

An Internship Report On  
**Integrated Farming Systems, Production Technology Of  
Commercial Crops And Protected Horticulture**

Submitted in accordance with the requirement for the degree of

**B.Sc (BZC)**

Under the Faculty Guideship of

**Smt.M.Naga Parameswari**

Department of

**Chemistry**

V.S.R Govt Degree & P.G College

Submitted by :-

**PEDAPUDI VANI**

Reg.No: 2029223049021

**II B.Sc (BZC)**



**V.S.R GOVERNMENT DEGREE &P.G. COLLEGE**

Movva ,Krishna District, Andhra Pradesh, India

2022-2023

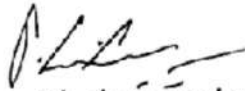
## Student's Declaration

I, PEDAPUDI VANI a student of B.Sc (BZC) Program, Reg.No.2029223049021 of the Department of Chemistry, V.S.R Govt. Degree College do here by declare that I have completed the mandatory internship from 25/08/2022 to 25/10/2022 in Krishi Vignan Kendra, Ghantasala under the Guideship of Smt.M.Naga Parameswari, Department of Chemistry, V.S.R Govt. Degree College.

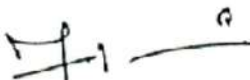
*P.Vani*  
Signature and Date


## Official Certification

This is to certify that Pedapudi Vani Reg.No : 2029223049021 has completed her internship in Krishi Vignan Kendra, Ghantasala on Integrated farming systems, Production technology of commercial crops and Protected Horticulture under my supervision as a part of partial fulfillment of requirement for the degree of B.Sc (BZC) in the department of Chemistry , V.S.R Govt. Degree College, Movva.


  
(Signature with date and seal)  
Programme Coordinator  
KRISHI VIGYAN KENDRA  
GHANTASALA - 521133

### Endorsements

Faculty Guide 

Head of the Department 

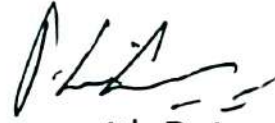
Principal

  
PRINCIPAL  
V.S.R. Govt. Degree College  
MOVVA - 521135, Krishna Dt., A.P.

## Certificate from Intern Organization

This is to certify that Pedapudi Vani Reg.No: 2029223049021 of V.S.R Govt. Degree College, Movva underwent internship in Krishi Vignan Kendra, Ghantasala from 25/08/2022 to 25/10/2022.

The overall performance of the intern during her internship is found to be Satisfactory.



Authorized Signatory with Date and Seal

Programme Coordinator  
KRISHI VIGYAN KENDRA  
GHANTASALA - 521133



## Acknowledgements

First of all, I am grateful to the Almighty, who grace us and without blessing from who, we cannot think of breathing to learn.

This is my report after completion of 2 months internship in KVK, Ghantasala. I wish to express my sincere gratitude to Dr. S. Madhavi mam, Principal of V.S.R.G.D.C, Movva for providing us opportunity and lending her support to do the short term internship. I express my deepest sense of gratitude to M. Naga Parameswari madam, Dept of chemistry for her careful and precious guidance.

I sincerely thank to Dr. P. Sri Katha madam, Programme Coordinator of Krishi Vignana Kendra Ghantasala and all the staff members of KVK for their been guidance, necessary support, Cooperation, encouragement which contributed immensely for successful completion of this internship. All are grateful and unforgettable.

I wish to express my profound gratitude to all of them.

## CHAPTER 1: EXECUTIVE SUMMARY

We have completed our short-term internship entitled "Integrated farming systems, Production technology of horticulture crops and Protected horticulture" for about 2 months in Krishi Vignan Kendra, Gihantasala.

### Learning Objectives:

- \* To integrate theory and practice about integrated farming systems, Vermicomposting, cultivation practices of various crops etc.
- \* To build a record of work experience like field activities such as plantation, plant propagation, intercultural operations like weeding, mulching etc.
- \* To know about KVK Organisation, its structure, job roles and KVK activities.
- \* To assess interests and abilities in the field of study.
- \* To develop work habits and attitudes necessary for job success.
- \* To impart skills such as oral & written communication, managerial skills and technical skills.



## Outcomes achieved:-

- \* Learnt new concepts such as Integrated Fish farming, Poultry farming, Azolla unit preparation by both theoretically and practically.
- \* Learnt about Vermicomposting, preparation & its methods to develop the soil fertility.
- \* Acquired a skill in propagating a plant.
- \* Gained work experience in various fields like plantation, intercultural operations like weeding, mulching & staking, sticky traps installation, labelling the crops, watering, preparation of potting soil mix, sowing seeds and small green shade net house constructing.
- \* Understood about KVK organisation, structure, job roles and KVK activities.
- \* Acquired a good knowledge on technological developments such as using drones for pest & disease identification, using navigation system to find fishes in fish farming, water management & e-NAM an online marketing source for farmers.
- \* Got clear idea on Organic farming, pest controlling measures and learned the preparation of various bio-fertilizers by visiting an organic farmer in kaza near Ghantasala.
- \* Acquired technical & managerial skills and improved



communication skills by involving in group discussions and by interacting with KVK subject matter specialists and farmers & co-workers.

### Brief description about KVK

A Krishi Vignan Kendra (farm science centre) is an agricultural extension centre in India. The centres are associated with a local agricultural university, and serves as a link between ICAR and farmers to apply agricultural research in a practical, localized setting.

KVK's Objective is to impart training to the practicing farmers / farm women, rural youth and field level extension functionaries by following the method of "Teaching by doing" and "Learning by doing."

### Summary of all activities done in KVK :-

We participated in all the field activities with a great interest and completed all the tasks with mutual support and team work which were given by the subject matter specialists of KVK.

At first, we involved in some activities regarding to Protected horticulture such as - constructed a small green shade net house with the guidance of Horticulture sms Dr. V. Manju Vani mam. and prepared a potting soil mix to sow the tomato variety seeds in seed trays and we observed the germination within 2-3 days. And we did some activities related to production technology of commercial crops such as - plantation of vegetable crops like tomato, brinjal, chilly, land measured to cultivate papaya plants, and did intercultural operations such as weeding, mulching, staking, earthing up etc and labelled the crops, and also did watering to the plants.

We learnt new concepts such as Vermicomposting, Azolla preparation, Integrated fish farming, Poultry farming especially Kadaknath & about incubator, E-Nam, pests and diseases of rice and black gram through theoretical explanation and practical observation.

We visited an organic farmer KKT Sitaram reddy in Kaza village, <sup>which is</sup> nearer to Ghantasala. There he explained the differences between organic & chemical farming, preparations of biofertilizers and its importance. He practically shown the preparation Dhruvaseevamrutham an organic-fertilizer and explained its uses & application methods.



## CHAPTER 2: OVERVIEW OF THE ORGANIZATION

### A. Introduction of the Organization

Krishi Vignan Kendra, a farm science centre under the administrative control of Acharya N.G. Ranga Agricultural University was established at Gihantasala village, Gihantasala mandal, Krishna district in July, 2012 funded by ICAR.

The primary objective of KVKS is to disseminate agricultural technologies among the farmers and bridge the gap between research institutions and farmers by organizing various extension activities. KVKS also conduct demonstrations, trainings, and field days to educate farmers about new and innovative technologies in agriculture.

The organization focuses on improving agricultural productivity, sustainability, and profitability, and provides guidance to farmers on crop management, livestock management, natural resource management, and post-harvest management.



KVKs also undertake applied research to solve the problems faced by farmers in their respective areas. The research conducted by KVKs is demand-driven and farmer-centric, with the aim of enhancing the livelihoods of farmers.

Overall, KVKs play a crucial role in transforming Indian agriculture by empowering farmers with knowledge & technical support.

B. Vision, Mission & Values of the Organization

\* Science & technology led growth by leading to enhanced productivity, profitability and sustainability of agriculture.

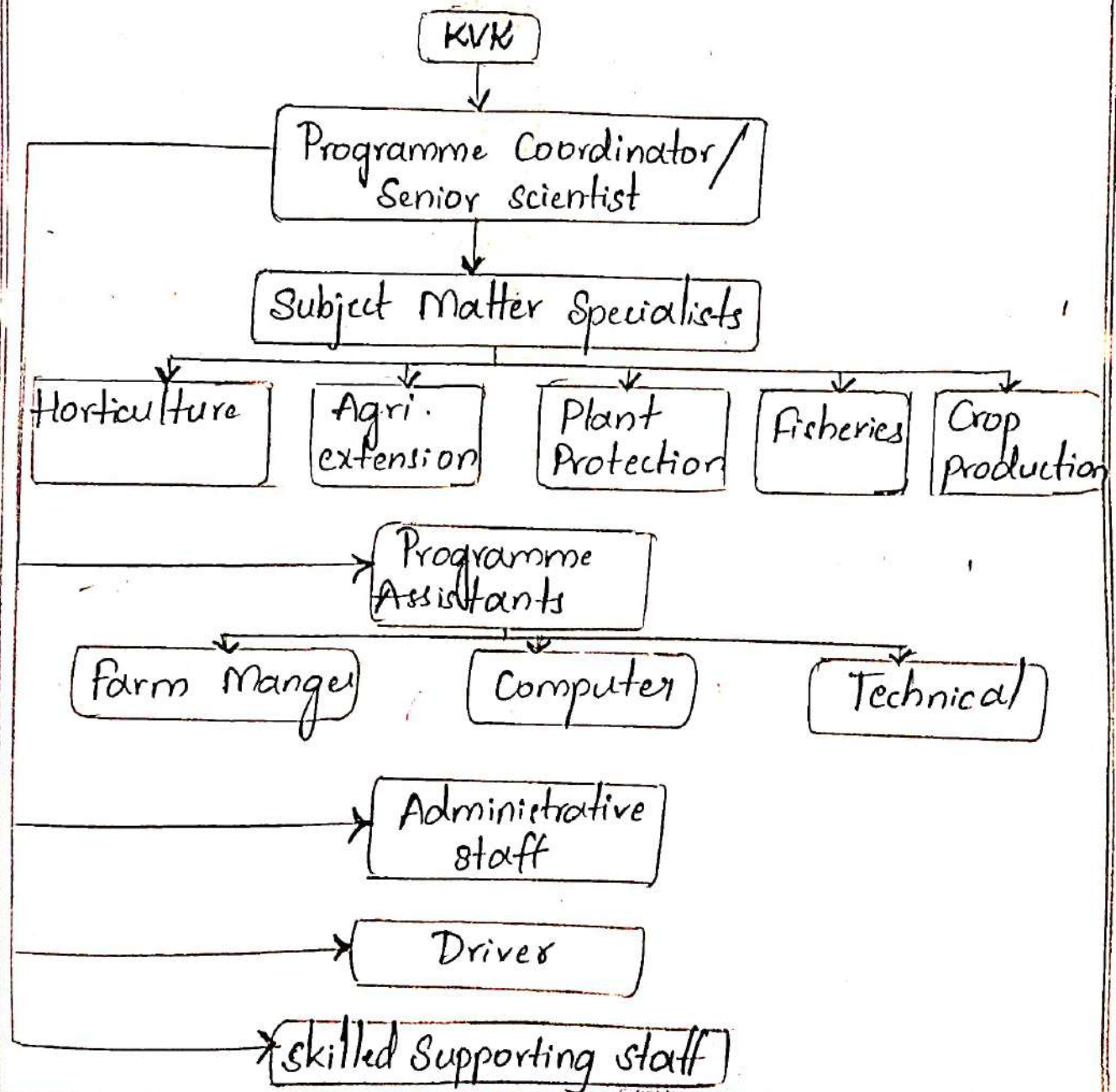
\* Farmer centric growth in agriculture and allied sectors through applications of appropriate technologies in specific agro ecosystem perspective.

C. Policy of the Organisation, in relation to the intern role.

\* To inculcate the knowledge to the interns related to various aspects such as Integrated farming systems, Nursery management, Protected

horticulture, vermicomposting, azolla preparation, Organic fertilizers preparation, inter-cultural operations, Poultry farming etc in order to make them efficient to develop entrepreneurial skills. And to make them capable to provide knowledge and technical support to the farmers.

#### D. Organizational Structure





E. Roles and responsibilities of the employees in which KVK Organization of the employees in

1. Senior scientist / Programme Coordinator +

- \* Keeping the head of the institution well informed about the KVK.
- \* Developing the needed infrastructure most consistent to the rural environment and developing annual and 5 yearly programmes and their effective implementation.
- \* Effective management of farms, workshops, animals & other training resources.
- \* Taking all possible measures for development of the staff on job-regular training and guidance will build the staff.
- \* Evaluation & supervision of the day to day work of the Kendra.
- \* Planning and conducting special training course (in area of specialisation) thus setting example before other KVK staff.
- \* Any other duties assigned by the head of the institution in the best interest of Kendra.

2. Subject matter Specialists +

- \* Planning, formulating & conducting relevant training

Courses -

- \* Conducting village and family survey & critically assessing the technological gap & training needs of the farming communities in their respective subjects.
- \* Organizing field day / field demonstration & providing field advisory services.
- \* Maintaining linkages with other developmental agencies.
- \* Keeping evaluation of training and other day to day work.
- \* Any other duties assigned by Programme coordinator.

### 3. Programme Assistant

- \* Assisting Subject matter specialists / Senior scientist and head in their work.
- \* Maintaining farm and different demonstration units on ideal conditions.
- \* Any other works assigned by Head / SMS.

### 4. Farm Manager

- \* Maintaining farm on commercial lines.
- \* Preparing farm layout & field demonstration.
- \* Planning the farm activities well in advance and executing the same in proper manner.
- \* Keeping the farm demo units in ideal and good conditions.
- \* Any other works assigned by Head / SMS.



F. Performance of the Organization in terms of turnover, profits, market reach, and market value:

Krishi Vignan Kendra, Gihantala has been performing exceptionally well in terms of its research and extension activities. The organization has developed several innovative agricultural technologies and practices that have been widely adopted by farmers in the region. The organization has also achieved a significant market reach and has a high market value in the agricultural sector.

G. Future plans of the Organization:

Krishi Vignan Kendra, Gihantala plans to expand its research and extension activities in the coming years. The organization aims to develop new agricultural technologies and practices that are environmentally sustainable and have a low carbon footprint. The organization also plans to enhance its training and educational programs for farmers and students.

### CHAPTER 3: INTERNSHIP PART

#### Activities / Responsibilities in the KVK Organisation during the Internship :-

As an intern, one must learn and carry out all the KVK activities in various concepts such as :-

- \* The activities related to Protected Horticulture includes setting up a shade net house, potting soil mix preparation & raising seedlings in seed-trays.
- \* In the case of Plant Propagation, one must learn the methods such as Grafting, Cutting, Layering etc and carry out practical work on it.
- \* Should perform the intercultural operations such as weeding, staking, mulching and earthing up etc.
- \* And should execute field activities like watering, labelling the crops, installation of sticky traps, plantation of various horticulture crops and learning the cultivational practices of those crops.
- \* Should listen the classes provided by the KVK staff members on various concepts like Azolla unit, Vermicomposting, Integrated farming systems, e-NAM etc.



\* Should interact with farmers & co-workers to learn the work, preparations of biofertilizers and to know about organic farming.

\* One must be able to identify the pest or disease that causes the paddy & black gram crops and can be able to suggest the chemical (or) organic pest controlling measures.

Working Conditions at KVK:

We have accomplished our short-term internship because of favourable working conditions at KVK that includes healthy atmosphere, good working environment, maintenance of all facilities which are available, spacious administrative building with good ventilation, Positive interactions of KVK members, and good intimacy of co-workers and farm workers & cordial relationship of KVK staff members, All these aspects improved our working abilities and made our work easier by providing guidance. We improved our conversational abilities, time management and discipline. And we learnt to ask queries without any hesitation because of harmonious relationship of KVK members.

## Weekly work schedule

Our supervisor has given assigned different tasks by allotting in groups. We have completed all those tasks according to this weekly schedule.

In every week our supervisor conducted group discussion and skill development classes. And at the end of the week she monitors and observes our progress regarding to skill development.


Equipment used in KVK are: Grape hoe, spade, sickle, lawn rake, grass shears, watering can, garden hose, trowel, fertilizer, scissors etc.

Tasks performed: All the activities which are assigned by the supervisor were executed by us such as setting up shade net, plantation of crops, installation of sticky traps, labelling, watering, intercultural operations - weeding, staking, mulching & earthing up, plant propagating, listening to the classes provided by KVK members etc.

Through this internship, the skills such as communication, time management, adaptability, technical skills etc have acquired by us.



ACTIVITY LOG FOR THE FIRST WEEK

Day & Date	Brief description of the daily activity	Learning Outcome	Person in Charge Signature
Day - 1 25/08/22	A brief introduction about organisation of KVK and activities by supervisor Dr. V. Manjivani.	KVK center provide various types of farm support & create awareness about improved agri. technologies.	
Day - 2 26/08/22	Construction of green shade net house.	To protect the plants from heat, rain & fast winds.	
Day - 3 27/08/22	Construction of shade net house with the guidance of supervisor.	To protect plants against pests, diseases.	
Day - 4 29/08/22	Shade net house setting up.	learnt that atmospheric elements - light, humidity can be controlled.	
Day - 5 30/08/22	Potting mix preparation and sowing tomato seeds in seed-trays.	Potting mix - Right ingredients maximize the growth of plants. Healthier, uniform & vigorous seedlings <sup>will be</sup> produced.	
Day - 6 31/08/22	Observation of seed germination.	It took 2-3 days to observe the small white structure that grown out of seeds.	

## WEEKLY REPORT

WEEK - 1 (From Dt. 25/08/22 to Dt. 31/08/22.)

Objective of the Activity Done: \* Understood about KVK Organisation, structure & roles & responsibilities of employees.

Detailed Report: \* Gained practical knowledge on Protected Horticulture.

On first day in KVK, we interacted with Dr. V. Manjivani mam (Horticulture SMS) has given us a brief introduction about KVK organisation, structure, roles & responsibilities of staff members and the KVK activities.

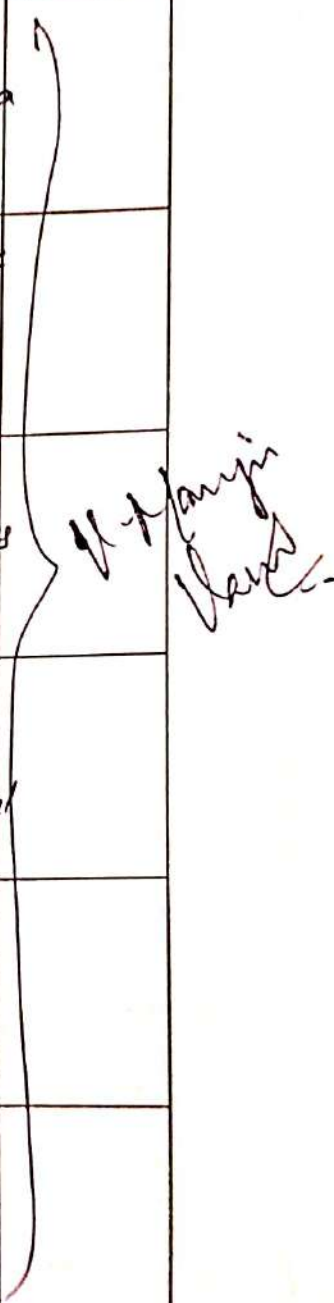
And on next three days, we constructed a small green shade net house with the guidance of Dr. Manjivani mam, (SMS) (or) supervisor. And learnt that it is used to plants from heat, light, rain & fast winds, to protect the plants from pests & diseases.

On 5<sup>th</sup> day, we prepared the potting soil mix and sowed the tomato seeds in seed trays where Manjivani mam explained the ingredients used in potting mix and benefits of seed trays.

On 6<sup>th</sup> day, we kept the seed trays in shade net house and moistured the seed trays. It took 2-3 days to observe the white structures that grown out of seeds.



### ACTIVITY LOG FOR THE SECOND WEEK

Day & Date	Brief description of the daily activity	Learning Outcome	Person In-Charge Signature
Day - 1 01/09/22	Measured and prepared the land for Papaya cultivation.	It determines how many papaya plants can be planted.	
Day - 2 02/09/22	Redlady Papaya plantation under supervisor guidance.	Learnt the practice of spacing plants i.e. 1.5 x 1.5 m.	
Day - 3 03/09/22	Banana plantation	Learnt the cultivation practices of Banana.	
Day - 4 05/09/22	Lemon grass plantation	Apart from cultivation learnt about the medicinal benefits.	
Day - 5 06/09/22	Vetiver plantation	Learnt the uses - Low-cost technology for soil and water conservation.	
Day - 6 07/09/22	Plantation of Lily bulbs.	Learnt cultivation of lily plants & its benefits.	

## WEEKLY REPORT

WEEK - 2 (From Dt. 04.09/22. to Dt. 07.09/22.)

Objective of the Activity Done: Acquired knowledge on high density Papaya Plantation. And plantation of various crops- Banana, Lily etc.

Detailed Report:


On first day, in the second week, we measured the land to cultivate papaya plants with the help of Dr. Venkata Lakshmi mam by using measuring tape and pegs. And the area of the land =  $570m^2$ . And there we observed the cultivator is being used in that land to prepare the soil.

On 2<sup>nd</sup> day, we planted the papaya (Red lady) plants with the space of  $1.5 \times 1.5m$ . We cultivated 50 plants and learned the cultivation practices, method of planting, spacing etc with the guidance given by the supervisor.

And the next four days, we were completely involved in plantation of certain plants such as Banana, Lemon grass, Vetiver and Lily bulbs. Apart from cultivation, we learnt the medicinal values & uses of Lemon grass - improves the sugar levels of blood, Vetiver - Low cost technology for soil & water conservation. and cultivation practices of Banana by Dr. Manjuraniam.



### ACTIVITY LOG FOR THE THIRD WEEK

Day & Date	Brief description of the daily activity	Learning Outcome	Person In-Charge Signature
Day - 1 08/09/22	Visited an organic farmer - Sitaram reddy along with Dr. Revathi mam & team members in kaza.	Learnt the difference b/w chemical & natural farming and preparations of bio fertilizers.	
Day - 2 09/09/22	Class on Pests & Diseases of Paddy by Dr. K. Revathi mam.	Learnt the pests - Yellow stem borer, leaf folder, brown plant hopper, diseases - false smut, sheath blight & management.	
Day - 3 10/09/22	class on Pests & Diseases of Black gram and Group discussion on pest management.	Learnt the organic and chemical management of insects - Aphids, Thrips & white fly.	
Day - 4 12/09/22	Class - about sticky traps & firmone traps by Dr. K. Revathi mam, Plant protection (MS)	To trap the flying insects, pests, wasps etc	
Day - 5 13/09/22	Placing sticky traps near papaya plants.	To detect what kind of pests are attracting towards papaya plants.	
Day - 6 14/09/22	Marigold plantation	To keep pests like mosquitoes, nematodes away and to kill aphids.	



## WEEKLY REPORT

WEEK - 3 (From Dt. 28/09/22 to Dt. 04/10/22)

Objective of the Activity Done: Learnt the preparation of Organic fertilizers.

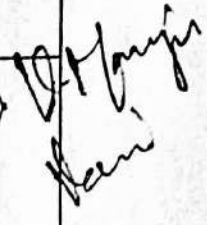
Gaind knowledge on Pest & Disease controlling measures.

Detailed Report:

On first day of 3rd week, we visited an Organic farmer K. Sitaram Reddy along with Revathi mam in Kaza village. There he explained about the differences between Organic and Chemical farming, Preparation, composition, application methods and uses of various bio-fertilizers such as Teevamrutham, Neemastra, Agnastra, Dasaparanikashayam etc. And he practically shown the preparation of Dhruvajeevamrutham by using the materials - water, cow dung & urine, jaggery, flour of pulse and a handful of fertile from the land.

On 2<sup>nd</sup> & 3<sup>rd</sup> day, we learnt the pests & diseases of paddy - Yellow stem borer, leaf folder, Brown Plant hopper which causes Sheath blight & false smut and their chemical and natural pest management. And got aware of Pests & diseases of Black gram by the class given by Dr. K. Revathi mam. On 4<sup>th</sup> day we learnt the uses of sticky traps & firmone traps and on 5<sup>th</sup> day, we placed these sticky traps (blue) near papaya plants. On 6<sup>th</sup> day we planted marigold plants to eradicate pest.

ACTIVITY LOG FOR THE FORTH WEEK

Day & Date	Brief description of the daily activity	Learning Outcome	Person In-Charge Signature
Day - 1 15/09/22	Theoretical class on Azolla unit by Dr. M. Venkata Lakshmi mam - Crop production (SMS)	Its a biofertiliser used to increase crop yield & quality.	
Day - 2 16/09/22	Process of Azolla unit cultivation, advantages & Disadvantages.	learnt steps to prepare azolla unit, maintenance, uses, limitations etc.	
Day - 3 17/09/22	Practically observed the preparation of Azolla biofertilizer.	Observed exsitu Azolla unit, ingredients used in preparation of azolla soil, low dig, single super phosphate, Azolla etc.	
Day - 4 19/09/22	Theoretical class on Vermicomposting by Dr. M. Venkata Lakshmi mam.	Earthworms convert the organic waste into manure rich in high nutritional content.	
Day - 5 20/09/22	Procedure of Vermicomposting.	learnt the earth worm types, procedure of composting, uses, methods etc.	
Day - 6 21/09/22	Observation of Vermicomposting pit.	Its a natural/ organic manure - very beneficial for plant growth.	



## WEEKLY REPORT


WEEK - 4 (From Dt 15/09/22 to Dt 21/09/22)

**Objective of the Activity Done:** Learnt about Azolla & Vermicomposting

**Detailed Report:** On first 3 days of 4th week, we acquired both theoretical & practical knowledge on Azolla preparation, uses, limitations etc.. which was explained by Dr. M. Venkata Lakshmi mam (Crop production SMS).  
\* Azolla Preparation - Mix clean fertile soil with cow dung & water and should spread uniformly across the pond, 1 kg of fresh Azolla culture is required. This has to be applied uniformly in the pond. We should make sure that water depth must have atleast 5 to 6 inches in the pond. For ensuring better growth of Azolla, we should apply 1kg of cowdung & 100 to 120 grams of single super phosphate once in 2 weeks. It gets ready for harvesting in 2-3 days. The pond has to be cleaned for every 6 months.

And next 3 days, we learned about the preparation, uses, methods, types of earthworms, advantages and disadvantages in Vermicomposting by the class given by Dr. M. Venkata Lakshmi mam. We observed the pit method i.e., the organic matter is collected in cemented pits.

ACTIVITY LOG FOR THE FIFTH WEEK

Day & Date	Brief description of the daily activity	Learning Outcome	Person In-Charge Signature
Day -1 22/09/22	Class on production technology of commercial crops by Dr. V. Manjivani mam. Horticulture (SMS)	learnt the soil, climate, variety, planting, land preparation, spacing, inter-cultural operations of horticulture crops.	
Day -2 23/09/22	Plantation of tomato.	learnt - the soil, climate conditions, planting, spacing of tomato plants.	
Day -3 24/09/22	Attended the Poshan Abhiyan programme	It is to lay emphasis on nutritional status of adolescent girls, pregnant women, children from 0-6 yrs. And Importance of cultivating plants.	
Day -4 25/09/22	Plantation of Tomato (chirayu)	learnt the cultivational practices of tomato.	
Day -5 27/09/22	Brinjal plantation (mahi 552 variety)	learnt the variety, climatic conditions, spacing, method of planting of brinjal.	
Day -6 28/09/22	Plantation of chilly. (us341 variety)	learnt the planting method without disturbing the roots.	



## WEEKLY REPORT

WEEK - 5 (From Dt. 22/09/22 to Dt. 28/09/22)

Objective of the Activity Done:

Understood the concept of Production Technology of Commercial crops.

Detailed Report:

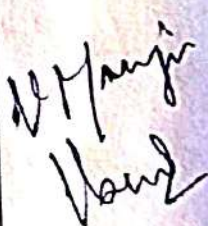
On first day in the 5th week, we had a class on Production technology of commercial crops by Dr. V. Manjuvati mam, she explained the soil and climatic conditions, variety of plant, Planting includes Land preparation, Spacing, Method of planting, Intercultivation operations include weeding, staking, mulching, irrigation, manuring & fertilization, Harvesting of various crops such as Tomato, Brinjal, Chilly, Banana, Papaya etc.

On 2nd day, we planted tomato plants i.e. Arka abhed near papaya plants as intercultivational crop. On 3rd day, we attended the programme called Posha Abhiyan - Health campaign & cultivation of plants, which lays emphasis on nutritional status of adolescent girls, pregnant women, children from 0-6 years and importance of cultivation of plants which is chemical-free.

And on least three days, we were involved in plantation of tomato (chiraayu), Brinjal (mahi 252) and chilly (Cv-34) vegetable crops.



## ACTIVITY LOG FOR THE SIXTH WEEK

Day & Date	Brief description of the daily activity	Learning Outcome	Person In-Charge Signature
Day -1 29/09/22	Lawn preparation (Korean carpet grass) and brief explanation.	To control soil erosion, dust. To enhance heat dissipation. To make garden attractive.	
Day -2 30/09/22	Class on Irrigation & Its types by Dr. V. Manjivani mam.	To supply water to fields through various systems of tubes, pumps & sprays.	
Day -3 01/10/22	Watering	For survival and growth plants & learnt how much water is required for various crops.	
Day -4 06/10/22	Weeding	To eradicate the pests & diseases.	
Day -5 07/10/22	Weeding	Learnt the differences between main crops and weeds.	
Day -6 10/10/22	Labelling the crops.	To identify the crop species in field.	



## WEEKLY REPORT

WEEK - 6 (From Dt 29.09.22 to Dt 10.10.22)

Objective of the Activity Done:

Preparation. Gained some knowledges on Lawn  
Detailed Report: Practiced some field activities like watering,  
weeding and Labelling the crops.

We observed that the lawn material was received by KVK on first day of 6th week from Challapalli nursery. The nursery manager has explained the preparation of lawn. He explained about the Korean Carpet grass, its texture and climatic conditions, site & soil preparation, levelling and Lawn making methods such as seeding, turfing, turf plastering, dibbling roots and astroturf.

On 2nd day, we acquired good knowledge about irrigation, fertigation and types by listening to the class given by Dr. V. Manjivani mam. We understood that the water can be supplied to the fields through various systems of tubes, pumps & sprays. We also learnt that fertilizers can also <sup>be</sup> supplied to plants through drip irrigation. On 3rd day, we were involved in watering the plants. On 4th & 5th days, we did weeding and learnt the uses i.e. to eradicate the pests and diseases. And on last day of this week, we labelled the crops to identify the crop species in field.



ACTIVITY LOG FOR THE SEVEN WEEK

Day & Date	Brief description of the daily activity	Learning Outcome	Person In-Charge Signature
Day -1 11/10/22	Class taken by Agri extension (SMS), Dr. B. Naveen sir on e-NAM.	It is developed for the farmers to sell all agri products through online.	V. Manjunath
Day -2 12/10/22	Plant propagation methods - Cutting & Budding.	To keep the special characteristics of that plant.	
Day -3 13/10/22	Class on Plant propagation methods - Grafting & layering.	To multiply plants identical to the parent plant.	
Day -4 14/10/22	Snake plants propagation.	Learned the process of propagating snake plants i.e by cutting.	
Day -5 15/10/22	Intercultural operations - Weeding, staking.	<u>Weeding</u> - To eradicate pests & diseases. <u>Staking</u> - To provide support & ability to grow without bending.	
Day -6 17/10/22	Intercultural operations - Mulching, earthing up	<u>Mulching</u> - To suppress the weeds. <u>Earthing up</u> - Regulate soil moisture.	

## WEEKLY REPORT

WEEK - 7 (From Dt. 11/10/22 to Dt. 17/10/22)

Objective of the Activity Done:

- \* Understood about e-NAM.
- \* Learnt about Plant propagation methods.
- \* Got practical knowledge on Intercultural operations.

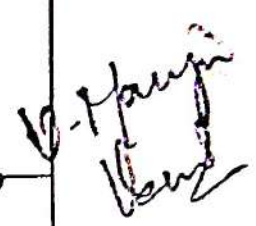
Detailed Report:

On first day of 7<sup>th</sup> week, we attended to the class which was taken by Agri. Extension (SMS) Dr. B. Naveen Sir on e-NAM. There he explained the vision, salient features of e-NAM, Benefits of trading on e-NAM, Advantages of various stakeholders, Online Registration procedure for farmers/Traders, e-NAM & its role in Agriculture industry. We learnt that its a good platform for farmers to sell all the agri products through online.

On 2<sup>nd</sup> day, we gained some knowledge on Plant propagation by listening to the explanation and by practical observation. i.e about ~~Cut~~ Cutting & Budding. On 3<sup>rd</sup> day also, we learnt about Grafting & Layering propagation methods. And on 4<sup>th</sup> day, we practically propagated the snake plants by using the cutting method. And on last two day we were involved in intercultural operations such as weeding, mulching, staking, earthing up etc.



## ACTIVITY LOG FOR THE EIGHTH WEEK

Day & Date	Brief description of the daily activity	Learning Outcome	Person In-Charge Signature
Day - 1 18/10/22	Theoretical class on Integrated fish farming by J. Vaswanth sir (fisheries SMS)	It reduces the input and increase the output & economic efficiency.	
Day - 2 19/10/22	Agri-based fish farming.	Learnt about Paddy cum fish culture and Horticulture cum fish farming.	
Day - 3 20/10/22	Livestock fish farming	Learnt about Poultry, Duck, Pig, Goat, Rabbit cum fish farming systems.	
Day - 4 21/10/22	Types of fishes & practically observed the fish ponds in KVK	Learnt to differentiate the sea fishes & ornamental fishes and feeding of fishes near pond.	
Day - 5 22/10/22	Class on Poultry farming (Kadakkath)	Learnt about breeds of kadakkath, house management, watering & feeding system, diseases & care.	
Day - 6 25/10/22	Explanation about Egg incubator.	Hatching the eggs of Kadakkath artificially within 21 days.	

## WEEKLY REPORT

WEEK - 8 (From Dt. 18/10/22 to Dt. 25/10/22)

Objective of the Activity Done:

Detailed Report:

Gained some basic knowledge about Integrated Fish farming and Poultry farming.

On first 4 days of eighth week, we learnt about the Integrated fish farming that includes Agri based fish farming such as Paddy cum fish farming and Horticulture cum fish farming, Live stock fish farming such as Paddy cum fish farming, Duck cum fish farming, Goat cum fish farming etc., and the types of fishes. by the classes given by Fisheries (SMS) J. Yaswanth sir. And we observed the fish ponds, feeding the fishes and chemicals for treating fish pond.

On last two days, we acquired some basic knowledge about Kadaknath poultry farming, types of breed, house management, Watering and feeding systems, Egg incubator, Diseases and care required for chicken etc by listening to the class by J. Yaswanth sir. And he has given demonstration on Egg incubator. We observed the chicks of kadaknath that hatched artificially in egg incubator.



## CHAPTER 5: OUTCOMES DESCRIPTION

Describe the work environment you have experienced (in terms of people interactions, facilities available and maintenance, clarity of job roles, protocols, procedures, processes, discipline, time management, harmonious relationships, socialization, mutual support and teamwork, motivation, space and ventilation, etc.)

We have completed our short term internship entitled "Integrated Farming systems, Production technology of commercial crops and Protected Horticulture" in (KVK) Krishi Vignan Kendra, Gihantasala.

We started our internship on 25<sup>th</sup> Aug, we positively interacted with Dr. P. Sri Latha mam, Programme Coordinator of KVK has given us guidance whereas Dr. V. Manjuvani mam, Horticulture Subject matter specialist has given us a brief introduction regarding to our internship programme.

Facilities available in KVK are Administrative building, Farmers hostel, Seed godown, Seed processing unit, Soil testing lab, Bee keeping, Fish rearing unit, Azolla unit, Vermicompost unit, Polyhouse, Field farms etc and we observed the proper maintenance of all these facilities.

Space and Ventilation:- We observed that the KVK is very spacious with well developed administrative building having training hall, Office space etc and there is a good ventilation.

Job roles :- Job roles in KVK include Principal Scientist & Programme Coordinator, Subject matter specialists (Horticulture, Fisheries, Agri. extension, plant protection, Crop production), Skilled support staff, Farm manager, Programme assistants, Driver, Jeep Driver & Tractor driver.

Protocols :-

- \* Conduct On-Farm Tests on Agriculture & allied subjects.
- \* To organize training programmes and non-formal educational activities.
- \* To organize crop cafeteria and demonstrational units like Vermicomposting, Poultry, Dairy rams, Fish ponds, Azolla, Mushroom culture etc.. in the KVK instructional farm.

Processes and Procedures :-

Protected Horticulture :- Selection of site, setting up a green shade net house, potting mix preparation, seed sowing in seed trays, plantation of saplings of sown seeds in the field.

Lawn Preparation :- Site and soil preparation, Levelling, Methods of Lawn Making - Seeding, turfing, turfplastering, dibbling roots and astroturf.



Production technology of commercial crops → Soil, climate, variety, Planting - Land preparation, Spacing, Manure & fertilizers, irrigation, Intercultural operations - weeding, plant protection - Pests & Disease management, Harvesting and Yield.

Vermicomposting → Types of earthworms - *Eisenia foetida* and *Lumbricus rubellis*. There are two methods of vermicomposting - Bed method and Pit method. The process is mainly required to add nutrients to the soil. The earthworms are mainly used in this process as they eat the organic matter and produce castings through their digestive systems.

There are different process & procedures for each activity such as plant propagation, Integrated fish farming, Poultry farming and Azolla unit etc.

We improved our time management and discipline by being at KVK in time and by doing the tasks given by the supervisor on time.

We enhanced social skills by practicing empathy and effective communication, interactions with Subject matter specialists (or) supervisors, Farm manager and farm workers, co-workers / team members. During this internship, we completed all tasks with mutual support & team work and by the motivation and guidance of KVK members.

Describe the real time technical skills you have acquired (in terms of the job-related skills and hands on experience)

The real time technical skills that I have acquired at Krishi Ugnan Kendra, Gihantasala are as follows +

- \* In the case of Plant propagation, I learnt that we should use only healthy vigorous source plants and to consider the growth stage and timing of the plant.
- \* I learnt that for Horticulture, communication skills, technical knowledge about different types of fruits, vegetables and crops, record keeping were essential.
- \* The ability to control density and manage watering system, feeding system and how should the hall be prepared before entering the chicken and about egg incubator are the skills that I learnt about Poultry farming.
- \* Maintaining the physical environment (air adjusting the heat, light and humidity) controlling the sanitary conditions and health



measures are the things I learnt about fisheries.

\* I learnt about two types of Integrated fish farming such as Agri-based and live-stock fish farming through the class given by Dr. J. Yaswanth sir (fisheries subject matter specialist).

\* Able to identify the kind of pest that affects crops, the type of disease and what pesticides to be used, finding the crop predators, Organic methods to control pests etc are the things that I learnt about Pest management and controlling measures.

\* I learnt the intercultural operations and their uses by practically doing weeding, mulching, staking and earthing up.

\* I learnt setting up a small green shade net house to protect the plants from heat, rain and fast winds and to control the atmospheric elements like light, humidity and  $CO_2$  levels and raising seedlings in nurseries, growing media & pest management etc in the case of Protected Horticulture.

Describe the managerial skills you have acquired (in terms of planning, leadership, team work, behaviour, workmanship, productive use of time, weekly improvement in competencies, goal setting, decision making, performance analysis, etc.

At the duration of our internship programme, we were involved in many activities of various concepts and acquired managerial skills. Everyday we learned new concepts and it is very interesting to learn how the huge production is managed in fields like horticulture, Vermicomposting, Integrated fish farming, poultry farming, Azolla units etc.

As an intern, we also learned how to manage our time productively and we were involved in teamwork and completed assigned works. From both the theoretical classes and practical work, we have acquired the managerial skills. They are as follows;

In terms of Planning:-

- \* To accurately estimate time and effort required to complete an assigned task such as plantation, weeding, watering.
- \* Developed weekly schedules and time-tables with



clear, specific milestones and deadlines.

Leadership :- We acquired the skills like relationship building, ability & adaptability and decision making, taking the initiative and leading the team etc.

Teamwork :- The skills that we have acquired with regard to teamwork are respecting the other members decision & their point of views in group discussions, social skills, leadership skills and supporting each others work while doing the tasks.

Workmanship :- We acquired the skills like improving the quality of work we are doing, being hardworking, the process to be followed while doing a work etc.

\* I also learnt how to manage the amount of time to complete the work productively.

\* I analysed my performance throughout the weeks, I found that I improved a little bit in various activities when compared to first week at the end of this internship.

\* I worked in such away that the goals to be reached are reached by me in time and by making good decisions, I completed internship part successfully.



**Describe how you could improve your communication skills** (in terms of improvement in oral communication, written communication, conversational abilities, confidence levels while communicating, anxiety management, understanding others, getting understood by others, extempore speech, ability to articulate the key points, closing the conversation, maintaining niceties and protocols, greeting, thanking and appreciating others, etc.)

At the duration of this short-term internship, I have improved my communication skills in the following ways:

- \* I improved my oral communication not only by speaking but also being an active listener. by listening to what other persons are saying, instead of formulating only my response.
- \* Improved my written communication skills in various aspects such as connection, clarity, cause, conciseness and correctness by practicing.
- \* By interacting with the members of Krishi Vignan Kendra and by asking some queries, we ameliorated our conversational abilities.



\* I learnt to listen carefully what the supervisor is trying to tell us.

\* I improved my body language by maintaining good eye contact, a smile and small gestures of greeting people.

\* I learnt to be brief and specific.

\* I learnt to treat everyone equally with respect.

\* I was taught to be mindful of the way I was communicating with others.

\* I boosted my confidence levels and also improved my anxiety management.

\* I have learnt to be polite, humble and punctual.

\* Initially, I was very introvert, but now I started communicating with everyone like friends, coworkers etc in KVK and I also improved my interpersonal skills.

Describe how could you could enhance your abilities in group discussions, participation in teams, contribution as a team member, leading a team/activity.

In this internship part, I enhanced my abilities in group discussions and while participating in teamworks and activities by-

- \* Understanding about the topic more deeply.
- \* Exploring more ideas and exchanging information.
- \* Listening the thoughts and ideas of other members of my team.
- \* Respecting the contribution<sup>of</sup> other speaker and their views on topic.
- \* Being an active listener.
- \* Managing the time efficiently.
- \* Staying attentively during the discussion.
- \* Being quick and precise while making decisions.
- \* Making clear and confident responses.
- \* Discussing the work with the people in team.
- \* Maintaining positive mindset.
- \* Purposeful work.



\* In this internship most of the activities (or) tasks cannot be done in isolation. In order to complete the work in time it requires a teamwork and their contribution.

\* Each member of the team contributed a lot by-

→ Using the opportunity to learn from others.

→ Using creative thinking skills and contributing unique ideas.

→ Asking help or clarification wherever needed.

→ Giving their best efforts on task.

\* As a team member, one should foster open and honest communication.

\* Creating collaborative goals.

\* Dividing the work according to the persons efficiency.

\* Supporting the team members and sharing updates.

\* Understanding the problems of team members.

\* Giving feedback to the team members.

\* Voicing the needs and doubts of the team to the supervisor.

\* Being clear and confident in expressing opinions.

Describe the technological developments you have observed and relevant to the subject area of training (focus on digital technologies relevant to your job role)

In horticulture, a recent innovation has been the development of digital scouting application for mobile devices that provide a monitoring platform for the registration of diseases and after biological solutions.

\* Usage of drones for pest and disease identification has been one of the technological development.

\* Growing plants in small amount of sand and gravel known as hydroponics is the technological skill that I learnt from this short-term internship.

\* I learnt about precision agriculture (a range of practices that uses technology to provide crops precisely no more and no loss) through this internship.

\* knowing how to utilise GPS to navigate to pre-determining flood plan sites.



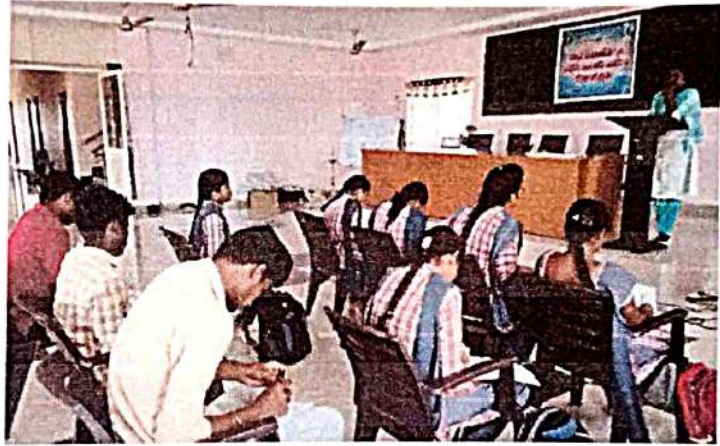
- \* Using navigation system to find fishes.
- \* Vessel monitoring system (VMS) is a new type of technology that determines the temperature of water and amount of water required.
- \* And e-NAM (an Online National Agriculture Market) also developed for the farmers to sell all the products of agriculture.
- \* Water management technology in agriculture offer farmers more sustainable ways to provide sufficient water to plants. For instance, a micro drip irrigation system, N-Drip etc. reduces the usage of water by upto 50% and improves crop quality.



## PHOTOS & VIDEO LINKS















## LINKS

- <https://www.indiafilings.com/learn/enam/>
- <https://krishijagran.com/animal-husbandry/kadaknath-chicken-farming-best-breeds-feeding-house-management-and-complete-business-plan/>
- <https://www.notesonzoology.com/india/fishery/integrated-fish-farming-principles-advantages-and-disadvantages/787>
- <https://www.bighaat.com/blogs/kb/major-diseases-of-paddy>
- <https://www.organickeeralam.org/english/product/how-to-make-jeevamrutham/16>
- <https://www.difference.wiki/organic-farming-vs-chemical-farming/>
- <https://youtu.be/lir2GkiyGyA>
- [https://agritech.tnau.ac.in/horticulture/horti\\_Landscaping\\_lawn%20making.html](https://agritech.tnau.ac.in/horticulture/horti_Landscaping_lawn%20making.html)
- <https://youtu.be/Kg-tNWJGYA>
- <https://youtu.be/FSFBPtRO4HU>
- <http://ecoursesonline.iasri.res.in/mod/page/view.php?id=101115>









Acharya N.G. Ranga Agricultural University, Guntur  
(Indian Council of Agricultural Research)



ATARI, ZONE - X, Hyderabad

# KRISHI VIGYAN KENDRA, GHANTASALA

Krishna District- 521133, Andhra Pradesh

This is to certify that Ms/ Mr/ Mrs.....*Peda.pudi Vani*.....  
has successfully completed Internship Programme on Integrated Farming Systems,  
Production Technologies of commercial crops and Protected Horticulture organized at  
KVK, Ghantasala to degree college students of V.S.R Govt. Degree & P. G. College, Movva as a  
part of course curriculum in New Education Policy (NEP) from 25<sup>th</sup> August, 2022 to 25<sup>th</sup> October, 2022.

*V. Manjunatha*  
Course Director

*P. Lakshmi*  
Programme Coordinator  
Krishi Vigyan Kendra  
Ghantasala



## Student Self Evaluation of the Short-Term Internship

Student Name: Pedapudi Vani

Registration No: 20292230  
49021

Term of Internship: From: 25.08.2022 To: 25.10.2022

Date of Evaluation:

Organization Name & Address: Krishi Vignan Kendra, Gihantayala

Please rate your performance in the following areas:

Rating Scale: Letter grade of CGPA calculation to be provided

1	Oral communication	1	2	3	4	5
2	Written communication	1	2	3	4	5
3	Proactiveness	1	2	3	4	5
4	Interaction ability with community	1	2	3	4	5
5	Positive Attitude	1	2	3	4	5
6	Self-confidence	1	2	3	4	5
7	Ability to learn	1	2	3	4	5
8	Work Plan and organization	1	2	3	4	5
9	Professionalism	1	2	3	4	5
10	Creativity	1	2	3	4	5
11	Quality of work done	1	2	3	4	5
12	Time Management	1	2	3	4	5
13	Understanding the Community	1	2	3	4	5
14	Achievement of Desired Outcomes	1	2	3	4	5
15	OVERALL PERFORMANCE	1	2	3	4	5

P. Vani

Signature of the Student

Date:

## Evaluation by the Supervisor of the Intern Organization

Student Name: P. Vani

Registration No: 20292230

Term of Internship:

From: 25.08.2022 To: 25.10.2022  
49021

Date of Evaluation:

Organization Name & Address: Krishi Vignan Kendra, Ghantasala.

Name & Address of the Supervisor with Mobile Number Dr. V. Manjuvani

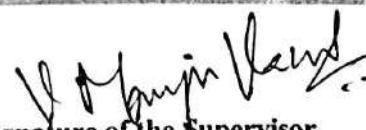
Please rate the student's performance in the following areas:

Please note that your evaluation shall be done independent of the Student's self-evaluation

Rating Scale: 1 is lowest and 5 is highest rank

1	Oral communication	1	2	3	4	5 ✓
2	Written communication	1	2	3	4 ✓	5
3	Proactiveness	1	2	3	4	5 ✓
4	Interaction ability with community	1	2	3	4 ✓	5
5	Positive Attitude	1	2	3	4	5 ✓
6	Self-confidence	1	2	3	4	5 ✓
7	Ability to learn	1	2	3	4	5 ✓
8	Work Plan and organization	1	2	3	4 ✓	5
9	Professionalism	1	2	3	4 ✓	5
10	Creativity	1	2	3	4	5 ✓
11	Quality of work done	1	2	3	4	5 ✓
12	Time Management	1	2	3	4	5 ✓
13	Understanding the Community	1	2	3	4	5 ✓
14	Achievement of Desired Outcomes	1	2	3	4	5 ✓
15	<b>OVERALL PERFORMANCE</b>	1	2	3	4	5 ✓

Date:

  
 Signature of the Supervisor  
 Subject Matter Specialist (Horticulture)  
**KRISHI VIGYAN KENDRA**  
**GHANTASALA - 521 133**



## EVALUATION

**MARKS STATEMENT**  
**(To be used by the Examiners)**

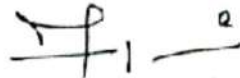


INTERNAL ASSESSMENT STATEMENT

Name Of the Student: Pedapudi Vani  
Programme of Study: Bachelor of science  
Year of Study: 2021-22  
Group: B.Sc(B2C)  
Register No/ILT. No: 2029223049021  
Name of the College: V.S.R Government Degree & P.G College, Movva  
University: Krishna

Sl.No	Evaluation Criterion	Maximum Marks	Marks Awarded
1.	Activity Log	25	25
2.	Internship Evaluation	50	50
3.	Oral Presentation	25	25
	GRAND TOTAL	100	100

Date:


  
Signature of the Faculty Guide

Certified by

Date:

Signature of the Head of the Department/Principal

Seal:

  
PRINCIPAL  
V.S.R. Govt. Degree College  
MOVVA - 521135, Krishna Dt., A.P.