

Model Program Book



SHORT-TERM INTERNSHIP (On-Site/Virtual)

Designed & Developed by



**ANDHRA PRADESH
STATE COUNCIL OF HIGHER EDUCATION**

(A STATUTORY BODY OF GOVERNMENT OF ANDHRA PRADESH)



An Internship Report on
Enhancing cold storage efficiency and sustainability
in Agriculture
(Title of the Internship)

Submitted in accordance with the requirement for the degree of
IIIrd B.A (H.E.P)

Under the Faculty Guideship of
P. Nageswar Reddy
(Name of the Faculty Guide)

Department of
History
(Name of the College)

Submitted by:
Ki Dharami S.V.B Government Degree college
(Name of the Student)

Reg.No: 211100481010

Department of
History
(Name of the College)

S.V.B Government Degree college
Koilkuntla

Student's Declaration

I, K. Dharoni a student of Internship
Program, Reg. No. 2111004610 of the Department of History
College do hereby declare that I have completed the mandatory internship
from 07-08-2023 to 06-10-2023 in Edula Siva Reddy (Name of
the intern organization) under the Faculty Guideship of
T. Nageswari Reddy (Name of the Faculty Guide), Department of
History, S.V.B. Govt degree college,
(Name of the College) Koilkuntla

K. Dharoni
(Signature and Date)

Official Certification

This is to certify that K. Phoojan (Name of the student) Reg. No. 2111001/10/10 has completed his/her Internship in IIIrd B.A (H.E.P) (Name of the Intern Organization) on Edula Siva Reddy Cold Storage (Name of the Internship) under my supervision as a part of partial fulfillment of the requirement for the Degree of IIIrd B.A (H.E.P) in the Department of History.
S.V.B. Govt Degree (Name of the College).

This is accepted for evaluation.

(Signatory with Date and Seal)

Endorsements

Faculty Guide T. Nageshwar Reddy

Head of the Department History.

Principal H. Ravi Sub. N 6/11/23

PRINCIPAL
S.V.B. GOVT DEGREE COLLEGE
KOILKUNTLA, NANDYAL (Dt.)

Page No:



Certificate from Intern Organization

This is to certify that Shovit Teem (Name of the intern)
Reg. No. _____ of S.V.B Gunt Degree (Name of the
College) underwent internship in Edula Siva Reddy Storage (Name of the
Intern Organization) from koilkuntla to koilkuntla.

The overall performance of the intern during his/her internship is found to be
Edula Siva Reddy Cold Storage (Satisfactory/Not Satisfactory).

Authorized Signatory with Date and Seal

Acknowledgements

Edula Siva Reddy cold storage

The Internship Andhra Pradesh in Edula Siva Reddy and storage in local Kolkuntla Red chillys and and chana whole moong, split moong, mong dal storage. Acknowledgements height of building for a chilly oling in room storage. typically, chilly could storage regist of 6 floors Ground floor (12ft) + 5 floors (9ft each) in export looking the chilly stock storage in lifet and chillys export Andhra Pradesh :- Dry chillys local Kurnool market in Andhra Pradesh and dry chillys red market Guntur in Andhra Pradesh

INR

quinta

INR

market	District	price
Hindupuram	Anathpur	quinta 15,000.00
Kurnool	Kurnool	quinta 11,899.00
Guntur	Guntur	quinta 19,700.00

BLUECOLD

chilly cold storage of 5,000 MT?

Approximately one acre of land is required for a 5000 MT cold storage for chilly. This land required is sufficient for cold storage, machine room, condenser tank and condenser, power house transformers, and also 20 feet free space in all direction for fire and safety guidelines.

What is the approximate building length width and height required for a 2,500 MT chamber?

Generally for chilly storage of 5,000 MT, customers build two chambers of 2,500 MT, each they build the cold storage in rectangle shape, and standard size is $140 \times 40 \times 57$ ft. and standard size of each 2,500 MT chamber is $140 \times 40 \times 57$ ft. (L x W x H). depending on the customers land layout. the building is Blue cold can help with plan for their requirement.

CHAPTER 1: EXECUTIVE SUMMARY

The internship report shall have only a one-page executive summary. It shall include five or more Learning Objectives and Outcomes achieved, a brief description of the sector of business and intern organization and summary of all the activities done by the intern during the period.

Introduction:-

Cold storage industry is a very important and essential industry. The temperature is maintained with the help of precision instruments. Cold storage is used to preserve fruits, chilis and All potatoes stock once they are kept in the cold storage they do not get spoiled even after many months.

The development of cold storages in the country has an important role. The marketing of cold storage follows the local existing distribution network.

The internship report shall have only a cold storage objectives and outcomes organization.

Weight loss of Dry chilli and recommendation to reduce the weight loss

chilli stored before, with proper drying from 65-85% RH to below 10% RH

Here after only it can be stored as per the storage condition.

weight loss is caused due to:-

Improper storage is not maintained RH - cold storage is not maintained properly or per He, required 4°C and not less than 95% RH value at the storage period of 6 to 12 months.

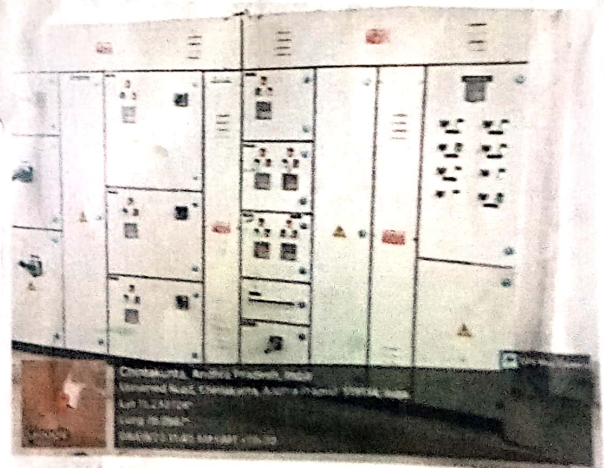
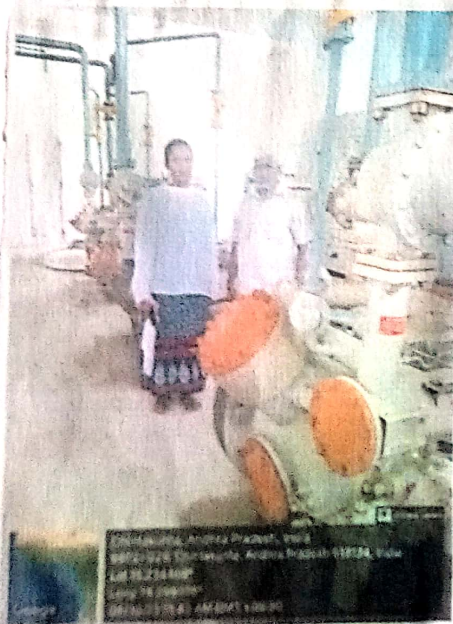
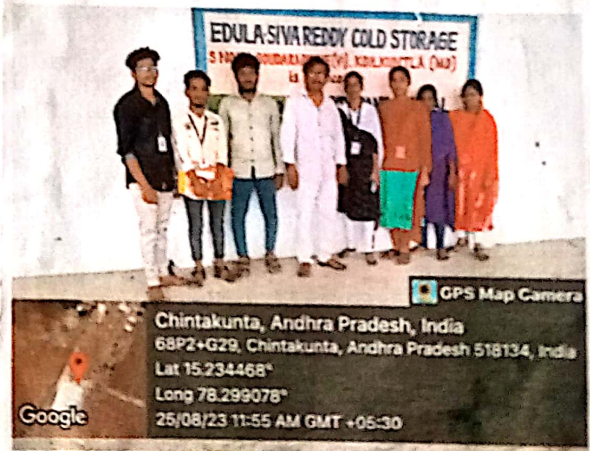
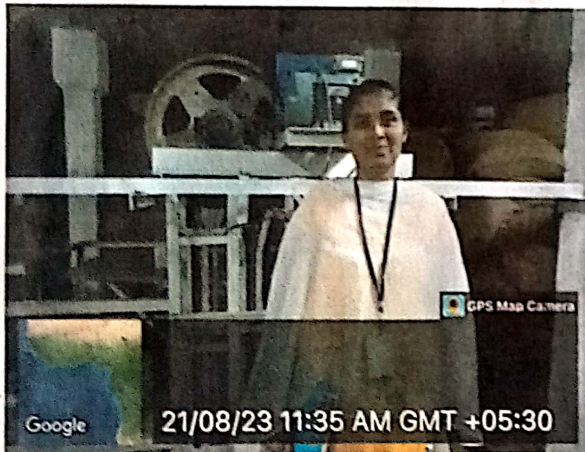
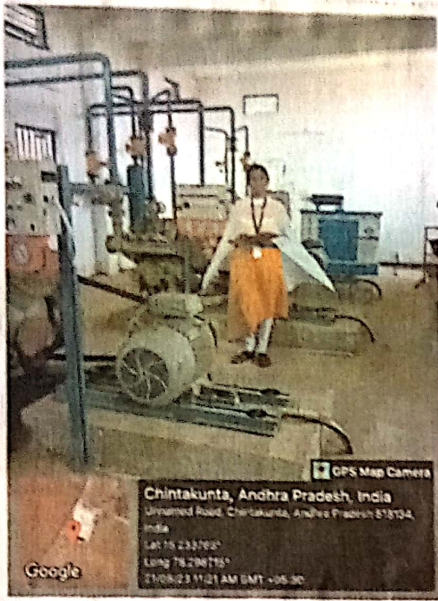
Recommendations to reduce weight loss:-

* perfect packing:- Do the perfect packing then only it will reduce the transpiration rate and the weight loss is reduced. for chilli, stored vacuum packing then just packing.

Maintain the storage temperature:-

Maintain the storage temperature of 4°C for reduction of weight loss maintain the RH to reduce the weight loss.

B.A Department Nageswara Reddy Sir Introducing
old storage manager



CHAPTER 2: OVERVIEW OF THE ORGANIZATION

Suggestive contents

- A. Introduction of the Organization
- B. Vision, Mission, and Values of the Organization
- C. Policy of the Organization, in relation to the intern role
- D. Organizational Structure
- E. Roles and responsibilities of the employees in which the intern is placed.
- F. Performance of the Organization in terms of turnover, profits, market reach and market value.
- G. Future Plans of the Organization.

Storage in India :-

The first problem is that there aren't enough cold storages. The government is offering some subsidies. The government is trying to park this up. but it is still a very capital intensive there are also very different business models at play. There is a need for godowns.

This need is towards storing grains and selling it at a better price once the harvest seasons are over. For example and is very easy to store must forness don't do it because they don't have space to store it.

weight loss of Dry

chilli and

we common to reduce the weight loss

Chilli is stored before, with proper drying from 65-85% RH to below 10% RH. Here after only it can be stored as per the storage condition.

Weight loss in caused due to:-

Improper storage is not maintained RH. cold storages is not maintained properly as per the required 4°C and not less than 95% RH value at the storage period of 6 to 12 months.

Recommendations to Reduce weight loss:-

* perfect packing :-

Do the perfect packing then only it will reduce the transaction rate and the weight loss is reduced for chilli stored vacuum packing then packing.

CHAPTER 3: INTERNSHIP PART

Description of the Activities/Responsibilities in the Intern Organization during Internship, which shall include - details of working conditions, weekly work schedule, equipment used, and tasks performed. This part could end by reflecting on what kind of skills the intern acquired.

Cold storage :-

Down throw product cooler in ware
bins for fans for high test pressure to
ensure leak proof cool down ward airflow
pattern for equal distribution of air
chick peas, splitmung, moongdal, split green gram
moong dal, chillis, tharidal, chama whole moong
total item proper cooling extend the shelf life.

storage temperature, 5,000 MT could 8°C
stored temperature 2,500 MT chilli storage (30 TR)

The Internship Andrapradesh in Edula Siva Reddy
cold storage in location Koilkuntla Red chillis
and tharidal and chama, whole moong, splitmung,
moongdal storage Acknowledgements high of
building for chilli cooling in room storage.

BLUE COLD

ammonia for chilly cold storage!

Generally chilly cold storage are above 5000 MT capacity. In this range ammonia refrigerant is more economical than freon. For this large size storage customers, consultants, as well as installers have a deep and long experience in working with Ammonia. Blue cold has supplied and continues to supply many chilly cold storage in the various small markets of Andhra Pradesh and North Karnataka.

What is the cooling capacity or heat load in TR required for a 2,500 MT chamber?

Approximate cooling capacity required for a 2,500 MT chilly storage chamber is 30 TR at 8°C storage temperature. Accordingly for more chambers, the total capacity is multiplied by the total number of chambers. For example for 5,000 MT capacity the cooling required is 60 TR.

ACTIVITY LOG FOR THE FIRST WEEK

Day & Date	Brief description of the daily activity	Learning Outcome	Person In-Charge Signature
Day -1	First day: Edula Siva Reddy cold storage (koila kuntla)	cold storage - down throw product cooling	
Day -2	stock saving storage in Edula Siva Reddy cold storage	product stocked in 3 years and 4 years.	
Day -3	sth the floor fan's high efficiency	$3 \times 5 = 15$ fans	
Day -4	Different stock for dal and chana whole moongdal, chillies.	stock is totally stock product cooling.	
Day -5	storage temperature	$+ 10^{\circ}\text{C}$ temperature	
Day -6	could storage packing left price in indoor	use full loading lift	

WEEKLY REPORT

WEEK - 1 (From Dt..... to Dt.....)

Objective of the Activity Done:

Detailed Report:

- * However if cold storage facilities are used the product may be stored for 1-3 years.
- * cold storage - Down throat product cooler
- * 35 = 15 Fans
- * Sin wave fins for fans for high sp
- * tiebe test pressure to ensure leak proof
- * Down load, air flow pattern for equal distribution.
- * storage temperature 500 MT cold.
- * sec stored temperature 2,500 MT chill storage
- * could store in a tomato, sorghum.

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ACTIVITY LOG FOR THE SECOND WEEK

Day & Date	Brief description of the daily activity	Learning Outcome	Person in Charge Signature
Day - 1	water supply room oil ing machine important machine. In 4 stage	material Discharge pressure kpch:- 1st 05	
Day - 2	action pressure 14.2	ammonia val 160 kg	
Day - 3	oil pressure 16.4	A.B supply ammonia val	
Day - 4	Dis present liquid change cooling Ice liquid out down	total 5 room total + 10 °C temperature cooling	
Day - 5	evolving lines 70 ° (97 RP)	Ammonia - dim cooling liquid change	
Day - 6	Ammonia in 4 stage ring supply section 77 to pressure down (24 hours)	Hours day 77 to (24 hours)	

WEEKLY REPORT

WEEK - 2 (From Dt..... to Dt.....)

Objective of the Activity Done:

Detailed Report:

Laban reply :-

6 feet cellulose pad water cooling system with cold storage system dehumidification dispensant cellulose once entire passage fugoditigue.

- * a cooling system utilizing natural energy from diurnal ambient air temperature difference
- * water is cooled at night by cellulose pad cooling power and stored for cooling application at day time
- * overall cap can reach 9.4 for room temperature higher than 40°C
- * feasible for data center cooling

The present study develops a cooling system using water as the working medium which is cooled at night by cellulose pad cooling tower (CWCT) and stored for cooling application at day time that is it utilizes the natural energy drawn from diurnal ambient air temperature difference.

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ACTIVITY LOG FOR THE THIRD WEEK

Day & Date	Brief description of the daily activity	Learning Outcome	Person In-Charge Signature
Day - 1	storage (Broyar) that on explane	total Broyar $3 \times 5 = 15$	
Day - 2	white stock chicken as, split moong moong Del split green gram moong Dal, toos Dal	total item proper cooling extend the shelf life.	
Day - 3	motor power and light speed (Lp Bypass) compage processing	$\rightarrow 100^\circ$ Dabul $\rightarrow 3\frac{1}{2}$ Level $\rightarrow$ oil - 6° TD#	
Day - 4	temperature is storage	15% and 16.2 Temperature	
Day - 5	china change	room cooling	
Day - 6	gas liqued change that cooling Reate	storage all cooling.	

WEEKLY REPORT

WEEK - 3 (From Dt..... to Dt.....)

Objective of the Activity Done:

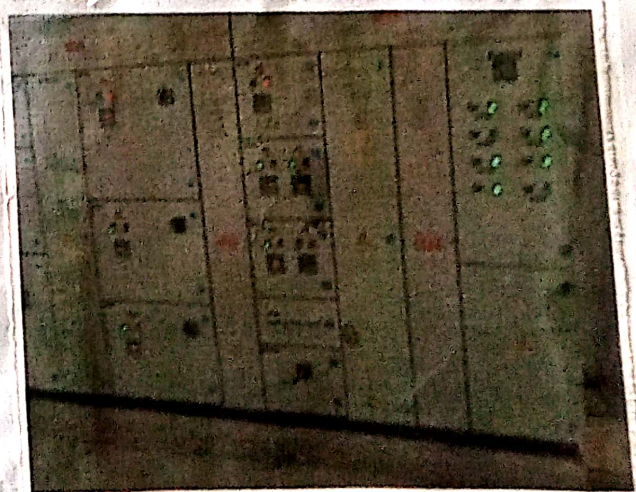
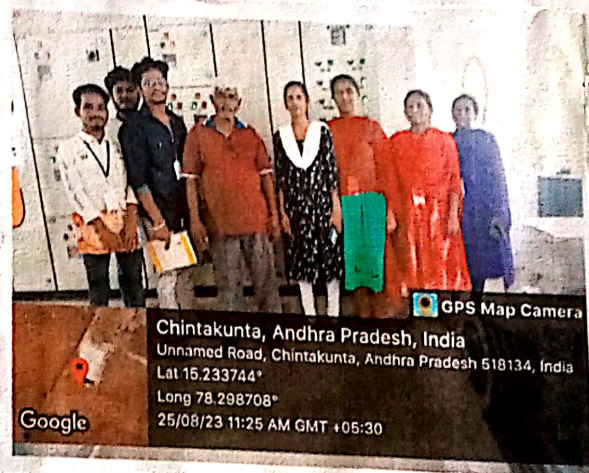
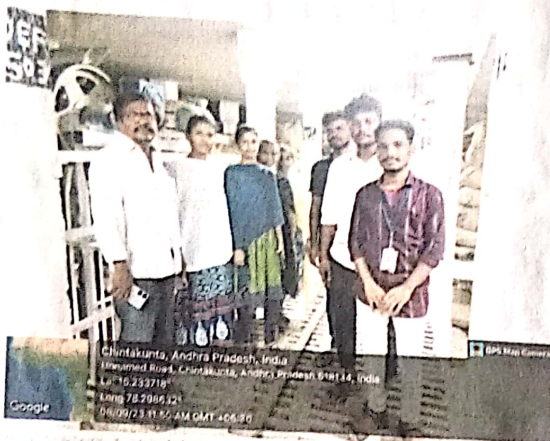
Detailed Report:

A cooling system was built and tested. It is found that the coefficient of performance of [COP] for heat dissipation of water at night, COP_{at} , is between 3.8 and 11 and varies linearly with the evaporation temperature glide ΔT_{ev} (difference between cold water temperature in the storage tank and wet bulb's temperature of ambient air).

The COP for room cooling at day time run with air cooler in a room, COP_{day} , is between 8.8 and 12.6 for day cycle operation. The measured overall cooling COP is 5.1. COP is expected for each 9.4 at room temperature $15^{\circ}C$.

ACTIVITY LOG FOR THE FORTH WEEK

Day & Date	Brief description of the daily activity	Learning Outcome	Person In-Charge Signature
Day - 1	A cold storage facility works on a refrigeration system which helps	maintain a stable temperature and environment	
Day - 2	cellulose pad cooling which is cooled at night by cellulose cooling tower	(water)	
Day - 3	Temperature for example climos as high as 3-4 times	stock 3-4 years	
Day - 4	this item, when needed, can be taken from the cold storage	store item stock	
Day - 5	cold storage issued to preserve	storage item stock	
Day - 6	Business part	Business Report	



WEEKLY REPORT

WEEK - 4 (From Dt..... to Dt.....)

Objective of the Activity Done:

Detailed Report:

* Overall COP can reach 9.4 for room temperature higher than 40°C

* Feasible for data center cooling The present study develops a cooling system using water as the working medium which is cooled at night by cellulose pad cooling tower (CWCT) and stored for cooling application at day time that is, it utilizes the natural energy drawn from diurnal ambient air temperature differences. A cooling system was built and tested it is found that the coefficient of performance of (CWCT) for heat dissipation of water at night, COP_{nt} , is between 3.8 and 11 and varies linearly with the evaporation.

ACTIVITY LOG FOR THE FIFTH WEEK

Day & Date	Brief description of the daily activity	Learning Outcome	Person In-Charge Signature
Day -1	Blowers:- The cooled air is speed across the room	Room all cooling	
Day -2	The compressor consumes almost all the power in a cold room	compressor only device	
Day -3	heat dissipation at water at night copnt	3.8 and Dryasies linearly with the Evaporation	
Day -4	temperature difference $+10^{\circ}\text{C}$	cooling system	
Day -5	feasible for data center cooling	overall copan reach 9.4 for room temperature	
Day -6	liquefied CO_2 ran	oil ground val one in the start.	

WEEKLY REPORT

WEEK - 5 (From Dt..... to Dt.....)

Objective of the Activity Done:

Detailed Report:

Construction & working of a cold storage plant:-

A cold storage facility works on a refrigeration system which helps maintain an adequate temperature and environment as per the specifications of each item being stored these are the main components of a cold storage room

* compressor :- it is the main component that runs the cold room it is the only device that needs the energy to run. The compressor consumes almost all the power of a cold room

* condenser :- it is required to remove the heat from the refrigerant and the circulating water

* Blowers :- The cooled air is spread across the room through the convection pipes, thus achieving the desired temperature of the room.

* $+10^{\circ}\text{C}$ Temperature

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.)

Environmental careers

As part of research associated with education for sustainable ability at RMIT university, sent an invitation to environment professional seeking information about their background work.

The invitations to participate in the survey were distributed using the electronic data bases and network of organisations such as the centre for sustainability, leadership and the environment a jobs network environmental, education and training ecological sustainability manager project lead, education (delivering resources to colleges).

BLUECOLD

yes, generally customers use the ground floor of the chamber for items like white gram (Channa), and tamarind next five floors for chilly.

what role does the indoor unit play in saving electricity?

The most important component to maintain good quality of chilly in cold storage is the indoor unit. The proper selection of indoor unit will not only affect the quality of the chilly stored but also duration and life of chilly stored. A good indoor unit helps in maintaining proper temperature and relative humidity as well as keeps the electricity cost also low. Evaporator built with better quality of material, modern design, technology and manufacturing process helps the customer in for present and future.

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

Technologic skills

- * Develop and maintain local networks in ways that optimize performance.
 - * provide orientation and guidance to users on how to operate new software and computer equipment.
 - * check computer hardware (HDD, mouses, key boards, etc). to ensure functionality
 - * install and configure appropriate software and functions according to specifications
- information technology (IT):

is the use of computers to create, process, store, retrieve, and exchange all kinds of data and information it is typically used within the context of business operations as apposed to personal or entertainment technologies

* (ICF) information & communication system technology.

* Technical skills in future usefull in comminut - in development acquired the student future jobs in technologic skills.

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).

Describe the managerial.

* Red chillies could storage private linked.
red supporting and edulasivareddy auxiliary
transport activities, activities of travel agencies.

* storage in that 3 or 5 years stock useful
basing USD rupees in stock is edulasivareddy
could storage.

* building = 180 inches.

length = 120

width = 120

* workers (2) and one operation one packing
place four numbers in that edula siva reddy
could storage.

ex:- Farmer could storage stock useful 3 or 4
years stock in chillie one person. Formula
pages 300 and 500 Bastalu store.

* Department A/c operation name edulasivareddy.

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.,)

Approximately one acre of land is required for a 5000 MT cold storage for chilly. This land required is sufficient for cold storage machine room condenser tank and condenser power house transformers, and also 20 feet free space in all direction for fire and safety guidelines cold storage technology.

Due to the changes in the surrounding cold storage is most required. Refrigerated are houses are heavily costly, but several farmers opt to cut source for cold storage. As the demand for transportation of refrigeration goods is increased, it can push the demand for value-added services such as consolidation. The five most important factors for chilly cold storage are - (a) Room temperature relative humidity (b) cooling capacity (c) Air flow and Air distribution (d) cooling volume and surface area (e) modern design.

Cold storages

Cold storage is a building designed to store food stuff within certain temperature limits and relative humidity. The basic purpose of cold storage is to store the perishable food products at optimum temperature to enhance their shelf life. In cold storage temperature may vary from $+30^{\circ}\text{C}$ to -15°C and relative humidity may vary from 90% to 98%. For example milk is stored at around 4°C in cold storage while ice cream is stored at -30°C . Some of the advantages of using cold stores are required for storage of milk, butter, cheese, ice-cream etc. The stored at -25°C while milk is stored at 3 to 4°C . Similarly, many fruits and vegetables are also stored in cold storage.

Benefits of a cold storage:-

The main Advantages of using cold storages are:

- Food product can be stored when their supply is plentiful and can be used during the period of short supply.
- The transportation of food stuff from one place to another place is possible.

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

Edula Siva Reddy cold storage
abilities discussion my name Phani write
a. object work in a group discussion
20 numbers students in a group we are parti-
cipation in a A/c operation is a Gopalava-
rama his explain cold storage and guidance
the more information.

+10°C temperature all stock
cooling cold storage stock lift in indoor loading
its 5th floor chillies toor dal, chana, whole.
chickpeas, split moong, moong dal +10°C storage
Temperature ammonia was total Broyer
3x5 = 15 and 16.0°C cooling cellulose-pad water
system with cold storage system refrigeration
ment dispersant cellulose once bypassage
frige.

cold storage practices

In a cold store the following practices should be adopted.

1. Temperature control
2. Relative humidity control
3. condensation of water vapour
4. sanitation
5. Air movement
6. stacking and material handling.

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

Edula Siva Reddy cold storage abilities
we are my class friends we are all group
discussion for about the cold storage

my name Phani is write to
internship project work as a group discussion
14 men boys students in this group

we are participation as team in cold storage we
are all students on team gain athena wise going
to Edula Siva Reddy cold storage. All operate
in name gopala varma he is explain to
cold storage and audience of more infor-
mation me and friends consult leasing to
cold storage

other wise may information write
on project work record.

may stocks left to loading to chilli
some markets.

Student Self Evaluation of the Short-Term Internship

Student Name: *k. pharani*

Registration No:

Term of Internship:

From: *07-08-2023* To: *6-10-2023*

Date of Evaluation:

edula siva Reddy cold storage
Gopal vasima

Organization Name & Address:

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

Date: *21-09-2023*

k. pharani
Signature of the Student

Evaluation by the Supervisor of the Intern Organization

Student Name: <u>V. Chavani</u>	Registration No:
Term of Internship: From: <u>07-08-2023</u> To: <u>6-10-2023</u>	
Date of Evaluation:	
Organization Name & Address: <u>edula siva Reddy cold sto</u> <u>rage</u>	
Name & Address of the Supervisor with Mobile Number <u>9490402114</u>	

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	OVERALL PERFORMANCE	1	2	3	4	5

Date: 21-07-2023

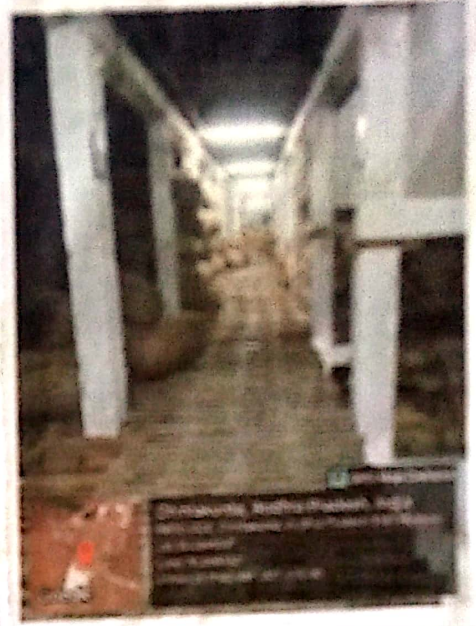
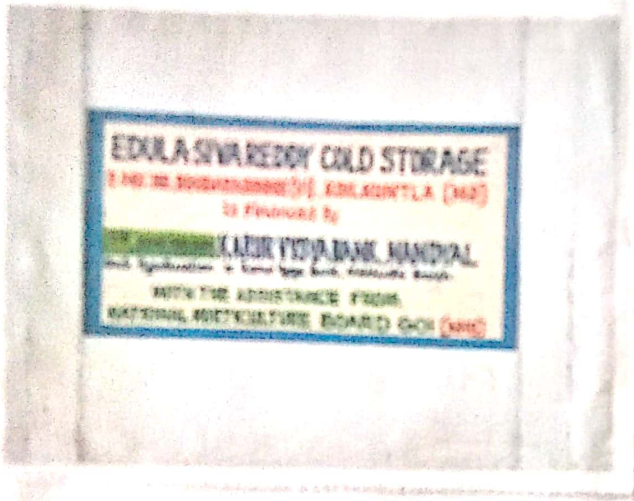
E. Harat M
Signature of the Supervisor

For: EDULA SIVA REDDY COLD STORAGE

Page No:

Proprietor

PHOTOS & VIDEO LINKS



Page No:

INTERNAL ASSESSMENT STATEMENT

Name Of the Student: *k. Phani*
Programme of Study: *pratics (meaning) Mining*
Year of Study: *2022 - 2023*
Group: *IIIrd B.A (H.E.P)*
Register No/H.T. No:
Name of the College: *S.V.B Govt degree college.*
University:

Sl.No	Evaluation Criterion	Maximum Marks	Marks Awarded
1.	Activity Log	25	19
2.	Internship Evaluation	50	40
3.	Oral Presentation	25	18
	GRAND TOTAL	100	77

Date:

Shobly
Signature of the Faculty Guide

Certified by

Date:

Seal:

M. Ravi Sth 1W
Signature of the Head of the Department/Principal

PRINCIPAL 6/11/23
S.V.B. GOVT DEGREE COLLEGE
KOILKUNTALA, NANDYAL (Dt.)

Page No:

