

A COMMUNITY SERVICE PROJECT REPORT

On

Water pollution

Community Service Project report submitted
in partial fulfillment of the requirements for the award of the Degree of

BACHELOR OF SCIENCES

By

Goraka.Hema

Reg no: 720130805105

Under the Guidance of

K.swetha

Department of physics



Mrs. A.V.N. College

(Affiliated to Andhra University)

Visakhapatnam-530001

2020-2023



Mrs. A.V.N. College
(NAAC Accredited 'A' Grade Institution)
(Affiliated to Andhra University)



Date:

CERTIFICATE

This is to certify that G. Hema, Regd.No 720130805105
of Mrs. A.V.N College underwent Community Service Project in
Water purification with special reference to isukathota
Visakhapatnam, Andhra Pradesh under the guidance of
K. Swetha from 24/9/2022 to 3/11/2022.

The overall performance of the community service volunteer
during her / his community service is found Good

K. Swetha

Authorized Signatory

108644

Model Program Book
**COMMUNITY
SERVICE
PROJECT**



Designed & Developed by



**ANDHRA PRADESH
STATE COUNCIL OF HIGHER EDUCATION**

(A STATUTORY BODY OF GOVERNMENT OF ANDHRA PRADESH)

PROGRAM BOOK FOR COMMUNITY SERVICE PROJECT

Name of the Student: G. Hemja

Name of the College: MRS. A.V.N College

Registration Number: 750130806105

Period of CSP: From: 21/9/2022 To: 3/11/2022

Name & Address of the Community / Habitation :
Shivalayam Colony
South side, Visakhapatnam
530022

Andhra

University

YEAR

Community Service Project Report

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

Name of the College: Mrs. A.V.N College

Department: Computer Science (BSc) [MPCs]

Name of the Faculty Guide: K. Swetha

Duration of the CSP: From 24/9/2022 To 3/11/2022

Name of the Student: GORAKA HEMA

Programme of Study: Community Service Project - water pollution

Year of Study: 2020 - 2023

Register Number: 720130805105

Date of Submission:

Student's Declaration

I, Goraka Hema, a student of C.S.P Program,
Reg. No. 720130805105 of the Department of Computer Physics
MAS.A.V.N College do hereby declare that I have completed
the mandatory community service from 24/9/22 to 3/11/22 in
Isukathota (Name of the Community/Habitation) under the Faculty
Guideship of K. Swetha (Name of the Faculty Guide), Department
of English physics in MAS.A.V.N College

G. Hema
(Signature and Date)

Endorsements

K. Swetha
Faculty Guide

D. Santosh
Head of the Department

M. Chandra
Principal PRINCIPAL
Mrs. A.V.N. COLLEGE
VISAKHAPATNAM

Certificate from Official of the Community

This is to certify that Gosaka - Hema (Name of the Community
Service Volunteer) Reg. No 720130805105 of Mrs. A.N. College (Name of
the College) underwent community service in
Isorathota (Name of the Community) from 24/9/22 to
3/11/22. The overall performance of the Community Service Volunteer during
his/her community service is found to be Good (Satisfactory/Good).



Authorized Signatory with Date and Seal

1086184



Acknowledgements

It is really matter of pleasure for me to get opportunity to thank all the members of Simhadripuram for giving the proper response which has been instrumental in completion of this project. who contributed directly or indirectly for the successfully completion of the project report "WATER POLLUTION" with special reference to Simhadripuram, Visakhapatnam District of Andhra Pradesh.

I wish to express my gratitude to all the members of Simhadripuram for giving the proper response which has been instrumental in completion of this project. I am thankful to my mentor K. Swetha lecturer in Physics in "Mrs. AVN college" Visakhapatnam for her support and encouragement throughout the time of the project. Also, I am very grateful to head of the department of Physics Computer Science and the other faculty members of the ^{Physics} Computer Science Department for being a source of support during this project period.

G. Hema

HTNO :- 720130805105

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.

In Shivalayam Colony people are located at Isukathota most of the people are drinking municipal water in Shivalayam Colony few people are drinking bore water. Because of water pollution is hard water.

Safe and readily available drinking water is key to public health. wells collect ground water and also gets filtered through rain not just the aquatic life, gets filtered through even when the humans end up drinking polluted water. Chlorine and chloramine are the major disinfectants used in public water systems. one of the challenges identify which effect the supply of water in rural areas in illegal connections.

facilities should be increased in Shivalayam Colony. awareness should be created in Shivalayam Colony. Drinking polluted water results in diseases. people in Shivalayam Colony are getting mineral water because the municipal water is hard water. few were unaware about of polluted water. facilities should be decreased.

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.

Simhadripuram colony is located in H.B Colony at ISAKAHPOTA area of VISAKHAPATNAM, Andhrapradesh. Hb Colony comes under pin code 530022. We have more than 4 listing of Simhadripuram Colony area on this website.

In Simhadripuram most of the peoples are drinking municipal water. few peoples are drinking mineral water 30% in Simhadripuram. many peoples are drinking the under-ground water.

By drinking the underground water the aged peoples are suffering with the diseases in Simhadripuram. The surroundings of Simhadripuram are good and neat. They should be improved in the facilities. the drainage system is good in the area. But the many peoples are drinking the municipal water directly. Due to the heavy rain the water should be muddy and not quality. Aged peoples are suffering with the joint pains because of drinking bore water. Awareness should be created in Simhadripuram.

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.

The activities undertaken in the Community during the Community Service project.

1. Survey on Socio-economic
2. House hold Survey
3. Report writing
4. Awareness Created
5. Awareness programme
6. Submit the project
7. Report the project.

Values, Life Skills and Technical Skills.

1. Team work and problem solving skills.
2. The ability to communicate effectively with others.
3. The collaborative nature of projects also reinforces the social and emotional learning programs.
4. People in learning environments have a wider and more diverse social circle.
5. Those whose readily and continuously are better able to pass along what they have learned and act.
6. When people learn, they again confidence for trying new things and stretched themselves.

ACTIVITY LOG FOR THE FIRST WEEK

Day & Date	Brief description of the daily activity	Learning Outcome	Person In-Charge Signature
Day - 1	few people here are affordable to get filter water	few were unaware about the problem of polluted water	K. Aruna
Day - 2	few houses are unaware of many diseases they are getting by drinking polluted water.	Drinking polluted water results in diseases.	K. Aruna
Day - 3	found few houses with poor water facilities and many houses getting water from bore. few aged people are suffering joint pain.	facilities should be increased	K. Aruna
Day - 4	very few houses are receiving municipal water.	found water crisis in this particular area.	K. Aruna
Day - 5	few houses are getting water from outside but many people are getting mud water by drinking it few families complained about fever.	Awareness should be created here in Simhadripuram about water pollution.	K. Aruna
Day - 6	many people are drinking underground water and using it for cooking purposes.	people in Simhadri - Puram preferring ground water only.	K. Aruna

WEEKLY REPORT
WEEK - 1 (From Dt. 21/9/22 to Dt. 11/10/22)

Objective of the Activity Done:

Detailed Report:

The waste from households, factories of agricultural lands gets discharged into rivers or lakes. 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.

Most water bodies get converted into dumping grounds by near by localities. And this causes a huge problem because the dump contains everything from plastic, aluminium to glass, styrofoam etc.; And since all the waste takes different time to degrade in the water, they tend to harm the aquatic life until they degraded.

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

ACTIVITY LOG FOR THE SECOND WEEK

Day & Date	Brief description of the daily activity	Learning Outcome	Person In-Charge Signature
Day - 1	Many peoples are drinking bore water and using it for cooking purposes	facilities should be increased.	S. Raju
Day - 2	few houses are using municipal water	Peoples in shivalayam are drinking municipal water.	S. Raju
Day - 3	few houses getting water from outside but many people are getting mud water	Awareness should be created in Simhadripuram.	S. Raju
Day - 4	many houses getting water from bore few aged people are suffering from joint's pain	facilities should be increased.	S. Raju
Day - 5	many peoples are affordable to get filter from outside.	few were unaware about of polluted water.	S. Raju
Day - 6	many peoples are suffering with diseases by drinking polluted water	Drinking polluted water in shivalay am.	S. Raju

WEEKLY REPORT
WEEK - 2 (From Dt. 2/10/22 to Dt. 8/10/22)

Objective of the Activity Done:







Detailed Report:

The pollution happens when water flowing down streams get contaminated at different points. A river may get polluted by sewage, industrial waste, construction waste and so on. Dumps carrying sewage and industrial effluents, waste water goes in the oceans, rivers etc. In fact water especially freshwater is one of the most important elements in the world. However with increasing levels of water pollution.

Water not only quenches our thirst but also plays a vital critical role in keeping us healthy. By drinking the pollutant water we begin to suffer from ill health. By the water pollutant the aquatic animals are died.

The oxygen levels in polluted water is lower. This causes the death of several organisms. Drinking water should be safe for consumption. Water is required in the body and depends on several factors, including maintaining health. Chlorine and chloramine are major disinfectants in water.

ACTIVITY LOG FOR THE THIRD WEEK

Day & Date	Brief description of the daily activity	Learning Outcome	Person In-Charge Signature
Day - 1	Many houses are unaware of many diseases by drinking polluted water.	Drinking polluted water results in diseases.	
Day - 2	By drinking the municipal water peoples are suffering with the diseases.	By drinking polluted water peoples are suffering with diseases.	
Day - 3	Most of the houses are affordable to drink the municipal water.	People in Shivalayam are getting mineral water from outside.	
Day - 4	Most of the peoples are drinking municipal water directly.	Drinking municipal water.	
Day - 5	many houses getting the water from bore, few aged people suffering asthma.	Awareness should be created in Shivalayam.	
Day - 6	few houses with having a poor water facility.	Good facilities should be created in Shivalayam.	

WEEKLY REPORT

WEEK - 3 (From Dt. 9/10/22 to Dt. 15/10/22)

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 consequently water is essential to our body. Neither we nor everything living can survive without water. We all know that water pollution can affect our health badly.

It causes such sickness and diseases that will badly affect our health. Let us not destroy it nor pollute it. We need and we should save conserve our mother nature, especially the different bodies of water. Absolutely there are many simple ways in how we can help.

The pollution happens when water flowing downstreams get contaminated at different point. Water not only quenches our thirst but also plays a critical role in keeping us healthy. The water pollutant the aquatic animals are died. One of the challenges identified which affected the supply of water in rural areas.

ACTIVITY LOG FOR THE FORTH WEEK

Day & Date	Brief description of the daily activity	Learning Outcome	Person In-Charge Signature
Day - 1	few peoples are drinking municipal water in their areas	People in shivalayam using mineral water to drink.	<i>[Signature]</i>
Day - 2	most of the people are getting mineral water in shivalayam.	facilities should be created.	<i>[Signature]</i>
Day - 3	few people are affordable to get filter water.	People are in shivalayam are using filter.	<i>[Signature]</i>
Day - 4	Some peoples are drinking underground water and using it for cooking.	Awareness should be created in shivalayam	<i>[Signature]</i>
Day - 5	Some peoples are affordable to get filter water	People are affordable to drink municipal water.	<i>[Signature]</i>
Day - 6	In shivalayam, the people are drinking polluted water.	Some people are suffering with diseases due to pollution	<i>[Signature]</i>

WEEKLY REPORT
WEEK - 4 (From Dt. 16/10/22 to Dt. 22/10/22)

Objective of the Activity Done:

Detailed Report:

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

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

Rain water :- It is the major source of water from rain. Chlorine and chloramine are the major disinfectants used in public water systems.

Drinking water should be safe for consumption. Water is required in the body and depends on several factors, including maintaining health and level of physical activities. Also, it varies on health-related issues as well as environmental condition such as summer.

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 and access to drinking water. The oxygen level in polluted water is lower. This causes the death of several organisms.

ACTIVITY LOG FOR THE FIFTH WEEK

Day & Date	Brief description of the daily activity	Learning Outcome	Person In-Charge Signature
Day - 1	Many peoples are facing the poor water facilities in Shivalayam.	good facilities are should be created in Shivalayam.	pepsi
Day - 2	many peoples are getting the water from outside due to water pollution.	Awareness should be created in Shivalayam.	pepsi
Day - 3	Some peoples are suffering with joint pains by drinking pollutant water.	Drinking polluted water.	pepsi
Day - 4	few peoples are drinking mineral water in Shivalayam.	people in Shivalayam preferring mineral water.	pepsi
Day - 5	Some peoples are receiving the municipal water in their area.	Drinking municipal water in their areas.	pepsi
Day - 6	many peoples are affordable to drink the ground water.	they are affordable to drink the ground water.	pepsi

WEEKLY REPORT
WEEK - 5 (From Dt. 23/10/22 to Dt. 29/10/22..)

Objective of the Activity Done:

Detailed Report:

Safe and healthy readily available drinking water key to public health. Community water systems and water safety plans (wsp) are important ways to ensure the health of a community and access to drinking water.

A community water system supplies water to the same population year-round in many places, communities lack the capacity to effectively adopt their current system for water sanitation and hygiene to the community's changing needs such as population growth, changes in water quality.

Traditional water purification methods include boiling, filtration, sedimentation and solar radiation. water borne diseases are more common in rural community where potable water supply coverage is very low. The boiling method was the most efficient giving 100% decontamination after three minutes of boiling water is at the core of sustainable development and is critical for socio-economic development.

CHAPTER 5: OUTCOMES DESCRIPTION

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

1. Name of the village town?
2. Name of the district?
3. Door no of the houses?
4. water source for domestic consumption?
5. Drinking water source?
6. what are the major water pollutants?
7. what types of freshwater pollutants are there?
8. what are the property and dangers of water pollutants?
9. where does water pollution come from?
10. How much water does a person use each day?
11. Is proper drainage system exist for your used water?
12. water born diseases encountered in the last few year in the family.
13. mosquito repellents using a toilet cleaners?
14. Chemical products using a toilet cleaners?
15. of the medicine frequently used in the family?

Describe the problems you have identified in the community

Water scarcity is the lack of fresh water resources to satisfy water demand. It is manifested by partial or no satisfaction of expressed demand, economic competition for water quantity or quality, disputes between users, irreversible groundwater depletion, and negative effects on the environment.

It affects every continent and was categorized by the World Economic Forum as one of the largest global risks with respect to its potential impact over the next decade. One-third of the global population lives under situations of severe water scarcity at least one month of the year. Half a billion people in the world are affected by severe water scarcity all year round.

Half of the world's largest cities have been facing water scarcity. The absolute minimum water requirement for domestic usage is 50 liters per person per day, though 100-200 liters is often recommended.

Moreover, some states are facing the water scarcity in Andhra Pradesh.

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.

Possible solutions for the problems identified

- * waste water treatment.
- * plastic waste reduction.
- * water conservation.
- * install a water-efficient toilet in your home.
- * septic tanks.
- * Avoid using the toilet as a waste basket.
- * Stormwater management.
- * green agriculture.

Solutions :-

Before you sewage can be safely released back into the environment. It needs to be treated correctly in a water treatment plant. In a water treatment plant, sewage goes through a number of chambers and chemical processes to reduce the amount and toxicity of the water.

* The final stage of treatment is the tertiary phase.

This stage must be done before the water can be released. Almost all solid particles are removed from the water and chemical additives are supplied to get rid of any left over.

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

Awareness about water :-

Public water conservation campaigns raise awareness in all levels of society about the importance of saving water to cope with its scarcity and ensure sustainability. The aim is to change citizen attitudes and behaviours to improve water use efficiency.

Awareness programmes :-

S.No	Name of programme	Mode	Date
1.	Awareness programme on water conservation.	Pravara news paper phone - in programme	29-05-2019
2.	Community based water resource management.	Krishnadeshanu (Chandana varies) phone - in programme.	23-06-2020
3.	on occasion of world water day satode mollya sagada katanya.	Krishnadeshanu (Chandana varies) phone - in programme.	22-03-2021

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 substances have built up in water to extent of causing problem to people, animals and plants.

Addition of certain substance of the water such as organic, inorganic, biological, radiological, heat with which degrades the quality of water so that it becomes unfit for us. Water pollution is not only confined to surface water, but it has also spread to ground water, sea and ocean.

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

Causes of water pollution :-

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

1. Point Source :-

- It is directly to one influence. Here pollutant moves directly from source to water.

Point source are easy to regulate.

2. Diffuse or non-point source :-

It is from various ill-defined and diffuse sources. They vary spatially and temporally and are difficult to regulate.

The main source of water pollution are as follows :-

1. Community waste water :- Include discharges from houses, commercial and industrial establishments connects to public sewage system. The sewage contains human and animal excrete, food residues, cleaning agents, detergents.

2. Industrial waste :- The industrial discharge several inorganic and organic pollutants, which may have highly toxic to the living beings.

3. Agricultural sources :-

fertilizers contain major plant nutrients such as nitrogen, phosphorus and potassium.

the animal excrete such as wastes, from poultry fowls.

4. Thermal pollution :-

* The main sources are the thermal and nuclear power plants. The power plants use water and coolant and release hot waters.

5. Underground water pollution :-

In India at many places, the ground water is

with contamination due to sewage from industrial and municipal waste and influents.

6. Marine pollution :-

* oceans are the ultimate sinks of all natural and manmade pollutants.

* Rivers discharge their pollutants into the sea.

* The other sources of oceanic pollution are navigational discharge of oil, grease, detergents, sewage, garbage and radio sewage waste, off shore oil mining, oil spills.

7. Untreated sewage from households :-

* Dye, lotion, soap, hair oil, shampoo and many other products also contribute in water pollution. These products go to the sewage without any treatment.

* Untreated sewage breaks pipe, there is a chance that the waste enters in the process.

8. Garbage :- Plastics are non-biodegradable, clog water bodies and contaminate water.

9. Urbanization :- Urbanization is a key factor in increasing the amounts of water pollution.

10. Dumping solid wastes :- Humans, after carelessly dump their trash in the sea or near rivers.

11. Oil spills :- Accidentally oil spills have devastating effect on seas.

12. Dissolved solid waste :- Human polluting gases in the air can dissolve into salt & freshwater & pollute it.

* over exploitation of groundwater may lead to lack of arsenic.

Control measures:-

- * Riparian buffers
- * Lifecycle.
- * Treatment of Sewage water and the industrial effluents should be done before releasing it water bodies.
- * Hot water should be cooled before released from the power plants.

Ground water pollution:-

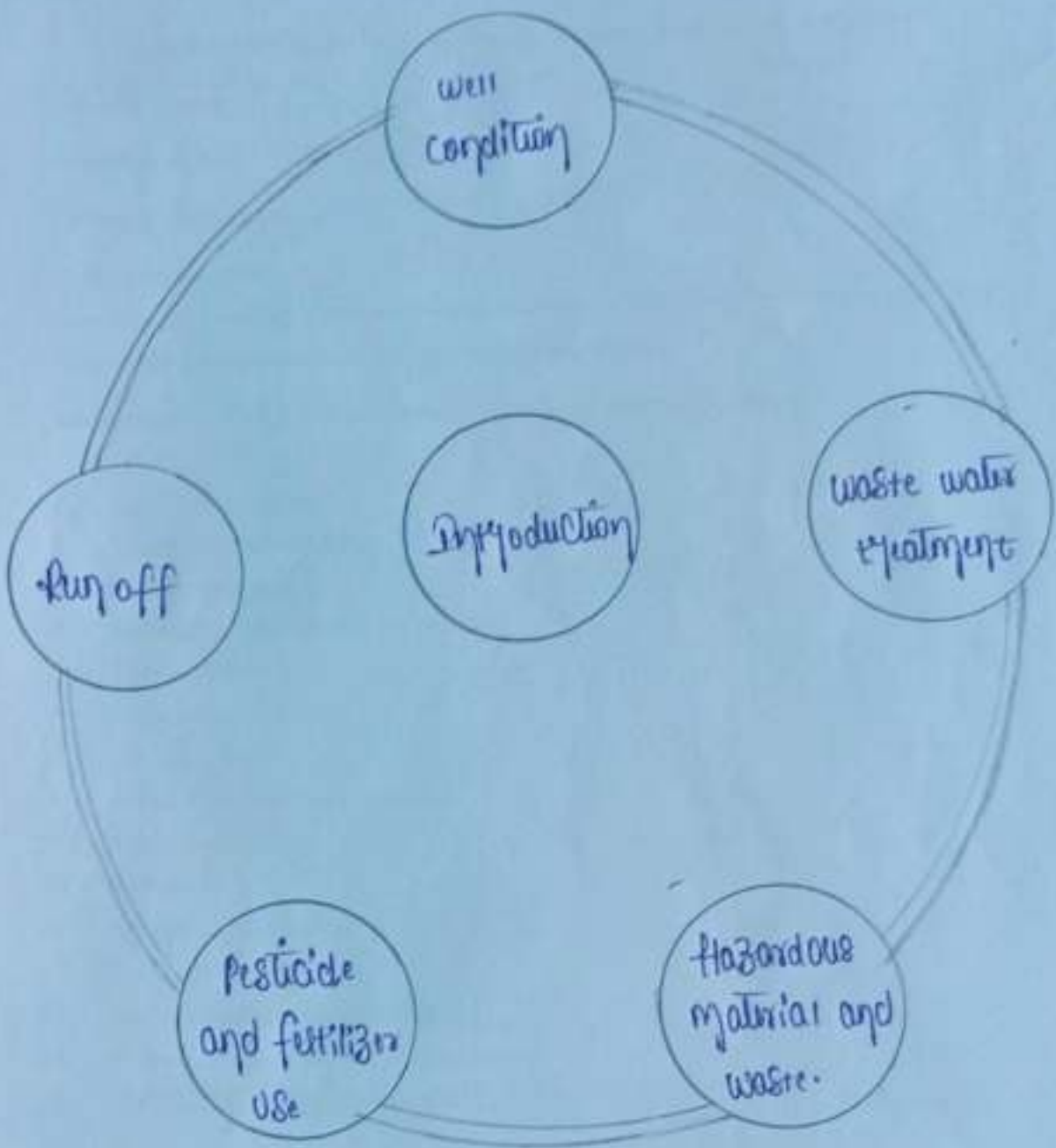
Any addition of undesirable substance to groundwater caused by human activities is considered to be contamination. This has been shown to be with thinking groundwater after often spreads the effects of dumps. to clean up.

Ground water contaminants come from two categories of sources. point source and non source are distributed on landfills. examples of point sources.

Source of ground water pollution:-

Most concern over ground water contamination has centered on pollution associated with human activities.

Human groundwater contamination has centered on to water waste disposal system. Land disposal of water waste, municipal waste water, land spreading of sludge. barge disposal from the petroleum industry. mine waste, deep-well disposal, lubricants and animal waste, agricultural source of ground.



Student Self-Evaluation for the Community Service Project

Student Name: *G. Hemra*
Registration No: *720130805105*
Period of CSP: From: *27/1/22* To: *31/1/22*
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:

G. Hemra
Signature of the Student

Page No:

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

Student Name:	G. Hemra
Registration No:	720130805105
Period of CSP: From: To:	29/9/22 to 3/11/22
Date of Evaluation:	
Name of the Person in-charge:	
Address with mobile number:	isurathota, visakhapatnam - 9652470590

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:

Signature of the Supervisor

Page No:

PHOTOS & VIDEO LINKS

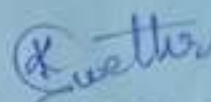




INTERNAL ASSESSMENT STATEMENT

Name Of the Student: G. Hemra
Programme of Study: water pollution
Year of Study: 2022-2023
Group: B&C
Register No/H.T. No: 720130805105
Name of the College: MAS. A.V.N College
University: Andhra University

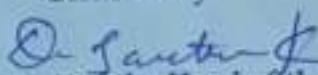
Sl.No	Evaluation Criterion	Maximum Marks	Marks Awarded
1.	Activity Log	20	
2.	Community Service Project Implementation	30	
3.	Mini Project Work	25	
4.	Oral Presentation	25	
	GRAND TOTAL	100	



Signature of the Faculty Guide

Date:

Certified by



Signature of the Head of the Department/Principal

Date:

Seal:


PRINCIPAL
MRS. A.V.N. COLLEGE
VISAKHAPATNAM



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

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