STSN GOVT DEGREE COLLEGE

KADIRI 515591

Sri Sathya Sai Dist

INTERNSHIP

Submitted by

A. SIRI CHANDANA

Reg : 2042005081001

Annexure-II

TITLE PAGE

PROGRAM BOOK FOR

(SHORT-TERM / SEMESTER-TERM) INTERNSHIP

Name of the Student: A. Sirichandana

Name of the College: S.T.S.N Govt. Degree College, Kadiri.

Registration Number: 204200508l001

Period of Internship: 4months From: 3/4/23 To: 8/7/23

Name & Address of the Intern Organization Silkworm seed multiplication centre - Kutagulla, Satya Sai Dist.

Sri Krishnadevaraya University

YEAR

Annexure-III

INTERNSHIP REPORT FRONT PAGE

An Internship Report on

Sericulture activities

(Title of the Short-Term / Semester Internship Program)
Submitted in accordance with the requirement for the degree of

Semester Internship

Under the Faculty Guideship of

M. Santhoshini

(Name of the Faculty Guide)
Department of

Sericulture - S.T.S.N Govt. Degree College, Kadiri.

(Name of the College)

Submitted by:

A. Siri Chandana

(Name of the Student)

Reg.No: 204200508100l

Department of Sericulture

(Name of the College)

S.T.S.N Govt. Degree college, Kadiri..

Annexure-IV

STUDENT'S DECLARATION

Student's Declaration

I, A. Siri Chandana a student of III B.Sc (C.2.S) Program, Reg. No. 20420050810001 of the Department of Sericulture College do hereby declare that I have completed the mandatory internship from 3/4/23 to 8/4/23 in Seed multiplication centre, kuttagulla (Name of the intern organization) under the Faculty Guideship of M. Santhoshini (Name of the Faculty Guide), Department of Sericulture, S.T.S.N Govt. Degree College, Kadiri. (Name of the College)

A. Siri Chandana
(Signature and Date)

Annexure-V

OFFICIAL CERTIFICATION

Official Certification

This is to certify that A. Sirichandana *(Name of the student)* Reg. No. 204200508/001 has completed his/her Internship in Seed Multiplication centre, Kutagulla *(Name of the Intern Organization)* on Sericulture activities *(Title of the Internship)* under my supervision as a part of partial fulfilment of the requirement for the Degree of _____ in the Department of Sericulture *(Name of the College)*. S.T.S.N Govt. Degree College, Kadiri.

This is accepted for evaluation.

(Signature with Date and Seal)

STSN GOVT. DEGREE COLLEGE ★ KADIRI ★ Date: ..... Sri Sathya Sai (Dist).

Endorsements

Faculty Guide

Head of the Department

Principal

PRINCIPAL
BTSN Govt.DEGREE COLLEGE
KADIRI - 515 591
Sri Sathya Sai (Dist).

Annexure-VI

CERTIFICATE FROM INTERN ORGANIZATION

Certificate from Intern Organization

This is to certify that A. Sai Chandana *(Name of the intern)* Reg. No 204200508/001 of S.T.S.N Govt Degree College *(Name of the College)* underwent internship in Silkworm seed multiplication centre *(Name of the Intern Organization)* from 3-4-2023 to 8-7-2023

The overall performance of the intern during his/her internship is found to be Satisfactory (Satisfactory/ Not Satisfactory / Good).

Office of the Asst. Director of Sericulture KADIRI

Asst. Director of Sericulture
KADIRI.

Acknowledgement

First of all I am very much thankful to my mentor M. santhoshini Lecture in Sericulture S.T.S.N Govt. Degree college, kadiri. for guiding me throughout my internship. She has given valuable suggestions to complete the Internship in stipulated time with support I cannot complete the given assingment. I am also thankful to the principal of the college for the cooperation and suggestions. I would like to thank to the CRC at kuppagutta and some farmers for enlightend about the basic knowledge of sericulture activities and many other skills which I acquired I on very much thankful to the staff of CRC. for their valuable inputs to learn the knowledge on sericulture because their efforts I learned.

I am also thankful to my parents and friends for giving co-operation and support. I would like to thank to the S.K university for framing the guidelines and rules from time to time.

I am also thankful to the Commisioner of collegiate education govt of AP for giving this wonderful opportunity. Vijayawada and AP state council of Higher Education.

Chapter - I

Executive Summary

Sericulture Proficiency is an inevitable part of education the course is aiming to the equip all the science aspirants to have basic skills as well as hands on experience on silk processing, Morriculture, Rearing and upto Market After Succesful completion of the Internship the students will be able to understand the following.

Objectives:-

* Sericulture dept is fully committed for public welfare, Rural people development.
* It aimed to sericulture is an agrobased cottage industry it gives entrepreneurship employment.
* To give knowledge on preparation of egg production & chawki rearing.
* It aimed to students can learn how to entrepreneur through sericulture.
* To give knowledge about the market
* To give basic information about package of practices in sericulture sectors.
* To understand the sericulture scenario in India
* Learned about egg production, importance of characteristic of industry Mulberry cultivation & Rearing.

* To enrich the practical knowledge of Silkworm Rearing, Moriculture.
* Learned Navigate and prefer common tasks in Mulberry Cultivation such as plantation, Irrigation, Manures, weeding and pruning, Harvesting and preservation of leaf.

Sericulture is an agro based cottage industry the term denotes productions of silk through Silkworm Rearing or in other words Commercial production of silk through Silkworm rearing. Sericulture is a labour intensive agro industry ideals evadication.

Employment further improves their economic standards of rural poor.

* I learned many activities in the sericulture for getting government and private Jobs.
* Every day I went into CRC unit kurtagulla for second internship for getting degree.
* After we visit Cocoon market. I also attend and note down the notes and did practical experience.
* I really appreciate the government for giving this wonderful opportunity.

Chapter - II

Overview of the organization:-

The Chawki rearing centre (CRC) was established in certified institute it was Registes under the CSB guidlines and maintain under the central Silk board it was establishment in 1965.

Objectives:-

* Additional coverage of plantation in the private land for sector i.e now plantation of Mulberry
* To increase the quantity of rearing for more production of cocoons.
* To improve the quality and quantity production of seed cocoon and rearing cocoons.
* To increase supply of disease free layings to the farmers.
* To encourage scientific practices in rearing, spinning .... etc.
* To strengthen silk weaving sector by providing training and diversification.
* To develops silk tourism in the state in convergence with the tourism mission.

Mission:-

Make continuous efforts development of sericulture in the state and transfer the technology rural people.

* To create greater opportunities for gainful employment and improved levels of income in sericulture through spread of scientific sericulture practices in the state.
* To improve productivity in all stages of sericulture production and improve the market of raw silk.

Vision:-

Nature sericulture as Sustainable and profitable vocation for all stake holders with emphasis on rural employment and production of Internationally Competative raw silk.

Chapter-3

Internship ON

A skill development course sericulture the national Education Policy NEW 2020 makes internship mandatory and calls for research as requirement for graduation in all domains specifically for the four-year undergraduate programmes. Hence the UGC has issued guidelines instructing education institutions how to go about this. the govt of Andhra pradesh development courses Along with three mandatory.

Internships during their graduation the Andhra pradesh state council of Higher Education has given the instructions to all the colleges, and universities. Hence the internship is mandatory for degree students. The commissoiner of the collegiate education and concerned universites are the implementing Authority. Here I am going to explain the internship working conditions work schedule what equipment used for internship and how I have successfully completed the tasks given by the mentors and what kind of skills acquired etc are discussing in this chapter.

Basic sericulture activities knowledge is important this may include Reasing, Reeling, CRC, Moriculture and Market.

For the self entrepreneur must have basics to build knowledge makes it easier to make the entrepreneurship.

An internship is a period of work experience offered by an organization for a limited period of time. Once confined to graduates, internship is hand practice for a wide range of placements in business, non-profit organization and government agencies they are typically undertaken by students and graduates experience in a particular field the students will get benefit from their placement becomes they often recruit will employes from their but internship who have known capabilities. Thus saving time and money in the long run Internship for professional carius. are similar in some ways. Similar to internships, apprenticeship transition transtudents from vocational school into work force.

In addition an internship can be used to build a professional network than can assit which letters of recommendation or lead to future employment opportunities. the benefit of bringing on intern into full time employment is that they are already familier with the institute.

Therefore needing title to no training institues their new provide current college students with the ability to participate in a field of their choice to receive hands on learning about a particular future career preparing them for full time work following graduation.

Companies in search of interns often find and place students in mostly unpaid internship for a fee these institutes charge student to assist with research promising to refound the fee if no internship is found the programs vary and aim to provide internship placements of repetable companies. Some companies may also provide Controlled housing in a weekly newcity mentorship support networking weekend activities of academic caidet.

Some programmes after extra odd on such as language classes networking events local expanion expanion and other academic options.

Intern Responsibilites:-

* ~~Fulfilling tasks~~ sets up to
* Fulfilling tasks set out by supervisors from several departments.
* Attending metting and taking minutes.
* Performing research of a supervisor's request
* updating social media platforms and writing copy for pests.
* Creating images for social media posts.

ACTIVITY LOG FOR THE FIRST WEEK

Day & Date	Brief description of the daily activity	Learning Outcome	Person In-Charge Signature
Day - 1 03/04/23	Eggs fixed in Incubator	I learn about process in incubation of eggs	
Day - 2 4/4/23	cleavage	I learn about division of cleavage	
Day - 3 5/4/23	Blastoderm formation	I learn how blastoderm forms	
Day - 4 6/4/23	Germand formation	I learn about Germband formation	
Day - 5 7/4/23	organogenesis	I learn about process of organogenesis	
Day -6 8/4/23	Blastokinesis	I learn about movement of the Embryo.	

WEEKLY REPORT

WEEK – 1 (From Dt...3/4/23 to Dt...8/4/23)

Objective of the Activity Done:

Detailed Report:

Incubation:-

The development of the embryo inside the egg starts from the times of its fertilization and these have to be taken care from that time itself including the periods of transport.

The eggs need to be well aerated and prevented from desiccation.

Around 25°c temperature and relative humidity of about 80% and 16 hours light alternating with 8 hours darkness is ideal.

Incubation is the process of facilitating the growth and development of the embryo inside the egg till hatching.

In involves providing the required ambience to the egg which includes the required temperature, relative humidity light and aeration

Blastoderm formation (12hr)

* Cleavage nuclei migrate through the yolk toward the perimeter of the egg. They settle in the bond of periplasm to form individual cells.

Germ bond formation :-

* Blastoderm cells in the ventral side of egg divides & collect to form lamelliform structure called ventral plate.
* ventral plate further thickness to form germ bond which later skin inside the egg.
* A membraneous layer forms a two fold around the germ bond called serosa (entire surface and amnion (ventral surface)

Organogenesis :-

* A narrow groove forms on germ bond.
* As the germ band enlarges it begins to lengthen and fold in to ectoderm & Endoderm
* Mesoderm arise from lower layer of ectoderm there are 18 embryonic segments in silkworm to attain uniform hatching the longest stage of embryo should be kept at 2-5°C.

Blastokinesis:-

It is an active movement of embryo from the ventral to the dorsal side of the egg and at the same time revalves 180° on its long axis.

ACTIVITY LOG FOR THE SECOND WEEK

Day & Date	Brief description of the daily activity	Learning Outcome	Person In-Charge Signature
Day - 1 10/4/23	Black boxing [Head pigmentation stage]	I learn about head pigment stage	
Day - 2 11/4/23	Block boxing (blue egg stage)	I learn about how blue egg stage formed	
Day - 3 12/4/23	Hatching + Brushing + Feeding	I learn about Hatching and brushing	
Day - 4 13/4/23	Feeding + Bedcleaning	I learn the process of feeding	
Day - 5 14/4/23	Feeding and Climatic Condition	I learn about how climatic condition maintain	
Day -6 15/4/23	Moulting time (1st Moult)	I learn that precautions taken during Moult	

WEEKLY REPORT

WEEK - 2 (From Dt. 10/4/23 to Dt. 15/4/23)

Objective of the Activity Done:

Detailed Report:

Day-1

Black boxing

When the eggs are incubated under suitable conditions reach to pin head or head Pigmentation stage in 7-8 days (48 hours before hatching)

* The first pigmentation can be seen through the egg shell as a blue spot and this stage is called "eye spot or pin head".

After the whole embryo turns black due to the development of body pigments and appears bluish black through the egg shell and called as Blue egg stage.

Hatching :-

Hatching is the process of Larva comes out from the eggs. If hatching is not uniform and only 50-60 percent of eggs are hatched on the first day brushing is the next proces

Brushing :-

The process which involves the transfer of newly born larva to the rearing tray or rearing bed is called brushing.

After hatching the brushing process takes place. Thus the suitable time for brushing would be 10 am but once again it depends upon the weather conditions.

Brushing Method :- (with mulberry leaves)

Mulberry leaves chopped to 0.5 sq cm size are sprinkled on the egg sheets when larva out.

* The mulberry leaf attracts the larvae.

After 10 minutes the eggsheet is turned upside down and larvae along with mulberry leaf are transferred to rearing tray using feathers.

Feeding :-

The feeding start when larva outed. First mulberry leaves chooped to 0.5 sq. cm size are sprinkled. The silkworm will feed only Glossy leaf should provided.

* At a time provide a climatic conditions of Temperature (26-28°C) and Humidity (80-85%)

Bed cleaning:-

Removing the old mulberry leaves. faecal matters of silkworms any dead or unhealthy silkworms etc. from the rearing bed is called bed cleaning.

The Brushing Methods:-

1. Cleaning with Net
2. Cleaning with husk
3. Cleaning with husk and net.

In chawki we observe the Net method for bed cleaning.

* At I st instar only one time brushing will done with net, size with 2mm^2.
* In II nd instar Two times (one just after the I st & II nd instar). - net size 2mm^2.
* In bed cleaning remove all waste and kept it in Compost Pit.

During Moulting time:-

When the silkworm are restored in moult do not disturb and do not give the feeding.

Maintain the Climatic conditions of Temperature and Humidity. The bed should be dry at of Continue 20 hrs.

ACTIVITY LOG FOR THE THIRD WEEK

Day & Date	Brief description of the daily activity	Learning Outcome	Person In-Charge Signature
Day - 1 17/4/23	Feeding (II nd instar)	I learn how feeding given	
Day - 2 18/4/23	Feeding and Bed cleaning	I learn about type of feeding	
Day - 3 19/4/23	Dusting Moult (II nd moult)	I learn that care about moult	
Day - 4 20/4/23	Fomes Distribution	I learn how to distribute the fomes	
Day - 5 21/4/23	Disinfection	I learn the process of Disinfection	
Day -6 22/4/23	Disinfection	I learn about the fumigation	

WEEKLY REPORT

WEEK – 3 (From Dt. 17/4/23 to Dt. 22/4/23)

Objective of the Activity Done:

Detailed Report:

Feeding of II nd instar:-

Depending on the size of the worms. complet leaves can't be used for Chawki worms.

The leaf quality also influences the process of chopping.

for the II nd instar : the leaf are chopped under the size of 2.0 instar and peak eating stage with 4.0

Generally chawki worms are to be fed 3-4 times a day with succulent and freshly chopped leaves.

* The amount of leaves given per feeding is adjusted to suit the appetite of the worms

Bed cleaning:-

Remove the all waste leaf, faecal matter of silkworms and any dead or unhealthy silkworms should be avoided.

The bed cleaning of II nd instar two times is come just after of I st moult and again before setting for 2nd moult.

* The bed cleaning is done with net method. on the second instar use 2mm² net size.

II nd Moulting time:-

During Moulting the bed should be kept it dry. with lime by applying the bed disinfection.

* Do not disturb when it settled to moult and not feeded.

* At a moult maintain the climatic conditions of Humidity and Temperature.

* The moult continue to 24 hours.

Farmers distribution:-

During moult or it enters in III rd instar. The dfs are supplied to farmers.

The farmers collect the dfls in Chawki rearing with packing strictly.

After during cool hours should be transport of early hours or evening time.

Disinfection:-

The destruction of disease causing germs is called disinfection.

The disinfection may be carried out by both Physical and chemical method.

most effective and simple method of disinfection is by using chemicals.

* The disinfection must be conducted before starting and completion of weaving.

* The disinfection in weaving was done by chemical using the formalin.

* During that precautions should be conclude to that on that second day fumigation is carried out.

The solution is boiled and allowed to evaporate in a pan and vapours come out slowly reaches all crevices and corners of equipment and room and kills the micro organisms or Micro germs.

ACTIVITY LOG FOR THE FORTH WEEK

Day & Date	Brief description of the daily activity	Learning Outcome	Person In-Charge Signature
Day - 1 24/4/23	K. Ramakrishnappa	I learn that survey of farmers	
Day - 2 25/4/23	visited to M. venkateshwara reddy garden	I learn that garden process	
Day - 3 26/4/23	visited to B. Ramireddy field	I learn about different activities in field	
Day - 4 27/4/23	visited to Anand shed	I learn many thing in farmer shed.	
Day - 5 28/4/23	visited to A. Raja reddy	I learn many practices from farmer	
Day -6 29/4/23	visited to M. Narasimhappa	I learn how to cultural/feeding the silkworm	

WEEKLY REPORT

WEEK – 4 (From Dt. 24/4/23 to Dt. 29/4/23)

Objective of the Activity Done:

Detailed Report:

Visiting the farmers for seavey

K. Ramakrishnappa

Farmer village :-

Acres :- 2 Acres

Mulberry variety :- V1

Rearing Method :- Shoot rearing

capacity of Dfls :- 200 Dfls

Survey-2

② M. venkateshwar reddy

farmer name :- M venkateshwar reddy

variety of plantation :- V1

no. of Acres :- 1½ Acre

Spacing :- 3x3

Dfls reared :- 250 Dfls

Rearing Method :- shoot rearing

Survey -3

Farmer name :- B. Ramireddy
variety :- V1
Acres plantation :- 6 Acres
spacing :- 6x6
Dfls reared :- 350 Dfls
Rearing Method :- Shoot rearing

Survey -4

Farmer name :- Anand
variety :- V1
Acre plantation :- 4 Acres
spacing :- 6x3
Dfls reared :- 400 Dfls
Rearing Method :- Shoot rearing
Marketed :- Madanapalli

Survey -5

Farmers name :- A. Raja Reddy
variety planted :- V1
no. of Acres :- 9 Acres
spacing :- 8x8
Dfls reared :- 500 Dfls
Rearing Method :- Shoot rearing

Survey -6

Farmers name :- M. Narasimhappa
variety :- V1
no. of Acres :- 3 Acres
spacing :- 3x3
Dfls reared :- 250 Dfls
Rearing Method :- Shoot rearing
Market available :- kadiri.

ACTIVITY LOG FOR THE FIFTH WEEK

Day & Date	Brief description of the daily activity	Learning Outcome	Person In-Charge Signature
Day - 1 01/5/23	Disinfection	I learn the process of Disinfection	
Day - 2 2/5/23	Disinfection (fumigation)	I learn how the fumigation is done	
Day - 3 3/5/23	Collection of chawki + transport	I learn that how to collect chawki	
Day - 4 4/5/23	Feeding + spacing bed cleaning	I learn that feeding process and spacing	
Day - 5 5/5/23	shoot feeding + spacing + climatic conditions	I learn about maintenance of climatic conditions	
Day - 6 6/5/23	Settle for mount.	I learn the Instruction during mount.	

WEEKLY REPORT

WEEK - 5 (From Dt. 01/5/23 to Dt. 6/5/23)

Objective of the Activity Done:

Detailed Report:

Disinfection:-

The destruction or deactivation of disease causing germs is called disinfection.

The disinfection may be carried out by both physical and chemical method.

Disinfection must be conducted before starting and completion of rearing.

* This process done with formalin

Commercial formalin contains 30 to 40% formaldehyde and has a specific gravity of 1.081 to 1.087

The rearing equipment such as rearing trays feeding stands, ... etc.

* while disinfection precautions should be maintened.

* After that fumigation process will happens it disinfectant is kill germs.

collection of chawki worms:-

The farmers Read only late age rearing. So that chawki worms will buy in chawki rearing [After II nd instar and reared.

After they allowed to shoot rearing they feed with mixed with mature leaf.
* They rearing up to spinning of cocoons.

Feeding:-

The late age worms are fed with bottom mature (dark green) leaves which are thick. Soft and rich in protein and comparatively low moisture leaf.

Too tender or over matured leaves are most not fit for feeding.

From the 3rd day of the 5th stage. the silk glands of the worm develop vigorously.
* The present conditions with the technological advancement and awareness by the farmers.

The frequency of feeding is brought down to 2 feedings / day even with leaf feeding.

The quantity of feed fixed for each instar should not be reduced.

Spacing:-

To facilitate the growth of the larva. timely and sufficient leaf quantity has to be feed to the silkworms.

Spacing influences the health of the larvae and also the economics of silkworm rearing.
* over crowding of the silkworms leads to insufficient consumption of leaves and larvae become small and spin smaller sized cocoons.

* Therefore optimum spacing needs to be provided as per the stage of the silkworms.

Settle for III 3rd moult :-

In late age rearing silkworm undergoes moulting for two times the third and fourth moulth for shedding the skin.

The moulting duration in for III 3rd instar is 24 hours.

* Don't feed with leaf and bed should be kept dry by lime applications.

ACTIVITY LOG FOR THE SIXTH WEEK

Day & Date	Brief description of the daily activity	Learning Outcome	Person In-Charge Signature
Day - 1 8/5/23	Feeding (Fourth instar)	I learn about late age feeding	
Day - 2 9/5/23	Feeding + Spacing	I learn the feeding of IV th instar	
Day - 3 10/5/23	Feeding + Environment conditions	I learn that maintainance of climate	
Day - 4 11/5/23	Feeding + spacing	I learn how the space provided	
Day - 5 12/5/23	During Moulting time (IV)	I learn care during m moulting time	
Day -6 13/5/23	V th Instar (Enters) start	I learn the instar during last.	

WEEKLY REPORT

WEEK – 6 (From Dt. 8/5/23 **to Dt.** 13/5/23**)**

Objective of the Activity Done:

Detailed Report:

Feeding:-

The mulberry leaf has to be fed to the silkworms as per the fixed gap so that the leaf is supplied to the silkworms with required Quality for which the fixed schedules or timings are followed during the silkworms rearing.

These schedules may vary based on the seasons and type of rearing.

The importance of feeding and growth of the worms are prominent.

Chopping of leaves for feeding is not essential to late age worms. Feeding of leaves depends on leaf harvest. In case of leaf pluking whole leaf can given IV and V instars.

However in rainy season depending on the humidity.

Leaf can be cut into two bits before feeding the worms. In case of shoot harvest, it is cut in to convenient size shoots to accommodate in the rearing tray. the quantity of leaf required for rearing of 100 layings from IV to V instar is given.

Spacing:-

The spacing influence the health of the larval and also the economics of silkworm rearing. Over crowding of the silkworms leads to insufficient consumption of leaves and larva become small and spin smaller sized cocoons. whereas wider spacing leaf to leaf wastage and higher leaf cocoon ratio. therefore optimum spacing needs to be provided as per the stage of this silkworms.

Good spacing of worms in the rearing beds plays a vital role for the success of silkworm crop and improvement of cocoon quality.

ACTIVITY LOG FOR THE SEVEN WEEK

Day & Date	Brief description of the daily activity	Learning Outcome	Person In-Charge Signature
Day - 1 15/5/23	Feeding + climate Conditions maintenance	I learn Management of condition	
Day - 2 16/5/23	Feeding + Physiological activity spacing	I learn about feeding + spacing	
Day - 3 17/5/23	Feeding + Physiological activity Silk glands	I learn that physiological activity	
Day - 4 18/5/23	Feeding + Silk glands	I learn/observe formation of Silk glands	
Day - 5 19/5/23	Development of Silkworm (final stage)	I learn the Development of Silkworm	
Day - 6 20/5/23	Silkworm mature	I learn the maturity of Silkworm	

WEEKLY REPORT

WEEK – 7 (From Dt.15/5/23 to Dt.20/5/23)

Objective of the Activity Done:

Detailed Report:

Feeding:-

The importance of feeding and growth of the worms are detailed in earlier stage.

It is a process to remove waste and harmful leaf from garden and collect good and quality of leaf.

Feeding of depends on leaf harvest. In case of leaf plucking whole can leaf given to IV and V instars. However in rainy season depending on the humidity.

Spacing:-

To facilitate the growth of the larvae. timely and sufficient leaf quality has to fed to the silkworms spacing influences the health of the larvae and also the economics of silkworm rearing. Overcrowding of the silkworm leads to insufficient consumption.

The worms are fed with big shoots. In every feed the larvae keep moving upwards to consume mulberry leaves.

Thus it is possible to accomodate 50% more worms per unit area. The rearing activities especially cleaning is reduced.

After present most of the farmers are attracted towards sericulture and rearing method most of the farmers are successfully following even with 7-8 tiers and 10 feet width irrespective of the length of the shoot.

Fifth instar worms feeding may last for five to seven days in case of multivoltine and bivoltine worms.

Ripening of worms:-

Ripened Silkworms are to be pickled on time. So that all the matured worms able to spin cocoons successfully mature worms normally crawl towards the edges of the rearing tray by raising heads. in search of suitable support for spinning their cocoons.

Environmental conditions:-

Silkworm is one of the most domesticated insects which produces luxurient silk thread in the form of cocoon by consuming mulberry leaves during larval period. the growth and development of Silkworm is greatly influenced by Environmental conditions such as temperature, humidity, air current and

light apart from rearing seasons. Quality mulberry leaf and genetic constitution of silkworm strains.

Temperature:-

The optimum temperature required for late age silkworms are 24-26°c. Temperature plays a vital role on the growth of the silkworms. As silkworms are cold-blooded animals. Temperature will have a direct effect on various physiological activities.

Humidity:-

Comparatively low humidity in the range of 65-70% is required. Humidity plays a vital role in silkworm rearing and its role is both direct and indirect.

It directly influences the physiological functions of the silkworm. Humidity also indirectly influences the rate of drying of the leaves in silkworm rearing beds

ACTIVITY LOG FOR THE EIGHT WEEK

Day & Date	Brief description of the daily activity	Learning Outcome	Person In-Charge Signature
Day - 1 22-5-23	Spinning (plastic collapsible mountage)	I Learnt that how the larva Spin the cocoon	
Day - 2 23-5-23	Spinning (Environment condition)	I Learn how the Provide Environment condition	
Day - 3 24-5-23	Spinning Super vision	I Learn the how to Super vision	
Day - 4 25-5-23	Cocoon harvesting	I Learnt the process of cocoon harvest	
Day - 5 26-5-23	Deflossing + seat cocoon ratio	I Learn how to Deflos the Colony	
Day - 6 27-5-23	Cocoon Sorting	I Learn the how to sort the cocoons	

WEEKLY REPORT

WEEK – 8 (From Dt. 20/5/23 to Dt. 27/5/23)

Objective of the Activity Done:

Detailed Report:

Spinning:-

Worms picked much before ripening may not spin the cocoons resulting in unnecessary crop losses at the final stage of rearing.

* Mature worms normally crawl towards the edges of the rearing tray by raising heads in search of suitable support for spinning their cocoons.
* The process of picking ripe worms and keeping them on the mountage for spinning is called mounting of worms.

To provide optimum conditions during mounting the ripened silkworms are transferred to the devices called as mountages.

The mountages for producing good reelable cocoon should have features.

Sufficient cocooning space between frame worms

* At spinning maintain 23-25°C and 75°-80% Humidity.

Generally pupation takes place on the 4th day of spinning.

* The cocoons are then harvested on the 5th day in summer and 6th day in cooler season.

Deflossing:-

It is necessary that floss covering the cocoons must be removed before marketing for getting a good price for cocoons for bivoltine.

Deflossing is not required for multivoltine x bivoltine (cross breed) cocoons.

Flossing can be removed by hand if the cocoon quatity is small. If quantity is more deflossing machine can be used.

Cocoon sorting:-

After floss removal the defective cocoons such as double, stained soiled thin end, malformed thin shelled, pierced and loose shell cocoons are sorted out.

These cocoons are kept as a separate lot while marketing.

Plastic collopsible Mountage:-

The mountages are used mainly as self-mounting devices to save labour during spinning.

It is being very well accepted and adopted most of the farmers

* It is made of plastic mesh having 11 folds of 2.2" height of and placed in a wooden/ Plastic tray of size 2'x3' for mounting the larvae.

* It can be stored by folding

Each mountage can hold 350 to 400 larva for spinning.

After mounting strips of paddy straw or pieces of old newspaper are put on the mountage for providing anchorage to the spinning silkworms.

Plastic collapsible mountage can also be used for self mounting. It can be directly placed on the rearing bed when the larvae start spinning by self ~~mounting~~ mounting.

Cocoon harvesting:-

The silkworm larva metamorphosis into pupa after spinning the cocoons for about 48hours from the time they are mounted.

ACTIVITY LOG FOR THE NINE WEEK

Day & Date	Brief description of the daily activity	Learning Outcome	Person In-Charge Signature
Day - 1 29-5-23	Transport the Cocoons to market	I Learn how to transport the Cocoons	
Day - 2 30/5/23	visit to Cocoon market	I Learn many things in market	
Day - 3 31/5/23	Observing Transactions + Breeds	I learn how transactions are provided	
Day - 4 01/6/23	Selection of Land	I learn the slection of Land	
Day - 5 02/6/23	Preparation of Nursery	I Learn how to prepare the Nursery	
Day - 6 03/6/23	Preparation + Planting materials	I Learn the Preparation of Materials	

WEEKLY REPORT

WEEK - 9 (From Dt. 29/5/23 to Dt. 3/6/23)

Objective of the Activity Done:

Detailed Report:

Transport:-

The cocoons should be cleaned by removing floss, litter, leaf material etc.

The cocoons should be put into loosely woven cotton bags. they are packed loosely and transported in cooler hours of the day.

* It is also important that cocoon cost depends on the quality and are well protected from direct sunlight and humidity.

Cocoon market:-

A systematic marketing management is one of the most effective tool to exploit the industrial Product.

Simply increasing the production of cocoons is not enough. providing of marketing facilities and these by increasing the demand for the cocoons is extremely essential for sustaining the industry.

Rules and Acts:-

All the reelers and reelers should obtained a licence to participate in the cocoon transactions and a normal nominal licence fee will be collected by the department / federation.

* All Cocoon transactions should be made only through federations / government Cocoon markets.
* All transactions involving Sale or Purchase of Cocoons is the Cocoon market shall be open auction
* All transations are obtained through online mode:-

Selection of Land:-

The soil should be deep, fertile, well drained, clayey loam to loam in texture, friable, porous and with good moisture holding capacity. Soline and alkaline soils are not suitable for mulberry cultivation.

Soils with 6.2 to 6.8 (slightly acids) and free with injurious salts are good for mulberry growth. However soline and alkaline soils are corrected with gypsum, sulphur or green manure while acidic soils are improved with lime and green manure.

* Mulberry is a deep rooted perennial plant Its root system goes to a depth of 1-2 meters in the case of a bush this requires Proper ploughing to deep so as to facilate the development of the root system well prepared land with deep digging makes the soil loose and plants find way to establish them selves.

ACTIVITY LOG FOR THE TEN WEEK

Day & Date	Brief description of the daily activity	Learning Outcome	Person In-Charge Signature
Day - 1 5/6/23	Selection of variety + collection	I learn that how to seled variety	
Day - 2 6/6/23	Transport of saplings	I learn that when should transport	
Day - 3 7/6/23	Planting of saplings	I learn plant saplings	
Day - 4 8/6/23	Plantation	I learn that process of plantation	
Day - 5 9/6/23	Irrigation (Drip System)	I learn how to provide water source	
Day - 6 10/6/23	Irrigation	I learn the Method of Irrigation	

WEEKLY REPORT

WEEK - 10(From Dt. 5/6/23 to Dt. 10/6/23)

Objective of the Activity Done:

Detailed Report:

Mulberry Management practices

Selection of variety:-

Characteristic features of a good Mulberry variety:-

1. High degree of nutrient value
2. High moisture content and retention capacity
3. Succulence for larger duration
4. High leaf yield
5. Good rooting capacity
6. Drought resistance
7. Disease resistance

First, choose the variety which as more advanceous to the all seasons.

Then pick out of all and collect them. after that transport to the feild where should Plantation takes place in main crop. with carefully with taking all measures.

The cutting is 18-20 cm with 3-4 active buds in irrigated conditions and 20-24 cm with 5-6 buds in rainfed conditions.

Plantation:-

The cuttings will plant after treatment of bavistin. to avoid the diseases.

Whatever plantation is different during irrigated & rainfed.

In irrigated were planted slantly with inside 2 buds and rainfed with 4 buds

During planting soil packed tightly not allow to air it leads to death of saplings....

Irrigation:-

Irrigation is the process of applied the water in different methods to the crop is known as Irrigation. they are many types:-

Drip Irrigation:-

Drip Irrigation is a method of irrigation in which water is slowly delivered to the root system of Multiple roots. plants

In this method water is either dipped onto the soil surface above the roots, or directly to the root zone.

It is often a method chosen over surface irrigation because it helps to reduce water evaporation

For last recent years drip irrigation is playing Major in irrigation of Mulberry gardens.

This Method is quite useful in not only a water saving but also its luxuriant growth.
This method is suitable to all types close, wide spacing systems and even for pit Methods

Advantages of Drip irrigation:-

* Conservation of water by preventing the evaporation loss on irrigation channels.
* Saving of man power required for irrigation.
* Control of weeds & hence high yield.
* uniform irrigation to the entire garden at a time.

ACTIVITY LOG FOR THE ELEVEN WEEK

Day & Date	Brief description of the daily activity	Learning Outcome	Person In-Charge Signature
Day - 1 12/6/23	Mulberry Management Practices	I learn the practices of Mulberry	
Day - 2 13/6/23	Pruning (Bottom Pruning)	I learn how to pruning the plants	
Day - 3 14/6/23	Pruning (Middle Pruning)	I learn the methods of pruning	
Day - 4 15/6/23	Pruning (Hind Cut Pruning)	I learn the TOP Pruning	
Day - 5 16/6/23	Weeding (Physical Method)	I learn that how to remove the weeds.	
Day - 6 17/6/23	Weeding (Chemical Method)	I learn how to discard the weeds	

WEEKLY REPORT

WEEK - 11 (From Dt. 12/6/23 to Dt. 17/6/23)

Objective of the Activity Done:

Detailed Report:

Mulberry Cultivation Practices:-

Planting season varies in different parts. In Karnataka mulberry is planted with the onset of south western monsoon, during July-August month plantation during rainy season results in rooting of cuttings.

Pruning :-

Pruning is not deviating process rather it invigorates the plants into production phases leading to luxuriant growth and better leaf yield. Pruning the mulberry plants is useful in adjusting the production period to synchronize with the leaf requirement for silkworm rearing.

Pruning also helps in diverting the energies of plant for optimum production of foliage.

Main objectives of pruning:-

* To Maintain proper shape and size of plant.
* To make cultural operation easier.
* To provide proper aeration and sunlight.
* To maintain convenient height for harvest.
* To induce higher foliage.
* To synchronize the leaf production and silkworm.
* Pruning schedules are differently according to the existing field condition.

Cut forms:-

The method by which the shape and form of mulberry plant is maintained is called a "cut form".

By maintaining a specific shape of the plant, a guaranteed quantity of Mulberry leaf can be obtained and this is possible by adopting pruning schedules.

Types of cut forms:-

* Low cut:-

In low cut form the length of the main stem is maintained below 50 cm from the ground level.

* Medium cut:-

In this type of pruning the of the main stem is maintained one meter from the ground level, middle pruning is a method of cutting the branches of

bush mulberry at a height of 45-60cm from ground level during December-January.

High cut:-

Here, if it is above one meter above the ground level. The maintenance of height varies from place to place.

Weeding:-

Weeds are unwanted and undesirable plants weeds complete with main crops for nutrients soil moisture, light, aeration, space and fertilizers etc.

* weeds serves as alternate hosts to several crop insects, nematodes, pathogens etc..
* weeds can be controlled by (i) physical Method (ii) intercultivation (iii) chemical methods

Physical Methods:-

Mechanical and manual weed control measures are as old as agriculture itself.

In the recent years herbicide technology and weed management have developed much with which are projective and cost effective.

manual weeding by digging, sucking, hoeing and pulling are the most common methods of weed control. Hand weeding is done by physical removing or pulling of weeds.

Chemical Method:-

It is another method of destroying the weeds and is mostly under use. To control Parthenium one kg salt is added to 5 litres of water and added to 5gm of detergent soap. Ammonium nitrate monochloro acetic acid acts effectively for weed control.

Glycin with Ammonium sulphate mixture controls cyperus rotundus, cynodon, dactylon effectively.

Besides, 2,4-D Sodium salt, 2,4-D amine fluchloralin, Atrazine, Atrazine and diuron chemicals are used.

ACTIVITY LOG FOR THE TWELVETH WEEK

Day & Date	Brief description of the daily activity	Learning Outcome	Person In-Charge Signature
Day - 1 19/6/23	Manures	I learn that application of manures	
Day - 2 20/6/23	Manures (Compost)	I learn about compost	
Day - 3 21/6/23	Mulching	I learnt how to mulch	
Day - 4 22/6/23	Inter cropping	I learn that process of Inter cropping	
Day - 5 23/6/23	Cutting Transplantation	I learn cutting & replantation	
Day - 6 24/6/23	Transplantation	I learn that procedure of Transplantation	

WEEKLY REPORT

WEEK - 12 (From Dt. 19/6/23 to Dt. 24/6/23)

Objective of the Activity Done:

Detailed Report:

Manures:-

Plants need several kinds of nutrients for their normal healthy growth, which are obtained from air, water and soil. the environment is an out door chemical factory where the plant get different from sunlight. soil the water and convert them in their growth are obtained partly for man.

Manures are plant and animal waste that are used sources of plant nutrients. the yeild nutrients after decomposition.

Manures can be grouped in to bulk organic manures and concentrated organic manures based on concentration of the nutrients.

The plant and animal decompositioned bodies are the source of organic manure. It is necessary for plants growth and high yield. The quality of organic matter in the soil can be in the soil can be in the soil can be increased by adding FYM, compost & green manure.

Compost:-

It is a mass of rotted matter made from waste. this process is to decompose plant residues in a heap or pit to bring the plant residues are applied directly to the soil readily available form.

There are different methods of composting based on whether the process is to decompose plant residues in a heap or pit to bring the plant residues are aneo aneobic.

The nutrients vale of farm compost can be increased by application of super phosphate or rock phosphate at -10kg/ton of raw material at the inital stage of filling the compost pit.

Mulberry - Inter Crops:-

Recommended inter crops maximum 90 days, preferably 70 days duration crops are Recommended

All legumes like horse gram, black gram, beans, soya beans, etc. and cow pea turmeric, coriander, zinger, ground nut.

Cutting transplantation:-

There are many ways to do this but one of the easiest is by snipping off a piece of stem. Placing it in a potting medium, and nursing the cutting until roots develop.

Rooting will generally occur in 3-4 weeks but some plants will take longer.

when the roots are 1-2 inches long or larger the cutting is ready to potted up.

* Then cut it slant type and plant in a main cup.
* In between the gaps or under high spaced it will arrange.

ACTIVITY LOG FOR THE THIRTEEN WEEK

Day & Date	Brief description of the daily activity	Learning Outcome	Person In-Charge Signature
Day - 1 26/6/23	Selection of Site + planning	I learn how to select the site	
Day - 2 27/6/23	Preparation of Material	I learn the preparation of Materials	
Day - 3 28/6/23	Preparation of thatch roof	I learn the build of thatch roof	
Day - 4 29/6/23	Collection of Sericulture waste	I learn the collection of waste.	
Day - 5 30/6/23	Bed Decomposing	I learn about Bed Decomposing	
Day - 6 01/6/23	Bed Decomposing	I learn the process of decomposing.	

WEEKLY REPORT

WEEK - 13 (From Dt: 26/6/23 to Dt: 1/6/23)

Objective of the Activity Done:

Detailed Report:

Selection of site :-

The vermicompost is process in which the earthworms convert the organic waste into manure.

The site should be aware of any pollutants and other chemicals and need of all transport and market facilities.

The site should be cleaned with all material avoid and keep it highly heated.

* Preparation of Materials :-

* water, cowdung, thatch Roof, soil or sand gunny bags, earthworms, weed biomass.

A large bin (plastic or cemented tank).

Dry straw and leaves collected from paddy fields. Biodegradable wastes collected from fields and kitchen.

* To prepare compost, either a plastic or a concrete tank can be used the size of the tank depends upon the availability of raw materials.

Page No:

* Collect the biomass and place it under the sun for about 8-10 days.

Now chop it to the requires size using the cutter prepare a cow dung slurry and sprinkle it on the heap for quick decomposition

Add a layer (2-3 inch) of soil or sand of the bottom of the tank.

Earthworms maintained as culture inorganic waste feed on the substrate.

The bed materials thus undergo physical and chemical breakdown in earthworm body.

It is rich in all major and micro nutrients, such as nitrogen, phosphorous, magnesium, zinc and calcium in simple forms. so that the plant root system can readily absorb them.

The bed will decompose the after water allowing and protection. It is needed for all west wet conditions.

ACTIVITY LOG FOR THE FOURTEEN WEEK

Day & Date	Brief description of the daily activity	Learning Outcome	Person In-Charge Signature
Day-1 3/7/23	Selection of Earthworms	I Learn the Selection of Earthworms	
Day-2 4/7/23	Transpost of Earthworms	I Learn how to Transpost	
Day-3 5/7/23	Take Precautions	I Learn Maintain/take Precautions	
Day-4 6/7/23	Super Vision	I Learn about look after	
Day-5 7/7/23	Maintenance	I Learn about Maintenance	
Day-6 8/7/23	Separation of Earthworms	I Learn that separate of Earthworms	

WEEKLY REPORT

WEEK - 14 (From Dt. 3/7/23 to Dt. 8/7/23)

Objective of the Activity Done:

Detailed Report:

Selection of Earthworms:-

Eudrilus, eugenia, Eisenia foetida, and Perionyx excavels earthworms are used in vermicompost preparation.

Vermicompost is the fastest method of converting waste organic matter in to a fertile compost.

Each earthworms feed 4-5 times of its own weight of material every day.

Vermicompost forms an excellent for multiplication of soil microbes.

Excretions of earthworms also contain several growth promoting substances.

Earthworms will improve soil texture, aeration, nutrients status and activates local earthworm population in soil.

Vermicompost has a very high nutrient value (N: 1.93%, P: 0.75% & K: 1.3%) as compared to FYM and Compost.

* From large mulberry garden 5-8 metric tons of waste material can be obtained through prunings other sources, which can be effectively converted through vermiculture or composting.

Climate: 20-30°C Temp and 6.8-7.5 pH,

Moisture: 40-50% Best Season - June-December

Spacing 2000 worms / Sqmt (3 ft thick bed).

6000 worms / 12×3×3 ft bed or 4300 worms / 8×3×3 bed.

Precautions:-

Water stagnation in the tank leads to Anaerobiosis → Change of pH → Mortality of worms.

Therefore 40-50% Moisture is optimal.

* Holes may be made on the vermibeds from the surface to the bottom using a stick here and there to allow aeration, worms should not be released in fresh water as this will release excess heat and destroys earthworm population.

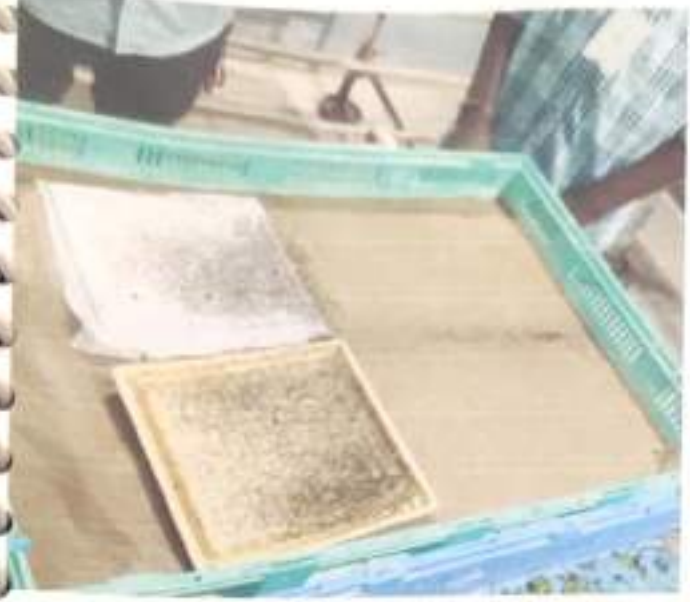
Incubation of Sillavoam Eggs

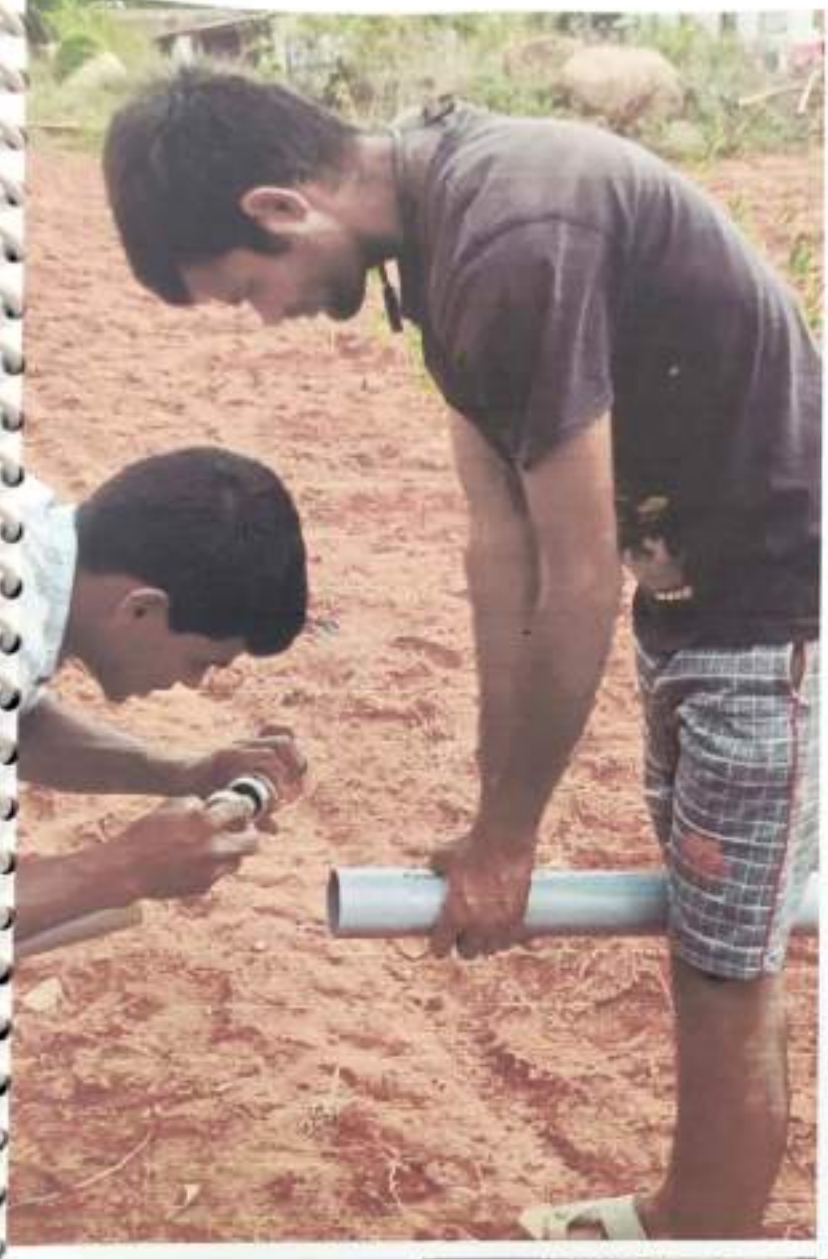







Chawak. Roasting





Vermi compost

Annexure-IX

STUDENT SELF-EVALUATION

Student Self-Evaluation of the Short-term / Semester Internship

Student Name: A. Sai chandana

Registration Number: 204200508001

Term of Internship: From: To: 03/04/2023 to 08/07/2023

Date of Evaluation:

Organization Name & Address: Silkworm seed multiplication center, katagulla. Satya Sai District.

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** ✓

Date:

A. Sai chandana

Signature of the Student

Annexure-X

EVALUATION BY THE SUPERVISOR OF THE INTERN ORGANIZATION

Evaluation by the Supervisor of the Intern Organization

Student Name: A. Sai Charitana

Registration Number: 204200508100I

Term of Internship: From: 3/7/23 **To:** 8/7/23

Date of Evaluation:

Organization Name & Address: Silkworm Seed Multiplication centre, Kadagutla.

Name & Address of the Supervisor with Mobile Number:

Note: 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	**OVERALL PERFORMANCE**	**1**	**2**	**3**	**4**	**5**

Date:

Signature of the Supervisor

STSN GOVT. DEGREE COLLEGE
Date:
Sri Sathya Sai (Dist).
KADIRI

Annexure – XI

INTERNAL ASSESSMENT STATEMENT

INTERNAL ASSESSMENT STATEMENT
(To be used by the Examiners)

Name of the Student: A. Siri Chandana

Programme of Study:

Year of Study: 2022-2023

Group: B.Sc (C.Z.S)

Register No/H.T. No: 204200508l001

Name of the College: S.T.S.N Govt. Degree College, Kadiri.

University: Sri Krishna devaraya University.

S.No.	Evaluation Criterion	Maximum Marks	Marks Awarded
1.	Activity Log	10	08
2.	Internship Evaluation	30	28
3.	Oral Presentation	10	09
GRAND TOTAL		50	45

Date:

Signature of the Faculty Guide

PRINCIPAL
STSN Govt.DEGREE COLLEGE
KADIRI - 515 591
Sri Sathya Sai (Dist).

Annexure – XII

EXTERNAL ASSESSMENT STATEMENT

EXTERNAL ASSESSMENT STATEMENT
(To be used by the Examiners)

Name of the Student: A. Sai Chandana

Programme of Study:

Year of Study: 2022 - 2023

Group: B.Sc (C.Z.S)

Register No/H.T. No: 204200508001

Name of the College: S.T.S.N Govt Degree College, Kadiri.

University: Sri Krishnadevaraya University.

S.No	Evaluation Criterion	Maximum Marks	Marks Awarded
1.	Internship Evaluation	80	73
2.	For the grading giving by the Supervisor of the Intern Organization	20	17
3.	Viva-Voce	50	43
TOTAL		150	133
GRAND TOTAL (EXT. 50 M + INT. 100M)		**200**	178

Signature of the Faculty Guide

Signature of the Internal Expert

Signature of the External Expert

Signature of the Principal with Seal