Affiliated to Madurai Kamaraj University, An Autonomous and a Linguistic Minority Institution Re-Accredited with ‘A’ Grade by NAAC with CGPA of 3.22 in 2012)

SATTUR-626203
DEPARTMENT OF BOTANY
(For those who are joining in 2016-2017 and after)

SYLLABUS

Programme : B.Sc., Zoology
Subject Code : U16BOA4P1
Semester : III & IV
No.of Hours allotted : 2/Week
Part III : Allied Subject Pratical paper
No.of Credits : 2

Title of the Paper : Plant diversity part i & ii, plant anatomy and plant physiology

OBJECTIVES :

- To train them to draw neatly labeled diagrams
- To train them to prepare micro preparation of materials
- To train them to take sections of given plant materials
- To learn to mount floral parts on a given plant materials
- To understand simple set ups in plant physiology

1. Micropreparation of plants mentioned in plant diversity part I & II of the syllabus

2. Section cuttings and submission of slides – Selaginella and Pinus

3. Spotters - identification of specimens or slides from Algae, Fungi, Bryophytes, Pteridoplytes, Gymnosperms and Plant anatomy included in the syllabus.

4. Section cuttings of dicot stem and dicot root.

5. To make dissections using dissection microscope of the floral parts of angiospermic plants and to bring out the salient features (floral diagrams also expected)

6. To assign the given plants to its natural order

7. To describe plants in technical terms

8. To describe simple set ups in plant physiology


Prepared by:

Signature :
B.Sc. Botany Ancillary Practical
(Question Pattern)

Cryptogams, Plant Anatomy, Pteridophytes, Phanerogams and plant Physiology
Subject Code : BBOAS4P1

Time : 3 hrs  
Max. Marks : 60

1. Make suitable micro preparations of A and B. Stain and mount in glycerine.
   Identify, draw labeled sketches giving reasons. Submit slides for valuation.
   \( (2 \times 5 = 10 \text{ Marks}) \)

2. Take T.S. of specimen C. Stain and mount in glycerine. Identify, draw labeled sketch giving reasons, submit slide for valuation.
   - 5 marks

3. Describe D in technical terms. Draw labeled sketches including L.S. of flower.
   Construct the floral diagram and floral formula. - 10 marks

4. Comment on the Physiology set up. E - 5 marks

5. Identify and write notes on spotters F, G, H, & I - (4 x 5 = 20 Marks)

6. Observation note book - 10 marks

Key and Scheme of Valuation:

1. A & B - Vegetative, Material from plant diversity. (included in the syllabus)
   \[
   \begin{align*}
   \text{Slide} & \quad - 2 \text{ marks} \\
   \text{Identification} & \quad - 1 \text{ marks} \\
   \text{Diagram} & \quad - 1 \text{ marks} \\
   \text{Notes} & \quad - 1 \text{ marks} \\
   \end{align*}
   \]
   \( (2 \times 5 = 10 \text{ Marks}) \)

2. C – Any Angiosperm specimen Anatomy Dicot stem, (or) root.
   \[
   \begin{align*}
   \text{Slide} & \quad - 2 \text{ marks} \\
   \text{Identification} & \quad - 1 \text{ marks} \\
   \text{Diagram} & \quad - 1 \text{ marks} \\
   \text{Notes} & \quad - 1 \text{ marks} \\
   \end{align*}
   \]------5 marks

3. Any Angiosperm specimen. (included in the syllabus)
   Description in technical terms - 4 marks
   L.S. of flower - 2 marks
   Other floral parts - 2 marks
   Floral diagram - 1 marks
   Floral formula - 1 marks
   ------10 marks

4. E – Any Physiology set up.
   Identification - 1 mark
   Diagram - 1 marks
   Description - 3 marks
   ------5 marks

   \[
   \begin{align*}
   \text{Identification} & \quad - 1 \text{ marks} \\
   \text{Diagram} & \quad - 1 \text{ marks} \\
   \text{Notes} & \quad - 3 \text{ marks} \\
   \end{align*}
   \] (4x5=20 Marks)
SRI S.RAMASAMY NAIDU MEMORIAL COLLEGE
(Affiliated to Madurai Kamaraj University, An Autonomous and a Linguistic Minority Institution
Re-Accredited with ‘A’ Grade by NAAC with CGPA of 3.22 in 2012)

SATTUR-626203

DEPARTMENT OF BOTANY
(For those who are joining in 2016-2017 and after)

BOTANY

(Syllabus for V and VI Semesters)

(Effective from the academic year 2016 – 2017)
### FIFTH SEMESTER

<table>
<thead>
<tr>
<th>Course components</th>
<th>Subjects</th>
<th>Subject Code</th>
<th>Inst. Hrs./Week</th>
<th>Credits</th>
<th>Exam Hours</th>
<th>Max. Marks</th>
<th>Int. marks</th>
<th>Ext. marks</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Part - III</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Elective (Inter disciplinary)</td>
<td>Paper III Horticulture and Landscaping</td>
<td>U16ZOE51</td>
<td>4</td>
<td>4</td>
<td>3</td>
<td>25</td>
<td>75</td>
<td>100</td>
<td></td>
</tr>
<tr>
<td>(Select any One)</td>
<td>Paper III Green Resources</td>
<td>U16ZOE52</td>
<td>4</td>
<td>3</td>
<td>3</td>
<td>25</td>
<td>75</td>
<td>100</td>
<td></td>
</tr>
<tr>
<td><strong>Part – IV</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Skill based Subject</td>
<td>Paper IV Biofertilizers</td>
<td>U16ZOS52</td>
<td>2</td>
<td>2</td>
<td>2</td>
<td>25</td>
<td>75</td>
<td>100</td>
<td></td>
</tr>
</tbody>
</table>

### SIXTH SEMESTER

<table>
<thead>
<tr>
<th>Course components</th>
<th>Subjects</th>
<th>Subject Code</th>
<th>Inst. Hrs./Week</th>
<th>Credits</th>
<th>Exam Hours</th>
<th>Max. Marks</th>
<th>Int. marks</th>
<th>Ext. marks</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Part-III</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Elective (Inter Disciplinary)</td>
<td>Paper IV Medicinal Botany</td>
<td>U16ZOE61</td>
<td>4</td>
<td>3</td>
<td>3</td>
<td>25</td>
<td>75</td>
<td>100</td>
<td></td>
</tr>
<tr>
<td>(Select any One)</td>
<td>Paper IV Plant Ecology and Biodiversity</td>
<td>U16ZOE62</td>
<td>4</td>
<td>3</td>
<td>3</td>
<td>25</td>
<td>75</td>
<td>100</td>
<td></td>
</tr>
<tr>
<td><strong>Part – IV</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Skill based Subject (Inter Disciplinary)</td>
<td>Paper VI Mushroom Technology</td>
<td>U16ZOS62</td>
<td>2</td>
<td>2</td>
<td>2</td>
<td>25</td>
<td>75</td>
<td>100</td>
<td></td>
</tr>
</tbody>
</table>
Programme : B.Sc., Zoology  
Subject Code : U16ZOE51  
Semester : V  
No. of Hours allotted : 4/ Week  
Part IV : Elective Subject- Paper III  
No. of Credits : 4

Title of the Paper : HORTICULTURE AND LANDSCAPING

Objectives:
To enable the students to
- know the importance of horticulture in day today life
- understand the various types of horticultural practices
- train techniques of vegetative propagation and various types of gardening.
- develop the skill of creating recreation facilities and leisure pursuits in gardening.

Unit – I Introduction
1. Introduction to Horticulture
   Special features of Horticulture
   Divisions of Horticulture
2. Garden and its parts Components
   Living elements, Hedges, Edges – trees
   Introduction:
   Spade, Sprayer, Rose Can / Water Can, Pruning scissors, Digging fork, Garden Rake, Tiller, Pick- axe   and secatuer
4. Gardening and land scaping.
   Introduction
   Formal Style
   Informal Style

Unit – II Preparation and Maintenance of Garden
2. Irrigation systems-Introduction-factors affecting irrigation-systems of irrigation.
4. Training -principles of training and methods of training
5. Pruning-Methods and uses of pruning.
Unit – III Propagation of Horticultural Plants

Sexual Propagation: Steps in sexual propagation- Disadvantages

Vegetative Propagation
1. Cuttage – Stem, Root and Leaf
2. Layerage – Ground layering, Air layering
4. Transplanting – Bare-rooted – Balling and Burlapping

Unit – IV Different Kinds of Gardening

Lawn – Establishment and Maintenance
1. Kitchen garden - Planning. Layout and Maintenance
2. Water garden – Introduction and different types.
3. Orchard – Planning and lay out.

Unit – V Indoor Gardening
1. Potted plants – Potting, Hanging pots.
2. Bonsai, Terrarium, Bottle garden, Dish garden
3. Green Houses, Terrace garden, Rockery
4. Soil less Culture, Hydrophonics, Sand Culture and aerophonics

Text Books:

References:

Prepared by:

Signature :
SYLLABUS

Programme : B.Sc., Zoology
Semester : V
Part IV : Elective Subject- Paper

Subject Code : U16ZOE52
No.of Hours allotted : 4/ Week
No.of Credits : 4

Title of the Paper : GREEN RESOURCES

OBJECTIVES
To enable the students to
• realize the fact that plants are the part and parcel of life on earth
• know the various usage of plants to society
• study the use of plants as food, cloth and shelter
• understand the use of plants as medicine
• appreciate the use of plants as energy source

UNIT – I
Food Resources- plant sources and their uses of the following:
1. Cereals : Paddy, Sorghum, Wheat and Maize
2. Millet : Pearl millet and finger millet
3. Pulses : Red gram, Bengal gram, Horse Gram and Garden pea
4. Fruits : Mango, Apple, Grapes, Pine apple, Jack fruit and Pomegranate
(12 Hours)

UNIT – II
Fibre, latex, dye, Resin and Gum Resources- plant sources and their uses of the following:
1. Fibre : Cotton, Jute, Agave
2. Latax : Rubber
3. Dye : Haematoxylin and Indigo
4. Resin and Gums: Canada Balsam, Turpentine and Gum arabic
(12 Hours)

UNIT – III
Nut, Beverage, Wood and Vegetable Resources- plant sources and their uses of the following:
1. Nuts : Cashew nut, Ground nut and Almond
2. Beverage : Coffee, Tea and Cocoa
3. Wood : Teak, Rose wood and Ailianthus
4. Vegetables : Brinjal, tomato, Bhendi, potato
(12 Hours)

UNIT – IV
Medicinal Resources- plant sources and their uses of the following:
1. Spices and Condiments : Ginger, Cardamom, Clove, Pepper and Cinnamon
2. Medicinal : Neem, Thoothuvalai, Ocimum
3. Tannins : Myrobalan
4. Narcotics : Tobacco and Ganja
(12 Hours)
UNIT – V

Energy Resources and oil Resources- plant sources and their uses of the following:
   Oil: Sandal oil, Coconut oil and Seasamum oil   (12 Hours)

Text Book

Reference Books

Prepared by:

Signature :
Title of the Paper: BIOFERTILIZERS

Objectives:
To enable the students to
- have an idea about soil microbes
- appreciate the beneficial uses of microbes
- understand the merits of Biofertilizers
- evaluate the response of crops to various Biofertilizers

Unit I: Introduction
- Introduction
- Importance of Biofertilizers
  Organic farming- Vermicomposting & Panchakavya
  Symbiotic $N_2$ fixers
  Definition- *Rhizobium*- Isolation of *Rhizobium*- Mass production of Rhizobium- Field application of *Rhizobium* inoculants -Crop response

Unit II:

Asymbiotic $N_2$ fixers:
- *Azotobacter*- Production of *Azotobacter* inoculants -Field applications- Beneficial roles of *Azotobacter*
- *Azospirillum*- Production of *Azospirillum* inoculants- Field use of *Azospirillum*- Crop response.
Unit III:
- **Blue Green Algae (BGA)** - Production of BGA inoculants- Field use of BGA inoculants
- **Green manure cum Biofertilizer** - Mass cultivation of Azolla- Field application of Azolla

**Text Book:** Materials edited and Consolidated by the Department

**References:**


Prepared by:

Signature :
Title of the Paper: MEDICINAL BOTANY

Objectives:
To enable the students to

- know about the historical background of herbal medicines – scope of raw drugs of plant origin
- understand the importance of plants in curing various diseases
- understand the structure and medicinal value of following phytochemicals
- know the way of preparation of oils and cultivation of selected medicinal plants

Unit I: Introduction

- Historical background of herbal medicines
- Scope of raw drugs of plant origin
- Systems of medicine

A brief account of Siddha and Ayurvedic medicines

Unit II Phytochemicals

- Basic study on the sources, structure and medicinal value of the following phytochemicals:

<table>
<thead>
<tr>
<th>Phytochemicals</th>
<th>Medicinal Plants</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Alkaloids</td>
<td>Catharanthus roseus</td>
</tr>
<tr>
<td></td>
<td>Rauwolfia serpentina</td>
</tr>
<tr>
<td>2. Cardiac glycosides</td>
<td>Digitalis purpurea</td>
</tr>
<tr>
<td></td>
<td>Strophanthus</td>
</tr>
<tr>
<td></td>
<td>Urginea indica</td>
</tr>
<tr>
<td>3. Steroidal Saponins</td>
<td>Dioscorea composita</td>
</tr>
<tr>
<td></td>
<td>Sarsaparilla</td>
</tr>
</tbody>
</table>
Unit III Medicinal Plants

- A very brief knowledge about each of the following medicinal plants with reference to the common name, morphology of the useful parts and important therapeutic values

<table>
<thead>
<tr>
<th>S. No:</th>
<th>Family</th>
<th>Medicinal plants to be studied</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>Caesalpiniaceae</td>
<td>Cassia angustifolia</td>
</tr>
<tr>
<td>2.</td>
<td>Rutaceae</td>
<td>Aegle marmelos</td>
</tr>
<tr>
<td>3.</td>
<td>Meliaceae</td>
<td>Azadirachta indica</td>
</tr>
<tr>
<td>4.</td>
<td>Asclepiadaceae</td>
<td>Hemidesmus indicus</td>
</tr>
<tr>
<td>5.</td>
<td>Lamiaceae</td>
<td>Ocimum sanctum</td>
</tr>
</tbody>
</table>

Unit IV: Medicinal Plants

<table>
<thead>
<tr>
<th>S. No:</th>
<th>Family</th>
<th>Medicinal plants to be studied</th>
</tr>
</thead>
<tbody>
<tr>
<td>6.</td>
<td>Euphorbiaceae</td>
<td>Phyllanthus niruri</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Emblica officinalis</td>
</tr>
<tr>
<td>7.</td>
<td>Piperaceae</td>
<td>Piper nigrum</td>
</tr>
<tr>
<td>8.</td>
<td>Zingiberaceae</td>
<td>Zingiber officinalis</td>
</tr>
<tr>
<td>9.</td>
<td>Liliaceae</td>
<td>Aloe vera</td>
</tr>
<tr>
<td>10.</td>
<td>Poaceae</td>
<td>Cynodon dactylon</td>
</tr>
</tbody>
</table>

Unit V: Extraction and cultivation

- Extraction of Eucalyptus oil
  - Steam distillation
  - Hydro distillation
  - Uses of Eucalyptus oil
- Extraction of Sandalwood oil
  - Steam distillation
  - Hydro distillation
  - Uses of Sandalwood oil
- Cultivation of medicinal plants
  - Catharanthus roseus
  - Gloriosa superba

Text book: Materials edited and consolidated by the Department
References:


Prepared by:

Signature : 
Programme: B.Sc., Zoology

Subject Code: U16ZOE61

Semester: VI

No. of Hours allotted: 4/ Week

Part IV: Elective Subject- Paper

No. of Credits: 4

PLANT ECOLOGY AND BIODIVERSITY

SYLLABUS

Objectives

To enable the students to

- understand the vegetation types
- understand the interaction between the abiotic and biotic factors
- study the ecological adaptations of plants
- analyse the concept of biodiversity and conservation strategies
- appreciate the role of various organization assessing the vegetation

UNIT – I

Ecology as a branch of biology. Brief history of Ecology. Ecological factors – climatic, edaphic and biotic factors; ecosystem dynamics – energy flow. Ecosystem concept and components – biotic and abiotic; ecological pyramids; pond ecosystem; exobiology – an elementary knowledge of the following ecosystems- coral, estuary, tundra, grassland and forest – Tropical rain forest.

(12 Hours)

UNIT – II

Units of vegetation – plant community; Plant formation, plant association and plant consociation – plant succession - Hydrosere. Study of the following with special reference to morphological, anatomical and physiological adaptations: a) Hydrophytes b) Xerophytes and c) Halophytes with special reference to mangroves.

(12 Hours)

UNIT – III

Causes, effects and control measures of the following pollutions - a) Air Pollution b) Water Pollution c) Thermal pollution d) Noise pollution e) Radioactive pollution. Phytoremediation – brief account only. Plant indicators of pollution.

(12 Hours)

UNIT – IV


(12 Hours)
UNIT – V
The measurement of biodiversity – species richness and evenness - alpha (packing), beta (turn over), gamma (accumulation) and mue (mosaicity). A brief knowledge on landscape and LSE category. Application of GIS and GPS. Red Data Book, CITES and CBD (brief account only).

(12 Hours)

TEXT BOOK

REFERENCE BOOKS


Prepared by:

Signature : 
Title of the Paper: MUSHROOM TECHNOLOGY

To enable the students to
- know the nutritional and therapeutic value of mushrooms
- practice the technology of cultivation of prescribed edible mushrooms
- know the techniques of spawn and compost preparation
- know the methods of preservation and food preparation

Unit I

Introduction - Nutritional Value of Mushrooms - Other uses of mushrooms.

Cultivation of White Button Mushroom (Agaricus bisporus) - Compost Preparation - Cultivation on Shelf - Cultivation in Bags - Harvesting & Packing.

Unit II:

Cultivation of Oyster Mushroom (Pleurotus sajor caju) - Facilities Mushroom House - Substrate Preparation - Cultivation: Poly bag method Cube Method - Spawn running - Fruit body production - Harvesting.

Cultivation of Paddy straw mushroom. (Volvariella sps) - Facilities and Materials required - Cultivation Traditional Method - Modern Cultivation Method - Harvesting.

Unit III:

Storage of mushrooms - Short term preservation – long term preservation.

Mushroom food preparations - Soup, Samosa, Curry, Omelet, Pickles.
Text Book:
Materials edited and consolidated by the Department

References:


4. **Mushroom Production** and Processing Technology, Pathak Yadav, Gour, Agrobios (India) Jodhpur.

Prepared by:

Signature :

CHAIRMAN

DEAN