

A.G & S.G.Siddhartha Degree College of Arts & Science, Vuyyuru.



Organic Farming

2019-20

Department of Zoology

Certificate Course

course code:ZOCC OF -04

Duration : 45 days

20/11/2019 - 07/01/2020

20/01/2020 -05/03/2020

A.G. & S.G. Siddhartha Degree College of Arts & Science

Vuyyuru-521165, Krishna District, Andhra Pradesh

(Managed by: Siddhartha Academy of General & Technical Education, Vijayawada-10)

An Autonomous College in the Jurisdiction of Krishna University

Accredited by NAAC with "A" Grade

ISO 9001:2015 Certified Institution

2019-2020



DEPARTMENT OF ZOOLOGY

Certificate Course
Title: Organic farming

Name of the Lecturer : D.A.Kiranmayee

Class : II BA, MPC(T&E) BZC(T&E)

Duration of the Course : **45 Days** (20.11.2019-- 07.01.20) &
(20.01.2020 to 05.03.2020)

Course Code : ZOO CC OF-04

A.G. & S.G. Siddhartha Degree College of Arts & Science

Vuyyuru-521165, Krishna District, Andhra Pradesh

Certificate Course

Title: Organic farming

Objectives:

- To produce food of high nutritional quality in sufficient quantity.
- To encourages sustainable livelihood of the producers as well as safeguards consumers health
- To improve soil fertility, conserving flora and fauna, increasing genetic diversity, and putting an end to chemical pollution and toxic residues.
- To maintain and increase long term fertility of soil.

Outcomes:

After studying the course, the student will be able to

1. Able to adopt organic farming as his career
2. Use fewer pesticides and recycle animal wastes
3. Able to conserve water and improves crop yields.
4. Able to increase net incomes of farmers
5. Able to increase crop intensity along with availing fair price of the crop grown.

Methodology: Teacher assisted learning Course

Duration: 45 Days

20/11/2019 to 07/01/2020
20/01/2020 to 05/03/2020

2019-20

A.G. & S.G. Siddhartha Degree College of Arts & Science

Vuyyuru-521165, Krishna District, Andhra Pradesh

Certificate course

Student Enrolment Sheet

Class : II BA, MPC(T&E) BZC(T&E)

S. No	Roll No.	Name of the Student	Signature
1	18-001	E.Venkata Ramana	E.Venkata Ramana
2	18-002	T.Naga jwanvi	T.Naga jwanvi
3	18-005	P.Rajeswari	P.Rajeswari
4	18-006	A.Mounika priya	A.Mounika priya
5	18-007	B.Sowmya sri	B.Sowmya sri
6	18-008	P.Kalyani	P.Kalyani
7	18-009	K.Bharath kumar	K.Bharath kumar
8	18-010	G.Veera babu	G.veera babu
9	18-014	MD.Tahaseena	MD.Tahaseena
10	18-015	A.Nahida sulthana	A.Nahida Sulthana
11	18-016	M.Pujitha	M.Pujitha
12	18-018	I.Naga pavani	I.Naga pavani
13	18-019	B.Naga mani	B.Naga mani
14	18-020	K.Lokesh	K.Lokesh
15	18-022	P.Prem kumar	P.Prem Kumar.
16	18-023	V.Rama Krishna	V.Rama Krishna

17	18-024	T.Akhila	T. Akhila
18	18-025	K.Navya	K. Navya
19	18-026	M.Vijaya raju	M. Vijaya Raju
20	18-027	B.Madhu	B. Madhu
21	18-029	K.Trinadh	K. Trinadh
22	18-030	M.Pavani	M. Pavani
23	18-032	S.Jeji	S. Jeji
24	18-231	K.Ramanjaneyulu	K. Ramanjaneyulu
25	18-232	A.Manikanta	A. Manikanta
26	18-233	K.Manasa	K. Manasa
27	18-234	T.Hareesh	T. Hareesh
28	18-235	T.Avinash	T. Avinash
29	18-236	CH.Syam sri	Ch. Syam Sri
30	18-237	N.Puspha sri	N. Puspha Sri
31	18-238	S.Vivek	S. Vivek
32	18-241	T.Karteeq	T. Karteeq
33	18-242	CH.Sumanth	CH. Sumanth
34	18-243	SK.Shafee	SK. Shafee
35	18-245	J.Mounika	J. Mounika
36	18-246	M.Praveen	M. Praveen
37	18-247	K.Raj kumar	K. Raj Kumar
38	18-248	Abdul .Jabbar	Abdul . Jabbar

39	18-249	N.Bhanu	N. Bhanu
40	18-301	K.Mohan srinivas	K. Mohan srinivas
41	18-302	D.Srihari babu	D. Srihari Babu
42	18-304	N.Swathi	N. Swathi
43	18-305	K.Subhashini	K. Subhashini
44	18-307	N.Yamini	N. Yamini
45	18-308	P.Sai chandana	P. Sai Chandana
46	18-310	K.Madhavi	K. Madhavi
47	18-331	K.Yedukondalu	K. Yedukondalu
48	18-332	P.Uday prathap	P. Uday Prathap
49	18-333	T.Bhavya	T. Bhavya
50	18-334	V.Sukumar	V. Sukumar
51	18-335	K.Yesu prema kumari	K. Yesu prema kumari
52	18-403	T. Mahendra	T. Mahendra
53	18-405	Abdul.Rasool	Abdul. Rasool
54	18-406	A.Bhavana	A. Bhavana
55	18-407	M.Sai leela	M. Leela
56	18-410	CH.Vivek	Ch. Vivek
57	18-415	B.Tejeswari	B. Tejaswari
58	18-416	Y.Sri lakshmi	Y. Sri lakshmi
59	18-418	D.Narasimha	D. Narasimha
60	18-419	P.Naga sudharani	P. Naga Sudharani

61	18-420	B.Sweety leela	B.Sweety leela
62	18-421	M.Sai kumar	M. Sai kumar
63	18-422	Md.Azees	Md. AZEES
64	18-423	K.Raja ratnam	K. Raja ratnam
65	18-425	A.Srihari	A. Srihari
66	18-426	S.Jagadeesh	S. Jagadeesh
67	18-429	CH.Vamsi kiran	Ch. Vamsi Kiran
68	18-431	K.Praveen	K. Praveen
69	18-432	T.Niranjan	T. Niranjan
70	18-433	V.Naga sireesha	V. Sireesha
71	18-434	Bibi Rahima	Bibi - Rahima
72	18-435	L.Sai kumar	L. Sai kumar
73	18-436	V.L.S. Chaifanya	V.L.S. Chaifanya
74	18-501	Sd. Reshma	Sd Reshma
75	18-502	M.Hindu priya	M. Hindu Priya
76	18-503	B.Sri sirisha devi	B. Sri sirisha devi
77	18-505	M.Shainy	m. Shainy
78	18-506	K.Gana hemani	K. Gana hemani
79	18-507	S.Naga malleswara rao	S. Naga malleswara
80	18-509	B.Nandini	B. Nandini
81	18-511	J.Deepthi	J. Deepthi
82	18-513	S.A.Suseela devi	S.A. Suseela devi

83	18-514	T.Bhuvaneswari	T. Bhuvaneswari
84	18-516	M.N. Anjana devi	M.N. Anjanadevi
85	18-519	Sd.k.karimulla	Sd.k. Karimulla
86	18-520	B.Teja Prasad	B. Teja Prasad
87	18-522	D.Dinakar	D. Dinakar
88	18-523	V. Anjali	V. Anjali
89	18-524	B.Geethika	B. Geethika

A.G. & S.G. Siddhartha Degree College of Arts & Science
Vuyyuru-521165, Krishna District, Andhra Pradesh

Value Added Course
Title: Organic farming

Test Exercise:

1. Write a brief note on Livestock component in organic farming
2. Write notes on Weed management
3. What do you know on Benefits of organic farming?
4. Give an account on composting methods
5. Write short notes on spices
6. Explain the concept and development of organic farming
7. What is organic farming
8. Write notes on Soil tillage?
9. Explain about Livestock component in organic farming
10. Give an account of Land preparation and mulching

Certificate Course
Title: Organic farming

Key:

1. Nutrient cycling: Nitrogen fixed by leguminous plants and different nutrients devoured by farm animals amid brushing are come back to soil through dung and urine. Overseen painstakingly, farm animals and manures can assume an imperative part in nutrient cycling on the organic farming.

In feedlots, it is important to store and discard manure and urine in a naturally acceptable way. Excreta contain several nutrients (including nitrogen, phosphorus and potassium) and organic matter, which are important for maintaining soil structure and fertility. Stubble in the fields and crop residues are important sources of forage in smallholder systems. Lower mature leaves stripped from standing crops, plants thinned from cereal stands and vegetation on fallow fields offer additional fodder resources related to food cropping. When animals consume vegetation and produce dung, nutrients are recycled more quickly than when the vegetation decays naturally. Grazing livestock transfer nutrients from range to cropland and concentrate them on selected areas of the farm.

2. Managing weeds in ornamental plant production, whether in field soil, greenhouses, or outdoor containers, can be difficult but is essential to successful production. Weeds not only compete with the crop for plant nutrients and sunlight but are also unsightly and do not meet clean nursery quality standards. In addition, ornamental plants infested with certain noxious weeds cannot be sold because of quarantine regulations. Because of the high value of ornamental crops and the limited number of herbicides available, growers often resort to costly hand-weeding. However, many of the strategies used in vegetable row crops or tree crops can be adapted for use in field-grown trees and cut flower production. For example, planting in rows allows the field to be more easily cultivated by hand or mechanically. The use of drip irrigation in tree or shrub production greatly reduces excessively wet areas, thus reducing the germination and growth of weeds.

Whether ornamentals are grown in containers, fields, or greenhouses, there are some control practices common to many methods of production that can reduce the impact of weeds on the crop as listed below in no particular order.

Prevention

The most important factor in overall weed control is to prevent weeds from developing seed and perpetuating the weed problem. Sources of weed introduction include weedy stock, weed seeds in the growing area or nearby, or plant propagules in manure, soil, uncomposted yardwaste, or other organic matter sources. Many growers cultivate or treat the margins of the property with herbicides to reduce the number of windborne or water-carried seeds that can move to the growing area. Screens on open-water inflow sources can be installed to keep out water-borne seeds. When using fine-mesh screens, increasing the surface area of the water intake and periodic debris removal may be needed to avoid clogging of the water flow.

3. Organic farming has many benefits for consumers. First, organic farming, thanks to its particular specifications, forces producers to respect specific quality criteria. In general, organic farming is more widespread than conventional farming: for example, farm animals in organic farming generally benefit from larger areas, with compulsory access to the outdoors for certain animals. For instance, calves raised in organic farming benefit from 4m² per head (for a calf of 300 kg) against only 1.8m² in conventional farming. This broader approach would allow some specialists to obtain more qualitative products that could be tastier for example.

On the other hand, the yields of organic farming are generally lower than those of conventional farming. This means higher operating costs (and therefore higher selling prices). Therefore, in general, the recommended retail price (RRP) for consumers buying from organic farming is higher than the selling prices of traditional agriculture. This poses a number of problems, especially to poor consumers who struggle to have the purchasing power to buy organic food. Prices aren't very different in some products, especially those growing easily without pesticides. Still, others, like meat and dairy, are significantly more expensive in organic farming because they require more work in order to comply with the organic specifications.

4. There are a few different methods of aerobic composting to choose from, and each one has its own unique charm.

In-vessel composting: Vessel composting is a method of production of compost in a sealed container that can help speed the composting process and the decomposition of organic matter by processing large amounts of waste without taking up much space. Plus, it keeps any smells contained – a win for your nose and your neighbors.

Aerated static pile composting: Static pile composting is like a big party to which everyone's invited – just mix your organic materials together in a giant pile and let the good times roll.

Aerated turned windrow composting: The windrow method involves creating long, tall piles of organic matter or biodegradable waste that are turned regularly.

Trench Composting: This type of composting is like a secret underground club for your waste – preparing trench compost means making garden beds, burying your scraps in a trench, and letting the soil and natural decompositions process do the rest

5. These spices are mostly used for flavoring or tempering cooked food and for preparing medicines and dyes etc. Main spices include pepper, chilies, turmeric, ginger, cardamom, clove, areca nut etc.

India is the largest producer of spices with annual output of 4.4 million tons (2005-06). But due to large scale internal consumption it only exports 1.3 lakh tones of spices annually. Table 11.XI presents an account of the area, production and export of spices in India

Pepper (*Piper nigrum*)

Black pepper is a climber shrub growing wild in the forest tracts of Kerala. India is the second largest producer of this spice in the world after Indonesia. The black pepper is the unripe dried fruit while white pepper is the skinned ripe fruit. It is used for giving flavour to foodstuffs.

Conditions of Growth

Pepper is the plant of hot and humid climate. It requires 10°C-30°C of temperature, 150 cm-200 cm of rainfall and well drained clayey loam soils rich in humus. It can also be grown on a variety of soils ranging from red loam to sandy loam and late rites. Its cultivation may be carried on from sea level up to a height of 1050m along the hill slopes but coastal sandy plains are generally avoided.

6.Organic farming has been a way of life and a tradition in our Indian farming system for centuries; it is not a new concept.

- Organic farming has its own system for controlling pests and diseases in crop and livestock production, which avoids the use of various synthetic chemicals or gene manipulation.
- There are various types of organic farming that are practised in the country's diverse climate, with forest produce falling under this category by default.
- Organic farming, among other types of farming systems, is gaining popularity due to its positive impact on the environment.
- Furthermore, organic farming is labour intensive, which increases rural employment and long-term improvements in resource quality.
- Organic farming is based on an intimate understanding of nature's laws and rules.
- In today's terminology, it is a farming system method that primarily aims at cultivating the land and raising crops in such a way that the soil remains alive and healthy through the use of organic wastes and other biological materials, as well as beneficial microbes (biofertilizers).
- They release nutrients to increase crop yield and sustainability. "Organic agriculture is a production system that promotes the health of soils, ecosystems, and people."
- Organic agriculture combines tradition, innovation, and science to benefit the shared environment and promote fair relationships and a good quality of life for all involved.

7.Organic farming also known as **ecological farming or biological farming**, is an agricultural system that **uses organic fertilizers such as compost manure, green manure, and bone meal** and emphasizes techniques such as **crop rotation and companion planting**.

- **Organic farming** is an agricultural practice that **makes use of biological pesticides and fertilizers derived from plant or animal waste**.
- The **goal** of organic farming is to create foods that are of the highest quality, have a high nutritional value, and are free of chemicals.
- It strives to develop a **sustainable system** that conserves energy, soil, and water; while at the same time providing general care for the environment.
- In fact, the use of chemical pesticides and synthetic fertilizers was the cause of the environmental harm that organic farming was intended to address.
- Or to put it another way, organic farming is a new type of agriculture or farming that **improves, maintains, and repairs the ecological balance**.
- Organic standards are intended to allow the use of naturally occurring substances while **prohibiting or strictly limiting the use of synthetic substances**.

- For example, naturally occurring pesticides such as pyrethrin are permitted, whereas synthetic fertilizers and pesticides are generally prohibited.
- Copper sulphate, elemental Sulphur, and Ivermectin are examples of permitted synthetic substances.
- Genetically modified organisms, nanomaterials, human sewage sludge, plant growth regulators, hormones, and antibiotic use in livestock husbandry are all prohibited.
- Organic farming advocates benefits such as sustainability, openness, self-sufficiency, autonomy and independence, health, food security, and food safety.

8 Tillage and crop rotations are production practices that influence soil health in ways that impact both long run productivity and environmental outcomes, such as nutrient run-off and carbon sequestration. These practices can also be adjusted in response to evolving weather and climate patterns in farmers' production environments.

- Tillage—turning the soil to control for weeds and pests and to prepare for seeding—has long been part of crop farming. However, intensive soil tillage can increase the likelihood of soil erosion, nutrient runoff into nearby waterways, and the release of greenhouse gases into the atmosphere. A reduction in how often or how intensively cropland is tilled enables the soil to retain more organic matter, which leaves the soil less susceptible to wind and water erosion and helps store, or "sequester," carbon. Farmers' choices about soil preparation, including tillage depth and the number of tillage operations, can reduce weed growth, improve nutrient management, and influence crop seeding. In general, less disturbance of soil can lead to more organic matter and lower potential for soil erosion and compaction. No-till is generally the least intensive form of tillage, while conventional tillage is the most intensive form of tillage. Conservation tillage, in which at least 30 percent of plant residue remains on the field following harvest, is less intensive than conventional tillage.
- Crop rotations are planned sequences of crops over time on the same field. Rotating crops provides productivity benefits by improving soil nutrient levels and breaking crop pest cycles. Farmers may also choose to rotate crops in order to reduce their production

9. Nutrient cycling: Nitrogen fixed by leguminous plants and different nutrients devoured by farm animals amid brushing are come back to soil through dung and urine. Overseen painstakingly, farm animals and manures can assume an imperative part in nutrient cycling on the organic farming.

In feedlots, it is important to store and discard manure and urine in a naturally acceptable way. Excreta contain several nutrients (including nitrogen, phosphorus and potassium) and organic matter, which are important for maintaining soil structure and fertility. Stubble in the fields and crop residues are important sources of forage in smallholder systems. Lower mature leaves stripped from standing crops, plants thinned from cereal stands and vegetation on fallow fields offer additional fodder resources related to food cropping. When animals consume vegetation and produce dung, nutrients are recycled more quickly than when the vegetation decays naturally. Grazing livestock transfer nutrients from range to cropland and concentrate them on selected areas of the farm.

10. Land preparation : Virgin forest areas, if selected for plantation, should be cleared of all undergrowth and trees not suitable for the relatively heavy shade needed by cardamom.

- Where the tree growth is sparse and shade insufficient or unsatisfactory, quick-growing trees are planted for temporary shade as well as other trees with a tall and spreading habit for permanent shade.
- The trees selected for providing permanent shade in cardamom plantations should have the following characteristics:
- A tall and fast-growing habit, so that within 3 years of planting the tree attains sufficient growth to provide shade for the already-flowering cardamom plants.
- The tree should provide maximum shade during the dry period.
- The tree should provide maximum shade during the dry period.
- The leaves should decompose quickly when they fall on the ground.
- Utis (*Alnusnepalensis*) has been recommended as an ideal shade tree. Other important shade trees are Chillowne, Schimawalichi, pan isaj, Bucklandeapopulnea, Malato, Macaranga denticulate and Edgeworthiagardneri. The shade trees are planted with a spacing of 7-10 m.

Planting

- Bulbs or slips or seedlings along with 1-2 shoots are planted in the prepared pits (30 cm x 30 cm) at 150 cm x 150 cm distance for Ramshai and Sawaney and at a 90 cm x 90 cm distance for Golshai, by digging a hole in the soil.
- The planting is done at 8-10 cm depth. After a few showers, the pits may be filled with surface soil. Well-rotten cattle manure, compost or leaf-mould should be mixed thoroughly with the top soil before planting.
- It is also advisable to add 100 g rock phosphate per pit and mix it with the top soil before filling the pits. Planting is done in June-July when there is sufficient soil moisture, atmospheric humidity and optimum temperature for growth.

Mulching

- Soon after the planting, the base of the plant should be mulched during November-April with dried leaves.
- Mulching will preserve the soil moisture and provide a source of nutrients after decomposition.

Organic manures like FYM, compost, leaf-mould and humus, rich forest soil may be applied. As the soil is rich, generally no fertilizer is recommended

A.G. & S.G. Siddhartha Degree College of Arts & Science
Vuyyuru-521165, Krishna District, Andhra Pradesh

Department of Zoology
Value Added Course

Title: Organic farming

Feed Back Form

1. Is the programme interested to you ✓
(Yes/No)
2. Have you attended all the session ✓
(Yes/No)
3. Is the content of the program is adequate ✓
(Yes/No)
4. Have the teacher covered the entire syllabus? ✓
(Yes/No)
5. Is the number of hours adequate? ✓
(Yes/No)
6. Do you have any suggestions for enhancing or reducing the number of weeks designed for the program? ✓
(Yes/No)
7. On the whole, is the program useful in terms of enriching your knowledge? ✓ ✓
(Yes/No)
8. Do you have any suggestions on the program? ✓
(Yes/No)

K. Bonthamuri 18-009
II. B.A

D. Sathish

PRINCIPAL

**AG & SG Siddhartha Degree College of
Arts & Science (Autonomous), Vuyyuru**

B. A. Viswanmayee

Head, Department of Zoology
AG & SG Siddhartha Degree College,
(Autonomous)
VUYYURU - 521 165.

A.G. & S.G. Siddhartha Degree College of Arts & Science
Vuyyuru-521165, Krishna District, Andhra Pradesh

Department of Zoology
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6. Do you have any suggestions for enhancing or reducing the number of weeks designed for the program? ✓ ✓
(Yes/No)
7. On the whole, is the program useful in terms of enriching your knowledge? ✓
(Yes/No)
8. Do you have any suggestions on the program? ✓
(Yes/No)

T. Manohar 18-403

II. M.P.C (E.M)

S. Subbarao

PRINCIPAL
AG & SG Siddhartha Degree College of
Arts & Science (Autonomous), Vuyyuru

B. Aniraman mayee
Head, Department of Zoology,
AG & SG Siddhartha Degree College,
(Autonomous)
VUYYURU - 521 165.

S.No	Reg. No	50 Marks	Name of the Student	Certificate Issues Signature
<u>II B.A.</u>				
1.	18.001	20	E. VENKATA RAMANA	E.V. Ramana
2.	18.002	20	T. NAGA JWANI	T. Naga Jwani
3.	18.005	20	P. RAJESWARI	P. Rajeswari
4.	18.006	21	A. MOUNIKA PRIYA	A. mounika priya
5.	18.007	22	B. SOWMYA SRI	B. Sowmya Sri
6.	18.008	21	P. KALYANI	P. Kalyani
7.	18.009	26	K. BHARATH KUMAR	K. Bharath Kumar
8.	18.010	30	G. VEERA BABU	G. Veerababu
9.	18.014	23	MD. TAHASEENA	MD. Tahaseena
10.	18.015	24	A. NAHIDA SULTHANA	A. Nahidasulthana
11.	18.016	26	M. PUJITHA	M. Pujitha
12.	18.018	20	I. NAGA PAVAN	I. Naga Pavan
13.	18.019	20	B. NAGAMANI	B. Nagamani
14.	18.020	25	K. LOKESH	K. Lokesh
15.	18.022	29	P. PREM KUMAR	P. Prem Kumar
16.	18.023	30	V. RAMA KRISHNA	V. Ramakrishna
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18.	18.025	23	K. NAVYA	K. Navya
19.	18.026	24	M. VIJAYA RATU	M. Vijaya Ratu
20.	18.027	26	B. MADHU	B. Madhu
21.	18.029	27	K. TRINADH	K. Trinadh
22.	18.030	24	M. PAVANI	M. Pavani
23.	18.032	21	S. JEJI	S. Jeji
<u>II. MPC (TM)</u>				
24.	18.231	30	K. RAMANJANYELU	K. Ramanjanjelu
25.	18.232	27	A. MANIKANTA	A. Manikanta
26.	18.233	26	K. MANASA	K. Manasa

S.No	Reg. No	50 Marks.	Name of the student	Certificate issue & signature
27	18.234	25	T. HAREESH	T. Hareesh
28	18.235	20	T. AVINASH	T. Avinash
29	18.236	25	CH. SYAM SRI	Ch. Syam Sri
30	18.237	29	N. PUSHPA SRI	N. Pushpasi
31	18.238	20	S. VIVEK	S. VIVEK
32	18.241	32	T. KARTHEEK	T. Karthik Babu
33	18.242	30	CH. SUMANTH	Ch. Sumanth
34	18.243	33	SK. SHAFEE	Sk. Shafee
35	18.245	26	J. MOUNIKA	J. Mounika
36	18.246	20	M. PRAVEEN	M. Praveen
37	18.247	21	K. RAJ KUMAR	K. Raj Kumar
38	18.248	30	ABDUL JABBAR	Abdul Jabbar
39	18.249	26	N. BHANU	N. Bhanu
<u>II. B.2c (TM)</u>				
40	18.301	36	K. MOHAN SRINIVAS	K. Mohan srinivas
41	18.302	32	D. SRI HARI BABU	D. Sri Hari Babu
42	18.304	33	N. SWATHI	N. Swathi
43	18.305	29	K. SUBHASHINI	K. Subhashini
44	18.307	30	N. YAMINI	N. Yamini
45	18.308	28	P. SAI CHANDANA	P. Sai Chandana
46	18.310	35	K. MADHAVI	K. Madhavi
47	18.331	25	K. YEDUKONDALU	K. Yedukondalu
48	18.332	25	P. UDAY PRATHAP	P. Uday Prathap
49	18.333	25	T. BHAVYA	T. Bhavya
50	18.334	25	V. SUKUMAR	V. Sukumar
51	18.335	48	K. YESU PREMAKUMAR	K. Prema

S.No	Reg. No.	50 Marks	Name of the Student	Certificate issue & signature
II mpcc (Em)				
52✓	18.403	30	T. MAHENDRA	T. Mahendra
53✓	18.405	31	ABDUL RASOOL	Abdul Rasool
54✓	18.406	22	AMMISETTI BHAVANA	A. Bhavana
55✓	18.407	30	M. SAI LEEA	M. Sai Leela
56✓	18.410	32	CH. VIVEK	Ch. Vivek
57✓	18.415	26	B. TEJASWARI	B. Tejeswari
58✓	18.416	20	Y. SRI LAKSHMI	Y. Sri Lakshmi
59✓	18.418	24	D. NARASIMHA	D. Nara Simha
60✓	18.419	27	P. NAGA SUDHA RANI	P. Naga Sudha Rani
61✓	18.420	25	B. SWEETY/ LEEA	B. Sweety Leela
62✓	18.421	26	M. SAI KUMAR	M. Sai Kumar
63✓	18.422	30	MD. AZEES	MD. Azees
64✓	18.423	20	K. RAJA RATNAM	K. Raja Ratnam
65✓	18.425	25	A. SRI HARI	A. Srihari
66✓	18.426	27	S. JAGADEESH	S. Jagadeesh
67✓	18.429	20	CH. VAMSI KIRAN	Ch. Vamsi Kiran
68✓	18.431	21	K. PRAVEEN	K. Praveen
69✓	18.432	29	T. NIRANJAN	T. Niranjana
70✓	18.433	27	V. NAGA SIREESHA	V. Naga Sireesha
71✓	18.434	31	BIBI RAHIMA	Bibi. Rahima
72✓	18.435	27	L. SAI KUMAR	L. Sai Kumar
73✓	18.436	22	V. L. S. CHAIFANYA	v. L. S. Chafanya
II B2.C (Em)				
74✓	18.501	48	Sd. RESHMA	Sd. Reshma
75✓	18.502	50	M. HINDU PRIYA	M. Hindu Priya
76✓	18.503	48	B. SRI SIRISHA DEVI	B. Sri Sirisha Devi
77✓	18.505	30	M. SHAINY	M. Shainy

S.No	Reg. No	50 Marks	Name of the Student	Certificate issue & Signature
78 ✓	18.506	28	K. GANA HEMANI	K.G. Hemani
79 ✓	18.507	40	S. NAGA MALLESWARA RAO	S.N. Mallesh
80 ✓	18.509	43	B. NANDINI	B. Nandini
81 ✓	18.511	38	J. DEEPTHI	J. Deepthi
82 ✓	18.513	43	S. AMRUTHA SUSEELADEVI	S.A.S. Devi
83 ✓	18.514	36	T. BHUVANESWARI	T. Bhuvaneshwari
84 ✓	18.516	33	M. NAGA ANJANA DEVI	M. Naga Anjana Devi
85 ✓	18.519	35	Sd. KARIMULLA	Sd. Karimulla
86 ✗	18.520	—	B. TEJA PRASAD	—
87 ✓	18.522	40	D. DINAKAR	D. Dinakar
88 ✓	18.523	50	V. ANJALI	V. Anjali
89 ✓	18.524	50	B. GEETHIKA	B. Geethika
			<u>8 students</u> <u>88</u>	
			<u>10/10/24</u>	
			Head, Department of Zoology, AG & SGS Siddhartha Degree College, (Autonomous) VUYYURU - 521 165.	
				INT. AUDIT IQAC AG & SGS Degree College VUYYURU - 521 165



A.G. & S.G. SIDDHARTHA COLLEGE OF ARTS & SCIENCE

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This is to certify that CH. Vivek of D.MPL has
successfully completed the certificate course in Organic farming organized by the department
of Zoology during the year 2019 - 2020 , in association with IQAC and passed the
examination in grade A


Course Coordinator

Head, Department of Zoology
A.G. & S.G. Siddhartha Degree College,
Vuyyuru - 521 165, Krishna Dist., A.P.





Principal

Principal
A.G. & S.G. Siddhartha Degree College of
Arts & Science, VUYUYURU-521 165.