

Model Program Book  
**COMMUNITY  
SERVICE  
PROJECT**



Designed & Developed by



**ANDHRA PRADESH  
STATE COUNCIL OF HIGHER EDUCATION**

(A STATUTORY BODY OF GOVERNMENT OF ANDHRA PRADESH)

Mrs. A.V.N College



Estd : 1860

Visakhapatnam – 530001

Andhra Pradesh

**CERTIFICATE**

This is to certify that project entitled as "Survey on WATER POLLUTION use by people report at I Town area, Visakhapatnam" is bonafide work done by CH. PAVAN KUMAR (Regd.no: 720130805014), B.Sc – M.P.C student under my guidance. I certify that the project work done by him/her is original and has not been submitted to any other information.

  
(M. Simhadri Naidu)  
Principal  
Mrs. A.V.N. COLLEGE  
VISAKHAPATNAM

  
(P.KRISHNA KUMARI )  
MENTOR

**SURVEY ON WATER POLLUTION  
AT NTR Colony, PORT AREA,  
VISAKHAPATNAM**

By  
**CHALLA PAVAN KUMAR**  
RGD NO: 720130805014



Estd : 1860

PROJECT WORK SUBMITTED TO MRS.A.V.N College, AFFILIATED TO  
ANDHRA UNIVERSITY, VISAKHAPATNAM FOR THE PARTIAL FULFILMENT  
OF DEGREE OF

**BACHELOR OF SCIENCE**

2020 – 2023

## DECLARATION

I, CH PAVAN KUMAR, Student of II B.Sc – M.P.C,  
Mrs.A.V.N College, affiliated to Andhra University here by declared that  
this project entitled "Survey on WATER POLLUTION use by NTR  
Colony Port area, Visakhapatnam.  
is a genuine work carried out by me under  
the guidance of Mrs. P .KRISHNA KUMARI, Lecturer in Chemistry, Mrs.A.  
V.N College, Visakhapatnam, Andhra Pradesh.

Further more, this project work was not submitted to any other  
institution or university for awarding any degree.

DATE:

PLACE: VISAKHAPATNAM

Signature of the student

# PROGRAM BOOK FOR COMMUNITY SERVICE PROJECT

Name of the Student: CHITHRA PAVAN KUMAR

Name of the College: SRINIVASA SWAMI ARIYAN COLLEGE

Registration Number: 450056515000

Period of CSP: From: 10-05-2024 To: 15-07-2025

Name & Address of the Community / Habitation :

SRINIVASA SWAMI ARIYAN COLLEGE University  
YEAR

## Community Service Project Report

Submitted in accordance with the requirement for the degree of... B.Sc.

Name of the College: MRS ANN COLLEGE

Department: CHEMISTRY

Name of the Faculty Guide: P. KRISHNA KUMAR

Duration of the CSP: From 12-07-2022 To 12-11-2022

Name of the Student: CHALLA PAVANI KUMAR

Programme of Study: WATER POLLUTION

Year of Study: 2020 - 2023

Register Number: 720130805014

Date of Submission:

## Student's Declaration

I, CH. PAVAN KUMAR, a student of Water Pollution Program,  
Reg. No. 720130805011 of the Department of Chemistry  
MRS. A.V.N. COLLEGE College do hereby declare that I have completed  
the mandatory community service from 12-07-2022 to 12-11-2022 in  
PORT AREA (Name of the Community/Habitation) under the Faculty  
Guideship of P. KRISHNA KUMAR (Name of the Faculty Guide), Department  
of maths, physics, chemistry in MRS. A.V.N. College

CH. PAVAN KUMAR  
(Signature and Date)

### Endorsements

P. KRISHNA KUMAR  
Faculty Guide

P. KRISHNA KUMAR  
HOD IN CHEMISTRY  
DEPARTMENT OF CHEMISTRY  
MRS. A.V.N. COLLEGE  
VISAKHAPATNAM-530002  
Principal

P. KRISHNA KUMAR  
PRINCIPAL  
Mrs. A.V.N. COLLEGE  
VISAKHAPATNAM

## Certificate from Official of the Community

This is to certify that Ch. Falcon Kema (Name of the Community Service Volunteer) Reg. No 230120705018 of royal Asha College (Name of the College) underwent community service in pit area (Name of the Community) from 12-07-2021 to 12-11-2021. The overall performance of the Community Service Volunteer during his/her community service is found to be \_\_\_\_\_ (Satisfactory/Good).

Authorized Signatory with Date and Seal



## Acknowledgements

It is really a matter of pleasure for me to get an opportunity to thank all the persons who contributed directly or indirectly to the successful completion of the project report, "A Study on WATER POLLUTION".

Also I am thankful to my faculty guide — from MRS. ANJ  
college, Vishakhapatnam — for being  
a source of support during this  
period.

Signature PAVAN KUMAR  
(720130805014)  
B.Sc (maths, physics chemistry)

## CHAPTER 1: EXECUTIVE SUMMARY

The community service report shall have only a one-page executive summary. It shall include a brief description of the Community and summary of all the activities done by the student in CSP and five or more learning objectives and outcomes.

The present study "Water pollution in N.T.R colony" about to find out the port city Vishakhapatnam, which have several type of water pollution are there. Industrial sites, waste water would are major contributors to water pollution and also another causes include to water pollution.

The whole colony was divided into "10" Quadrates of 700 x 400 Meters.

The surrounding untreated waste water directly contributes cholera, typhoid, fever and viral virus.

## CHAPTER 2: OVERVIEW OF THE COMMUNITY

About the Community/Village/Habitation including historical profile of the community/habitation, community diversity, traditions, ethics and values.  
Brief note on Socio-Economic conditions of the Community/Habitation.

N.T.R colony is located in Uppalapattanam district in the state of Andhra Pradesh India.

Water pollution is any chemical physical change in the quality of water that has harmful effect of water pollution. Water pollution sources is oxygen demand waste pipe drainage, modern washing powder and they chemical pollution ground water pollution.

Nutrient pollution which includes nitrate phosphate is leading type of contamination in fresh water.

### CHAPTER 3: COMMUNITY SERVICE PART

Description of the Activities undertaken in the Community during the Community Service Project. This part could end by reflecting on what kind of values, life skills, and technical skills the student acquired.

In this area water pollution degrades the quality of the water in the water bodies many disease can spread through water water cause the disease of fever malaria.

Water with increase in the amount of organic waste in water bacteria use up the available oxygen.

Surface water and ground water are both important sources for community water supply needs.

Waste water directly contributes chlorine typhoid fever for water pollution cause some disease.

ACTIVITY LOG FOR THE FIRST WEEK

Day & Date	Brief description of the daily activity	Learning Outcome	Person In-Charge Signature
Day-1	visited the study area and checked 1 <sup>st</sup> colony for drinking	learned about water pollution types.	<u>ls</u>
Day-2	Identify and tabulated the rate of house members	studied types of pollution water types	<u>ls</u>
Day-3	Identify and tabulated the number of members in line 1 and 2	we locate the shortage of water bodies	<u>ls</u>
Day-4	Identify and tabulated the colony in line 3 and 4	We observed rate of water bodies pollution	<u>ls</u>
Day-5	Identify and the number of 5 <sup>th</sup> line	studied water pollution of causes	<u>ls</u>
Day-6	studied the abundance of water pollution in water of our colony	learned identification of water pollution	<u>ls</u>

## WEEKLY REPORT

WEEK - 1 (From Dt. 12:01:2024 to Dt. 18:01:2024)

Objective of the Activity Done:

Detailed Report:

The waste from house holds, factories or agricultural lands gets discharged into across our tanks. This waste can either be in the form of liquid waste garbage or sewage. The harmful chemical coming out of this waste can damage aquatic life.

Not just the aquatic life, even when the humans end up drinking polluted water, they make themselves vulnerable to various life threatening diseases like hepatitis, cholera, typhoid and many other water borne diseases.

ACTIVITY LOG FOR THE SECOND WEEK

Day & Date	Brief description of the daily activity	Learning Outcome	Person In-Charge Signature
Day -1	The data obtained in 1 <sup>st</sup> week is tabulated and studied	learned about water pollution in the community area	<u>gaur</u>
Day -2	using the data and awareness camp has been conducted in the community	learned about how to make a campaign	<u>gaur</u>
Day -3	By the campaign creative awareness about the water pollution	learned about various threats being by the community area	<u>gaur</u>
Day -4	The campaign has been continued and created awareness on value of pollution	learned about various threats being by the community area	<u>gaur</u>
Day -5	The campaign has been continued and created awareness about increasing water pollution.	learned about various threats being by pollution in community area.	<u>gaur</u>
Day -6	The campaign has been continued and created awareness about practical measures of plants in area	learned about protective measures taken to avert of water pollution	<u>gaur</u>

## WEEKLY REPORT

WEEK - 2 (From Dt. 21:03:22 to Dt. 28:03:22)

Objective of the Activity Done:

Detailed Report:

The pollution happen when water flowing down streams get contaminated at different points. Water may get polluted by sewage and industries effluents. Waste water goes in the oceans, rivers etc..

In the past water especially fresh water is one of the most important elements in the world. However, with increasing levels of water pollution,

The oxygen level in polluted water is lower than causes the death of several organism. Drinking water should be safe for consumption. Water is required in the body and depends on several factors including maintaining health.



ACTIVITY LOG FOR THE THIRD WEEK

Day & Date	Brief description of the daily activity	Learning Outcome	Person In-Charge Signature
Day -1	The data obtained 1 <sup>st</sup> and 2 <sup>nd</sup> week is analysed	learned about how to prepare a data analysis	<u>hu</u>
Day -2	The analysed data is written on the paper in required manner	learned about methods of data presentation.	<u>hu</u>
Day -3	The pictures has been collected which were taken during campaign	learned about method of data presentation.	<u>hu</u>
Day -4	pie chart and tabular form were prepared	learned about preparation of tabular form	<u>hu</u>
Day -5	Information obtained is updated in the data Report	learned about information updated in the data Report	<u>hu</u>
Day -6	The reported data self verified once again	learned about how to prepare and report data analysed	<u>hu</u>

## WEEKLY REPORT

WEEK - 3 (From Dt. 12/10/22 to Dt. 12/16/22)

Objective of the Activity Done:

Detailed Report:

Water pollution is the cause of our undisciplined action and irresponsibility. We humans are only creating problems that can severely affect us. It is essential to our body.

If cause such sickness and diseases that will affect our health. Let us not deny it nor put it off if we need and we should help as our mother nature.

The pollution happens when water flowing down streams get contaminated at different points. Water not only our thirst but also plays a critical role in keeping us healthy.

ACTIVITY LOG FOR THE FORTH WEEK

Day & Date	Brief description of the daily activity	Learning Outcome	Person In-Charge Signature
Day -1	The community project report programme book were download and pdfout has been	people in shivald yearn using mircro to drink	<u>Anil</u>
Day -2	The data obtained and prepared literature were enterd in the program klesic.	facilities should be created	<u>Anil</u>
Day -3	The picture taken during project were fixed in program book	AWARNEN should be created in N.T.R colony	<u>Anil</u>
Day -4	the pictures taken during project were printed and fixed in the program book	people are in N.T.R colony are using water	<u>Anil</u>
Day -5	The programme book paper are arranged in order and verified one again	peoples are suffering with disease due to drinking	<u>Anil</u>
Day -6	The programme book has given to binding sale book	people are affordable to drink municipal water	<u>Anil</u>

## WEEKLY REPORT

WEEK - 4 (From Dt. 11.12.22 to Dt. 17.12.22)

Objective of the Activity Done:

Detailed Report:

Ground water is a source of a water that is under the land surface. It is accessible by well-tube wells and hand pumps.

Surface water: This type of source is found on the surface of the earth like ponds, rivers etc...

Rain water:- It is the major source of water from rain, chlorine and chlorine are the major used in public water systems.

Safe and readily available drinking water is key to public health. Community water systems and water safety plans are important ways to ensure the health of a community.

### ACTIVITY LOG FOR THE FIFTH WEEK

Day & Date	Brief description of the daily activity	Learning Outcome	Person In-Charge Signature
Day-1	-few people are drinking mineral water in Shivajinagar	people in N.T.R colony purifying mineral water	<i>PK</i>
Day-2	some people are getting the municipal water	Drinking municipal water in their area	<i>PK</i>
Day-3	many people are of feeble to drink the ground water	They are affordable to drink the ground water	<i>PK</i>
Day-4	some people are suffering with joint pain had drinking water	Drinking polluted water	<i>PK</i>
Day-5	many people are feeling poor water facilities in N.T.R colony	good facilities are should be created	<i>PK</i>
Day-6	many people are getting the water from outside due to water polluted	AWARNANA Needs to be created here N.T.R colony.	<i>PK</i>

## CHAPTER 5: OUTCOMES DESCRIPTION

Details of the Socio-Economic Survey of the Village/Habitation Attach the questionnaire prepared for the survey.

Oxygen - depletion pollution:-

Another consequence of algal bloom is their consumption of oxygen supplies. This means that those species which depend upon oxygen to survive are killed off. While anaerobic ones thrive some anaerobic microorganisms are capable of producing ammonia, and other harmful toxins, which can make the water even more dangerous to animals and humans too.

Surface water pollution:-

Referring to all water sources above ground, such as rivers, seas and oceans, surface water pollution can occur both naturally accidentally and intentionally.

Describe the problems you have identified in the community

- \* N.T.R colony is rich in water resources have several beneficial values most of the people in the area don't know their values.
- \* Due to this they are starting to protect them.
- \* The people in this study are learning several valuable resources contain due to this improper conservation.
- \* Due to insufficient knowledge the people in the area are starting to conserve the plants and protect our pure water sources.
- \* In the area of N.T.R colony people don't know the value of water.

Short-term and long-term action plan for possible solutions for the problems identified and that could be recommended to the concerned authorities for implementation.

Since the water pollution in the studied area are high level and their quantity is being shortage there is a necessity to conserve there type of conserving the water resources.

- \* pick up litter and throw it away in garbage can.
- \* blow or sweep fertilizer back onto the grass if it gets onto paved areas. don't put fertilizer on the grass right before it rains the chemicals will wash into storm drains and water ways
- \* wash our vehicles or outdoor equipment where it can flow to gravel or grassy area instead of a street
- \* Mow or compact grass or yard waste



Description of the Community awareness programme/s conducted w.r.t the problems and their outcomes.

The whole colony was facing the problem of water pollution those people effected of these pollution side effect like palia and vomiting typhoid etc... some of the people facing calcium deficiency and iron deficiency problem, childrens and adults are also facing health problems for water pollution of drinking water

The solution of these problem one and only awareness about water importance and tap to pollution avoid se sources and how to save our water bodies

### Report of the mini-project work done in the related subject w.r.t the habitation/village.

A mini-project work in the related subject w.r.t the habitation/village. (For ex., a student of Botany may do a project on Organic Farming or Horticulture or usage of biofertilizers or biopesticides or effect of the inorganic pesticides, etc. A student of Zoology may do a project on Aquaculture practices or animal husbandry or poultry or health and hygiene or Blood group analysis or survey on the Hypertension or survey on the prevalence of diabetes, etc.

The Report shall be limited to 8-10 pages.

### Water pollution :-

Water pollution is the contamination of water in water bodies such as rivers, oceans, lakes and swamps, this means that one or more substance have built up in water to extent of causing problems to people, animals and plants.

So whether or not water is considered to be polluted will depend on what that water was go to be used for.

## Causes of Water Pollution:—

There are numerous causes of water pollution. The main ones are listed below:

Type of sources

### 1. Point Source

\* It is directly to be to influence life pollution travels directly from source to water

\* Point sources are easy to regulate

\* The main source of water pollution are as follows

\* Community waste water, include discharge from houses, commercial and industrial establishments connect to public sewerage system.

## - 2. Industrial waste :-

The industrial discharge several inorganic and organic pollutants which may have highly toxic to the living beings.

## - 3. Agricultural sources :-

- \* fertilizer contains major plant nutrients such as nitrogen, phosphorus and potassium.
- \* Excess fertilizer so many reach the ground water by leaching or may be mixed with surface water of rivers, lakes and ponds. by runoff and drainage.
- \* Pesticides include, insecticides, fungicides, herbicides, nematocides, acaricides and soil fumigants. They contain a wide range of chemicals such as chlorinated hydrocarbons.

#### -4. Underground Water pollution:-

- \* In India, at many places, the ground water is threatened with contamination due to seepage from industrial and municipal waste to and effluent discharge channels and agricultural runoff.

#### -5. Marine pollution

- \* Oceans are the ultimate sink zone of all natural and man-made pollutants.
- \* Rivers discharge their pollutants into the sea. The sewerage and garbage of coastal cities are also dumped into the sea.

- 6. Garbage:- plastics are non-biodegradable. Many plastic bags, water bottles and contaminate water.

-7. Urbanization :-

Urbanization is a key factor  
in increasing the amount of water  
pollution.

-8. Pumping Solid Waste :-

Humans, after carelessly  
dump their the sewage near rivers

-9. Oil Spill :-

Accidental oil spills have  
devastating effect on sea.

-10. Dissolved Solid Waste :-

Human pollution gases in the air  
can dissolve into salt and fresh-  
water and polluted it.

## Control measures:-

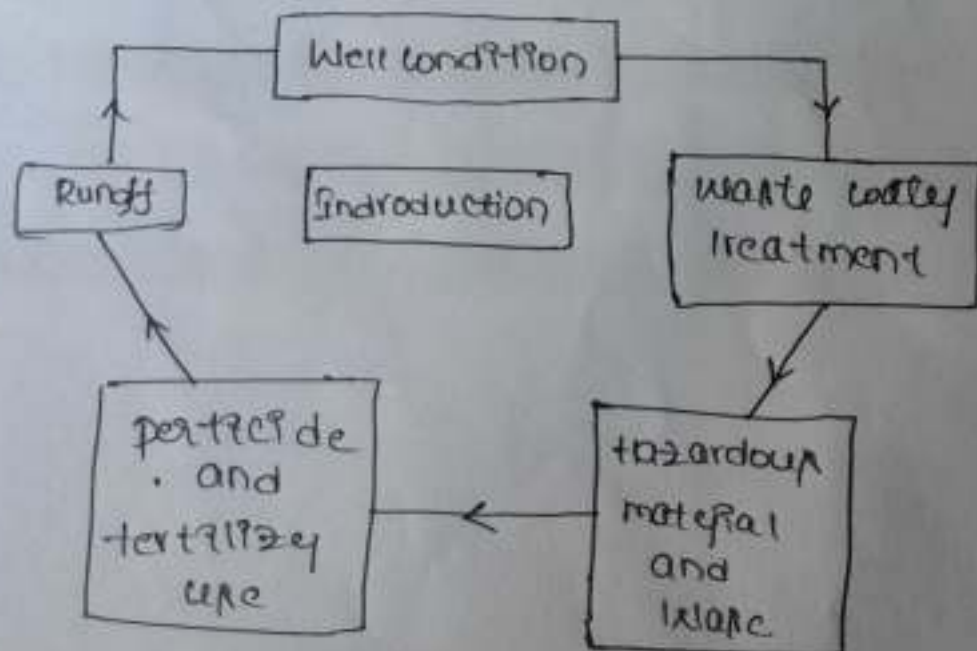
- \* Riparian purified
- \* Recycle
- \* Treatment of sewage water and the industrial effluents should be done before releasing it into the water bodies
- \* Raw water should be treated before released from the power plants
- \* Domestic cleaning in tanks streams and rivers which supply drinking water should be prohibited

## Ground water pollution

- Any addition of considerable substance to ground water caused by human activities is considered to be contamination. It has after been assumed that contaminants left on or under the ground will stay here.

## Source of ground water pollution:-

- \* Most concern over ground water contamination has centered on pollution associated with human activities.
- \* Human ground water contamination has central on to waste disposal system and disposal of solid.
- \* municipal waste water, waste water impoundment and spreading of brine disposed from the petroleum industry
- \* Mine waste, deep-cell herbicide and animal waste are agricultural source of ground





### Student Self-Evaluation for the Community Service Project

Student Name: CHAITA . PAVAN KUMAR

Registration No: 730130 805014

Period of CSP: From: To:

Date of Evaluation:

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:

CH . PAVAN KUMAR  
Signature of the Student

Page No:

*Evaluation by the Person in-charge in the Community/Habitation*

Student Name: Chaita Paton Kumar  
Registration No: 720130 @ 6014  
Period of CSP: From: 12-07-2022 TO 12-11-2022  
Date of Evaluation:  
Name of the Person in-charge:  
Address with mobile number:

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	2	3	4	5
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

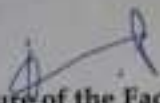
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## INTERNAL ASSESSMENT STATEMENT

Name Of the Student: *Chaitra Pavan Kumar*  
Programme of Study: *Water Pollution*  
Year of Study:  
Group: *B.Sc (mpc)*  
Register No/ILT. No: *720150 to 50111*  
Name of the College: *Mrs A.V.N College*  
University: *Andhra University*

Sl.No	Evaluation Criterion	Maximum Marks	Marks Awarded
1.	Activity Log	20	
2.	Community Service Project Implementation	30	
3.	Mini Project Work	25	
4.	Oral Presentation	25	
	GRAND TOTAL	100	

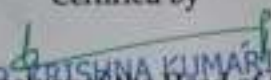
Date:

  
Signature of the Faculty Guide

Certified by

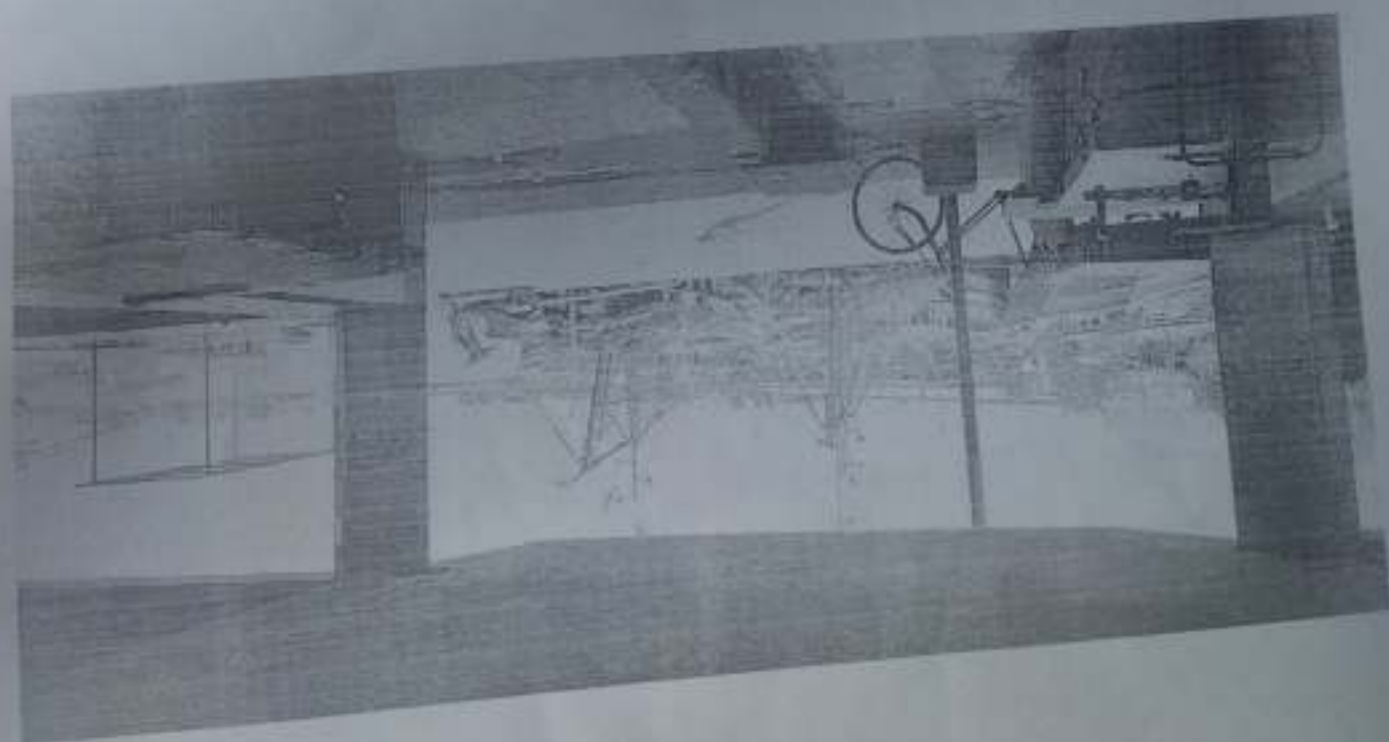
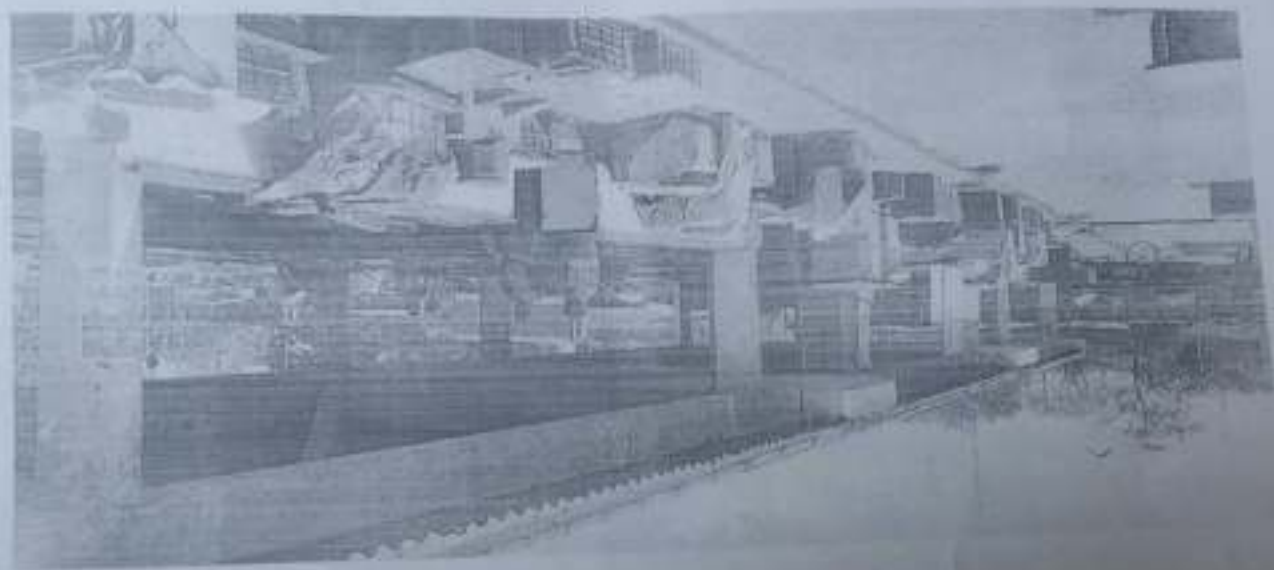
Date:

Seal:

  
Signature of the Head of the Department/Principal  
HOD IN CHEMISTRY  
DEPARTMENT OF CHEMISTRY  
MRS. A.V.N.COLLEGE  
VJSAKHAPATNAM-530001

Page No:









## **ANDHRA PRADESH STATE COUNCIL OF HIGHER EDUCATION**

(A Statutory Body of the Government of Andhra Pradesh)

2nd, 3rd, 4th and 5th floors, Neeladri Towers, Sri-Ram Nagar, 6th Battalion Road

Atmakur (V)Mangalagiri (M), Guntur, Andhra Pradesh, Pin - 522 503

[www.apsche.ap.gov.in](http://www.apsche.ap.gov.in)