#### Maris Stella College (Autonomous), Vijayawada

Name of the Department: Agriculture & Rural development

Members of the Department:

Name of the HOD: Dr. P. Lakshmana swamy

#### **Profile of every member in the Department**

Name: M. Priyanka

Educational Qualification: M.Sc. Horticulture

Designation: Asst. Professor & Head

Years of experience:

Maris Stella College:

Other Institutions:

G Suite Email Id:

Email Id: priya02194@gmail.com

Contact No: 9490560216

Aadhar No: 362536020355

Languages Known: Telugu, English

Areas of Interest: Land scaping

Vertical gardening

Academic Contribution:

Academic Profile:

Refresher Courses/Orientation Courses/Short Term Courses Attended:

**Research Publications:** 

a) Journals

b) Conference Proceedings

Paper Presentations:

Research Projects: Effect of biocides and ethylene inhibitors on extension of vase life of cut carnation cv. Dona under ambient conditions.

Books Published/Chapters in Books:

Research Guideship:

Workshops/Seminars/Webinars/Conferences Attended:

#### Webinars

1. Participated in the webinar on "Recent trends in Landscape industry" organized by the department of Horticulture, faculty of Agriculture, Annamalai University.

FDPs/Training Programs Attended:

Membership in Professional Bodies:

Recognition/Awards:

#### Overview of the Department

Agriculture plays a vital role in the Indian Economy. Almost 60 percent of the Indian work force is involved in agriculture and there is potential for the substantial growth of the sector. The demand for the trained professional in this field is very high both nationally & Internationally. As the agriculture sector plays a prominent role in the Financial, Cultural and Social Life of India, the stream of Agriculture Science makes a great contribution in the development of an energetic as well as naturally sustainable future of Agriculture Techniques. Thus, in a dire need of meeting the required Agricultural Graduates for Agricultural Sector. A student after completing B.Sc. in Agriculture gets a well-paying job right after Graduation and he can also progress towards Post Graduate degree and Research

#### Goals and Objectives

#### **Objectives**

1. To provide relevant education to the students in Agriculture, Processing and allied sciences.

2. To promote research and training on sustainable development of agricultural productivity, cost reduction in farming, farm mechanization and farm animal production.

3. To encourage the youths on entrepreneurship and rural development

4. To provide consultancy in agriculture to disseminate the technology innovation to the producer through integrated extension activities.

#### Goals

1. Responsive education, farmer –responsive training and services for development of Agriculture and agro-industry.

2. Maris stella College of Agriculture and Rural development visualize the critical importance of Agricultural Information and Communication Technology as an instrument for increasing productivity, rural development and enhancing the quality life of the farmers.

3. Maris stella College of Agriculture and Rural development aims to impart a technical education in Agriculture and related areas. The college creates, integrates, & amp; shares knowledge to meet the objectives

Departmental Activities 2015-2016, 2016-2017, 2017 – 2018, 2018-2019, 2019-2020, 2020-2021, 2021-2022

#### Syllabus

2015-2020, 2020-2025

#### Certificate/ Value Added Courses

2020-2021, 2020-2021
Life skills: Human Values and Professional Ethics
SDC: Vermicompost Production
Certificate Course: Minimum supporting Price for Agriculture crop in Andhra
Pradesh.
2021-2022
Life skills: Computer science
SDC: Zero Budget Natural Farming
Certificate Course: Seed Bed preparation

### **Courses Offered**

#### 2020-2025

#### **SEMESTER -I**

| S.No | COURSE          | CODE           | SE | CREDIT | THEOR | LA |
|------|-----------------|----------------|----|--------|-------|----|
| •    | TITLE           |                | Μ  | S      | Y     | В  |
| 1    | English         |                | Ι  | 3      | 3     | 0  |
| 2    | Fundamentals    | AGRO101        | Ι  | 3      | 2     | 1  |
|      | of Agronomy     |                |    |        |       |    |
| 3    | Fundamentals    | BICM101        | Ι  | 3      | 2     | 1  |
|      | of Plant        |                |    |        |       |    |
|      | Biochemistry    |                |    |        |       |    |
|      | and Soil        |                |    |        |       |    |
|      | Science         |                |    |        |       |    |
| 4    | Fundamentals    | AECO141        | Ι  | 2      | 2     | 0  |
|      | of Agriculture  |                |    |        |       |    |
|      | Economics       |                |    |        |       |    |
| 5    | Fundamentals    | <b>HORT181</b> | Ι  | 3      | 2     | 1  |
|      | of Horticulture |                |    |        |       |    |
| 6    | Rural           | AEXT 191       | Ι  | 2      | 2     | 0  |
|      | Sociology,      |                |    |        |       |    |
|      | Educational     |                |    |        |       |    |
|      | Psychology      |                |    |        |       |    |
|      | and Human       |                |    |        |       |    |
|      | Values          |                |    |        |       |    |
| 7    | HVPE            | LS-1           | Ι  | 2      | 2     | 0  |
| 8    | Vermicompos     | SDC-1          | Ι  | 2      | 1     | 1  |
|      | t Production    |                |    |        |       |    |
| 9    | MSPA            | CERTIFICAT     | Ι  | 2      | 1     | 1  |
|      |                 | E              |    |        |       |    |

#### SEMESTER-II

| S.No | COURSE  | CODE     | SE | CREDIT | THEOR | LA |
|------|---|----------|----|--------|-------|----|
| •    | TITLE   |          | Μ  | S      | Y     | В  |
| 1    | English   |          | II | 3      | 3     | 0  |
| 2    | Introductory<br>Agrometeorolog<br>y and Climate<br>Change | AGRO 103 | II | 3      | 2     | 1  |

| 3 | Fundamentals<br>of Genetics                   | GPBR 111        | II | 3 | 2 | 1 |
|---|---|-----------------|----|---|---|---|
| 4 | Fundamentals<br>of Entomology-<br>1           | ENTO 131        | II | 3 | 2 | 1 |
| 5 | Soil and Water<br>conservation<br>engineering | AENG 151        | II | 3 | 2 | 1 |
| 6 | Fundamentals<br>of Plant<br>Pathology –I      | PATH 171        | II | 3 | 2 | 1 |
| 7 |   | LS-2            | II | 2 | 2 | 0 |
| 8 | ZBNF  | SDC-2           | II | 2 | 1 | 1 |
| 9 | COMPUTER                                      | CERTIFICAT<br>E | Π  | 2 | 1 | 1 |

### SEMESTER-III

| S.N | COURSE TITLE          | CODE   | SE  | CREDI | THEOR | LAB |
|-----|-----------------------|--------|-----|-------|-------|-----|
| 0.  |                       |        | Μ   | TS    | Y     |     |
| 1   | Crop Production       | AGRO   | III | 3     | 2     | 1   |
|     | Technology (Cereals,  | 201    |     |       |       |     |
|     | Millets and Pulses)   |        |     |       |       |     |
| 2   | Fundamentals of Plant | GPBR   | III | 3     | 2     | 1   |
|     | Breeding              | 211    |     |       |       |     |
| 3   | Fundamentals of       | ENTO   | III | 2     | 1     | 1   |
|     | Entomology II (Insect | 231    |     |       |       |     |
|     | Ecology and Concepts  |        |     |       |       |     |
|     | of IPM)               |        |     |       |       |     |
| 4   | Fundamentals of Plant | PATH27 | III | 2     | 1     | 1   |
|     | Pathology II (Plant   | 1      |     |       |       |     |
|     | Pathology Principles) |        |     |       |       |     |
| 5   | Farm Machinery and    | AENG   | III | 2     | 1     | 1   |
|     | Power                 | 251    |     |       |       |     |
| 6   | Production Technology | HORT   | III | 2     | 1     | 1   |
|     | for Vegetables and    | 281    |     |       |       |     |
|     | Spices                |        |     |       |       |     |

| 7  | Agricultural Finance   | AECO   | III | 2 | 1 | 1 |
|----|------------------------|--------|-----|---|---|---|
|    | and Co-operation       | 241    |     |   |   |   |
| 8  | Fundamentals of        | AEXT   | III | 3 | 2 | 1 |
|    | Agricultural Extension | 291    |     |   |   |   |
| 9  | Economics for Rural    | AERD20 | III | 2 | 2 | 0 |
|    | Development            | 1      |     |   |   |   |
| 10 | Eco-physiology         | CPHY   | III | 2 | 1 | 1 |
|    |                        | 261    |     |   |   |   |

#### **SEMESTER-IV**

| S.No. | COURSE<br>TITLE   | CODE        | SEM | CREDITS | THEORY | LAB |
|-------|---|-------------|-----|---------|--------|-----|
| 1     | Crop Production<br>Technology - II<br>(Oilseeds, Fibre,<br>Sugar, Tobacco<br>and Fodder<br>crops)           | AGRO<br>202 | IV  | 3       | 2      | 1   |
| 2     | Irrigation water<br>management,<br>farming systems<br>and sustainable<br>agriculture                        | AGRO<br>203 | IV  | 3       | 2      | 1   |
| 3     | Agriculture<br>Marketing,<br>Trade, Prices  | AECO<br>242 | IV  | 3       | 2      | 1   |
| 4     | Manures,<br>Fertilizers and<br>Soil Fertility<br>Management   | SSAC 221    | IV  | 3       | 2      | 1   |
| 5     | Production<br>Technology for<br>Ornamental<br>Crops, Medicinal<br>and Aromatic<br>Plants and<br>Landscaping | HORT<br>282 | IV  | 2       | 1      | 1   |
| 6     | Entrepreneurship<br>Development and<br>Business<br>Communication  | AEXT<br>292 | IV  | 2       | 1      | 1   |

| 7  | Renewable        | AENG    | IV | 2 | 1 | 1 |
|----|------------------|---------|----|---|---|---|
|    | energy and Green | 252     |    |   |   |   |
|    | Technology       |         |    |   |   |   |
| 8  | Live-stock and   | LSPM    | IV | 3 | 2 | 1 |
|    | Poultry          | 201     |    |   |   |   |
|    | Management       |         |    |   |   |   |
| 9  | Statistical      | SMCA    | IV | 2 | 1 | 1 |
|    | Methods          | 201     |    |   |   |   |
| 10 | Rural            | PMRD202 | IV | 2 | 2 | 0 |
|    | Development      |         |    |   |   |   |
|    | Planning and     |         |    |   |   |   |
|    | Management       |         |    |   |   |   |

### SEMESTER-V

| S.No. | COURSE             | CODE    | SEM | CREDITS | THEORY | LAB |
|-------|--------------------|---------|-----|---------|--------|-----|
|       | TITLE              |         |     |         |        |     |
| 1     | Geo informatics    | AGRO    | V   | 3       | 2      | 1   |
|       | and                | 301     |     |         |        |     |
|       | Nanotechnology     |         |     |         |        |     |
|       | for Precision      |         |     |         |        |     |
|       | Farming and        |         |     |         |        |     |
|       | Practical Crop     |         |     |         |        |     |
|       | Production         |         |     |         |        |     |
| 2     | Environmental      | CPHY361 | V   | 2       | 1      | 1   |
|       | Studies and        |         |     |         |        |     |
|       | Disaster           |         |     |         |        |     |
|       | Management         |         |     |         |        |     |
| 3     | Principles of      | BICM    | V   | 3       | 2      | 1   |
|       | Food Science and   | 300     |     |         |        |     |
|       | Nutrition          |         |     |         |        |     |
| 4     | Crop               | GPBR    | V   | 3       | 2      | 1   |
|       | Improvement - I    | 311     |     |         |        |     |
|       | (Cereals, Millets, |         |     |         |        |     |
|       | Pulses and         |         |     |         |        |     |
|       | Oilseeds) and      |         |     |         |        |     |
|       | Intellectual       |         |     |         |        |     |
|       | Property Rights    |         |     |         |        |     |
| 5     | Problematic Soils  | SSAC    | V   | 2       | 1      | 1   |
|       | and their          | 321     |     |         |        |     |
|       | Management         |         |     |         |        |     |
| 6     | Protected          | AENG    | V   | 2       | 1      | 1   |
|       | Cultivation and    | 351     |     |         |        |     |

|    | Post-harvest<br>technologies   |             |   |   |   |   |
|----|--|-------------|---|---|---|---|
| 7  | Pests of Field<br>crops and Stored<br>Grain and their<br>Management                          | ENTO<br>331 | V | 3 | 2 | 1 |
| 8  | Diseases of Field<br>and Horticultural<br>Crops and their<br>Management - I<br>(Field Crops) | PATH<br>371 | V | 3 | 2 | 1 |
| 9  | Principles of<br>Integrated Pest<br>and Disease<br>Management                                | PATH<br>372 | V | 2 | 1 | 1 |
| 10 | Rural<br>Industrialization<br>and<br>Entrepreneurship  | RERD<br>203 | V | 2 | 2 | 0 |

#### **SEMESTER-VI**

| S.No. | COURSE TITLE          | CODE | SEM | CREDITS | THEORY | LAB |
|-------|-----------------------|------|-----|---------|--------|-----|
| 1     | Rain fed              | AGRO | VI  | 3       | 2      | 1   |
|       | Agriculture,          | 303  |     |         |        |     |
|       | Watershed             |      |     |         |        |     |
|       | Management and        |      |     |         |        |     |
|       | Principles of         |      |     |         |        |     |
|       | Organic Farming       |      |     |         |        |     |
| 2     | Agriculture           | SMCA | VI  | 2       | 1      | 1   |
|       | Informatics           | 301  |     |         |        |     |
| 3     | Crop Improvement-     | GPBR | VI  | 3       | 2      | 1   |
|       | II (Fibre, Sugar,     | 312  |     |         |        |     |
|       | Starches, Narcotics,  |      |     |         |        |     |
|       | Vegetables, Fruits    |      |     |         |        |     |
|       | and Flowers) and      |      |     |         |        |     |
|       | Principles of Seed    |      |     |         |        |     |
|       | Technology            |      |     |         |        |     |
| 4     | Pest of Horticultural | ENTO | VI  | 3       | 2      | 1   |
|       | Crops and their       | 332  |     |         |        |     |
|       | Management and        |      |     |         |        |     |
|       | Beneficial insects    |      |     |         |        |     |

| 5 | Diseases of Field | PATH | VI | 2 | 1 | 1 |
|---|-------------------|------|----|---|---|---|
|   | and Horticultural | 372  |    |   |   |   |
|   | Crops and their   |      |    |   |   |   |
|   | Management - II   |      |    |   |   |   |
|   | (Horticultural    |      |    |   |   |   |
|   | Crops)            |      |    |   |   |   |
| 6 | Post-harvest      | HORT | VI | 2 | 1 | 1 |
|   | Management and    | 381  |    |   |   |   |
|   | Value Addition of |      |    |   |   |   |
|   | Fruits and        |      |    |   |   |   |
|   | Vegetables        |      |    |   |   |   |
| 7 | Communication     | AEXT | VI | 2 | 1 | 1 |
|   | Skills and        | 391  |    |   |   |   |
|   | Personality       |      |    |   |   |   |
|   | Development       |      |    |   |   |   |
| 8 | Farm Management,  | AECO | VI | 2 | 1 | 1 |
|   | Production and    | 341  |    |   |   |   |
|   | Resource          |      |    |   |   |   |
|   | Economics         |      |    |   |   |   |

#### **SEMESTER-VII**

## Rural Agricultural Work Experience (RAWE) and Agro-Industrial Attachment (AIA)

| S.No. | COURSE TITLE                    | CODE | SEM | CREDITS | THEORY | LAB |
|-------|---------------------------------|------|-----|---------|--------|-----|
| 1     | <b>Rural Agricultural</b>       |      |     |         |        |     |
|       | Work Experience                 | RAWE |     |         |        |     |
|       | (RAWE) and Agro-                |      |     |         |        |     |
|       | Industrial                      | R    |     |         |        |     |
|       | Attachment (AIA)                |      |     |         |        |     |
|       | <b>Crop Production</b>          |      | VII | 5       | 0      | 5   |
|       | Crop Protection                 | Α    |     | 4       | 0      | 4   |
|       | <b>Rural Economics</b>          |      |     | 3       | 0      | 3   |
|       | Extension                       |      |     | 4       | 0      | 4   |
|       | Programme                       | W    |     |         |        |     |
|       | Research Station /              |      |     | 4       | 0      | 4   |
|       | KVK /DAATT<br>Centre activities | F    |     |         |        |     |
|       | and attachment to               | Ε    |     |         |        |     |
|       | Agro based                      |      |     |         |        |     |
|       | industries                      |      |     |         |        |     |

#### **SEMESTER-VIII**

| S.No. | <b>COURSE TITLE</b>     | CODE | SEM  | CREDITS | THEORY | LAB |
|-------|-------------------------|------|------|---------|--------|-----|
| 1     | <b>AELP-Agriculture</b> | AELP | VIII | 20      | 0      | 20  |
|       | Experiential            |      |      |         |        |     |
|       | Learning                |      |      |         |        |     |
|       | Programme               |      |      |         |        |     |

**Students Study Projects** 

2020-2021, 2021-2022 2020-2021, 2021-2022

- 1. Vermicompost production from the agriculture waste.
- 2. Horticulture crops seedling development under shade net.
- 3. Grafting techniques.
- 4. Soil collection and analysis.

**Department Club Activities** 

2015-2016, 2016-2017, 2017 – 2018, 2018-2019, 2019-2020, 2020-2021, 2021-2022

Gallery



### DEMONSTRATION ABOUT FERTILIZER APPLICATION::



meris stella college, beside canara bank, beside LEPL mall Lat N 16° 29' 59.7948" Long E 80° 39' 39.9024" 19/03/21 03:15 PM



meris stella college, beside canara bank, beside LEPL mall Lat N 16° 29' 59.7948" Long E 80° 39' 39.9024" 19/03/21 03:15 PM

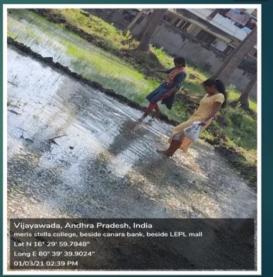


9/03/21 03:12 PM



### FERTILIZER APPLICATION::





# CONVENTIONAL PUDDLING OPERATION FOR PADDY FIELD::



### TRAPPING CROPS :: SUNFLOWER





Lat N 16° 29' 59.7948" Long E 80° 39' 39.9024" 01/04/21 10:06 AM

### TRANSPLATING THE PADDY SEEDLINGS





### IRRIGATION



### FERTILIZER APPLICATION AFTER TRANSPLATING::





### WEED MANAGEMENT IN PADDY FIELD ::





### VERMICOMPOST



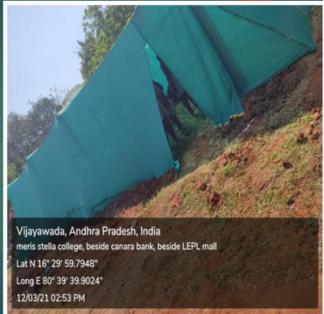


### SHADE NET LAND PREPARATION::









### INNER VEIW OF SHADE NET



### WEEDING IN SHADE NET

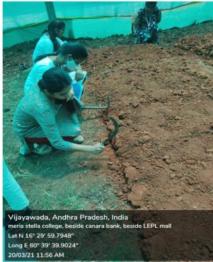


Vijayawada, Andhra Pradesh, India merin stella college, beside canara bank, beside LEPL mall Left 15° 29′ 59 7948° Leng E 60° 39′ 39 9924° 13/30/21 02-54 PM



### SEED BED PREPARATION UNDER SHADE NET







### CLASS ROOM PRATICALS



▶ BIO CHEMISTRY AND SOIL SCIENCE PRATICAL



Vijayawada, Andhra Pradesh, India meris stella college, beside canara bank, beside LEPL mall Lat N 16° 29' 59.7948" Long E 80° 39' 39.9024" 12/03/21 02:01 PM

### EXTERNAL PRACTICALS

- ► AGRONOMY:
- ► VIVA AND IDENTIFICATION







### HORTICULTURE EXTERNAL PRACTICAL





Vijayawada, Andhra Pradesh, India meris stella college, beside canara bank, beside LEPL malt Lat N 16° 29' 59.7948° Long E 80° 39' 39.9024° 29/03/21 03:04 PM

### BIO CHEMISTRY AND SOIL SCIENCE PRACTICAL





Vijayawada, Andhra Pradesh, India meris stella college, beside canara bank, beside LEPL mall Lat N 16° 29' 59.7948" Long E 80° 39' 39.9024" 27/03/21 01:44 PM