#### 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: D. Surekha Paul

Educational Qualification: M.Sc.

Designation: Asst. Professor

Years of experience: 2 years 2 months

Maris Stella College:

Other Institutions: Green fields institute of agriculture research and training, Vijayawada

G Suite Email Id:

Email Id: surekhapaul.sp@gmail.com

Contact No: 7801078078

Aadhar No: 791168265291

Languages Known: Telugu, English, Hindi, Tamil.

Areas of Interest: Genetics and plant breeding, Agronomy, crop physiology.

Academic Contribution:

Academic Profile:

Refresher Courses/Orientation Courses/Short Term Courses Attended:

Research Publications:

- a) Journals
- b) Conference Proceedings

Paper Presentations:

Research Projects:

1. Influence of different priming treatments on seed germination and vigour of wheat (*Triticum aestivum L.*) seeds.

Books Published/Chapters in Books:

Research Guideship:

Workshops/Seminars/Webinars/Conferences Attended:

- 1. One day national webinar on Nutraceuticals and medicinal herbs for health & immunity.
- 2. National seminar at Kanpur
- 3. National seminar at New Delhi, about seed science and technology.

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

2020-2025

Certificate/ Value Added Courses

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		Π	3	3	0
2	Introductory Agrometeorolog y and Climate Change	AGRO 103	II	3	2	1

3	Fundamentals of Genetics	GPBR 111	II	3	2	1
4	Fundamentals of Entomology- 1	ENTO 131	II	3	2	1
5	Soil and Water conservation engineering	AENG 151	II	3	2	1
6	Fundamentals of Plant 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 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 TITLE	CODE	SEM	CREDITS	THEORY	LAB
1	Crop Production Technology - II (Oilseeds, Fibre, Sugar, Tobacco and Fodder crops)	AGRO 202	IV	3	2	1
2	Irrigation water management, farming systems and sustainable agriculture	AGRO 203	IV	3	2	1
3	Agriculture Marketing, Trade, Prices	AECO 242	IV	3	2	1
4	Manures, Fertilizers and Soil Fertility Management	SSAC 221	IV	3	2	1
5	Production Technology for Ornamental Crops, Medicinal and Aromatic Plants and Landscaping	HORT 282	IV	2	1	1
6	Entrepreneurship Development and Business Communication	AEXT 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					
7	technologies Pests of Field crops and Stored Grain and their	ENTO 331	V	3	2	1
8	ManagementDiseases of Fieldand HorticulturalCrops and theirManagement - I(Field Crops)	PATH 371	V	3	2	1
9	Principles of Integrated Pest and Disease Management	PATH 372	V	2	1	1
10	Rural Industrialization and Entrepreneurship	RERD 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 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** 

- 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

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

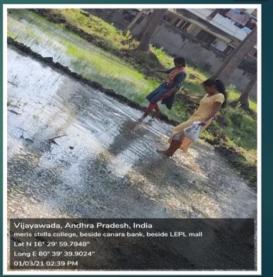


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### FERTILIZER APPLICATION::





# 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



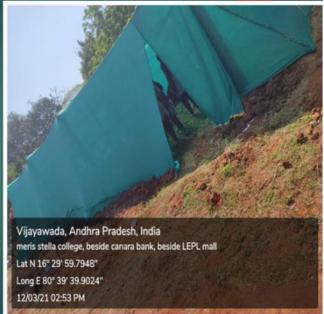


### SHADE NET LAND PREPARATION::









### INNER VEIW OF SHADE NET



### WEEDING IN SHADE NET

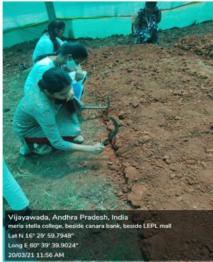


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### SEED BED PREPARATION UNDER SHADE NET







### 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