

Swachh Bharat Student Internship Program Report

An Internship Report for

Course code and title: SBS 100 Swachh Bharat Summer Internship Program

Credits: 2

Submitted in partial fulfillment of Master's Degree

M.Sc. In Biochemistry

By

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21P046006

Under the supervision of

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School of Chemical Sciences

Biochemistry



GOA UNIVERSITY
DATE: APRIL 2023



Examined by:

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10/5/23

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10/5/23

[Signature]
10/5/23

Seal of the School

DECLARATION BY STUDENT

I hereby declare that the data presented in this Internship report entitled, “**Swachh Bharat Student Internship Program Report**” is based on the activities carried out by me in the Biochemistry at the School of Chemical Sciences, Goa University under the Supervision of Dr Kanchanmala Deshpande and the same has not been submitted elsewhere for the award of a degree or diploma by me. Further, I understand that Goa University or its authorities will not be responsible for the correctness of observations / experimental or other findings given in the Internship.



Rohan G Haldankar

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Biochemistry

School of Chemical Sciences

Date: 10/05/2023

Place: Goa University

COMPLETION CERTIFICATE

This is to certify that the Internship report "**Swachh Bharat Student Internship Program Report**" is a Bonafide work carried out by Mr. Rohan G. Haldankar under my supervision in partial fulfillment of the requirements for the award of the degree of M.Sc. Biochemistry in the Discipline Biochemistry at the School of Chemical Sciences, Goa University.

Kanchanmelod
Signature and Name of Supervising Teacher
Date: *10/5/23*

[Signature]
10/05/2023
Prof. V.M.S. Verunkar
Signature and Name of Dean of the School
Biochemistry
School of Chemical Sciences
Date:
Place: Goa University



School Stamp

ACKNOWLEDGEMENT

My Internship named "**Swachh Bharat Student Internship Programme Report**" is the result of a collaborative effort and the valuable direction, assistance, collaboration, support, and encouragement offered to me by various individuals throughout the course of this Internship. I'd like to thank them for their encouragement, assistance, and guidance, without which my dissertation would not have been possible. I'd like to thank our Dean, Dr. Vidhyadatta M. Shet Venkar, for his continual encouragement and support. I am eternally thankful to my mentor, Dr. Kanchanmala B. Deshpande, for her invaluable advice, encouragement, and unwavering support throughout my internship. I am grateful and lucky to have had consistent encouragement, support, and advice from all of the Chemistry and Biochemistry section's teaching and non-teaching staff who assisted me in successfully completing my Internship work. Last but not least, I'd like to thank my group members Ms. Namitha Panday and Ms. Neha Maurya for their hard work and encouragement.

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INTRODUCTION

SBSI is an abbreviation for Swachh Bharat Student Internship. SBSI was initially implemented in May 2018 by the Ministry of Education, the former Ministry of Human Resource Development (MHRD), in collaboration with the Swachh Bharat Mission (Gramin), Ministry of Drinking Water and Sanitation at the national level. This is an initiative by honorable Prime Minister of India Narendra Modi is an extension of the Swachh Bharat Mission. The Ministry of Drinking Water and Sanitation, the Ministry of Youth Affairs and Sports, and the Ministry of Human Resource Development have collaborated to organize this 100-hour internship project for college and higher education students. Under this internship, enrolled students can participate in a variety of activities such as cleaning drives, trash management, awareness programmes on various themes such as health and hygiene, and students can also take on a variety of minor projects and work on them.

Activities Conducted Under Swachh Bharat Student Internship
(SBSI 2022-2023)

Date	Activity	Hours	Venue/ Platform
01 February 2023	Blood Donation Camp	25	Block E, SCS, Goa University
01 February 2023	Compilation of Blood Donors Data	05	Block E, SCS, Goa University
27 March 2023 - 06 April 2023	Water Quality Assessment of Miramar Beach	45	Analytical Laboratory, Block E, SCS, Goa University
31 March 2023	Talk & Awareness on Mental Health	10	Block E, SCS, Goa University/ Social Media
17 March 2023	Awareness Programme on Personal Hygiene with emphasis on Menstrual Hygiene	10	Block E, SCS, Goa University
22 April 2023 - 25 April 2023	Awareness on Health and Diet facts using social media platform	05	Social Media

ACTIVITY 1

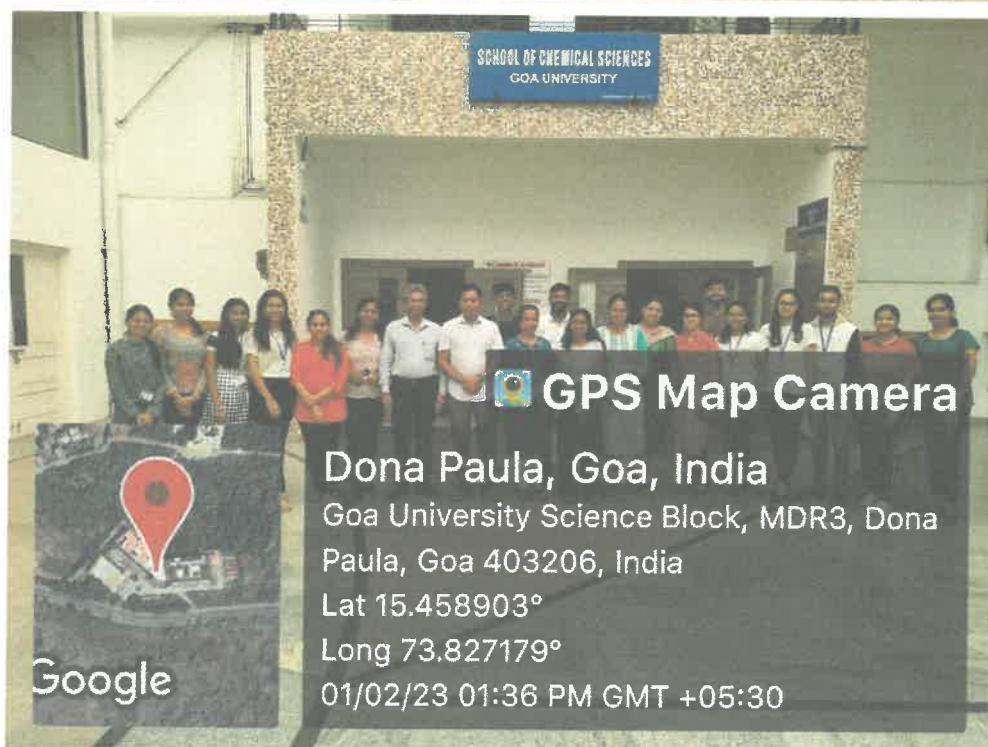
Activity: Blood Donation Camp

Date: 01 February 2023

Venue: Block E, SCS, Goa University

We SBSI Inters (Rohan Haldankar, Namitha Panday, and Neha Maurya) organized a blood donation programme on February 1st, 2023 (Wednesday). The camp was planned to assist people in need of blood transfusions. After registration and basic detail filling at Lecture Hall 1 of Block E, SCS, Goa University, the camp took place in Lecture Hall 9. The Dean of the school was invited to be the keynote speaker at this event. Around 10 a.m., the function began. The inaugural celebration was attended by donors and other Chemistry and Biochemistry faculty members. The blood donation camp was open to all Goa University students and faculty. Refreshments were provided by the school for individuals who donated blood to the camp. A team of roughly 10 personnel from Goa Medical College were put in charge of overseeing the entire process and collecting the blood, which included doctors, lab technicians, and other professionals. We'd also set up a rest area for anyone who felt dizzy or ill after donating blood. A big number of students from the Chemistry and Biochemistry sections took part. Students from other departments and doctoral students also took part in the activities. It was a huge success because approximately 40 donors donated blood.

Pictures of Blood Donation Camp

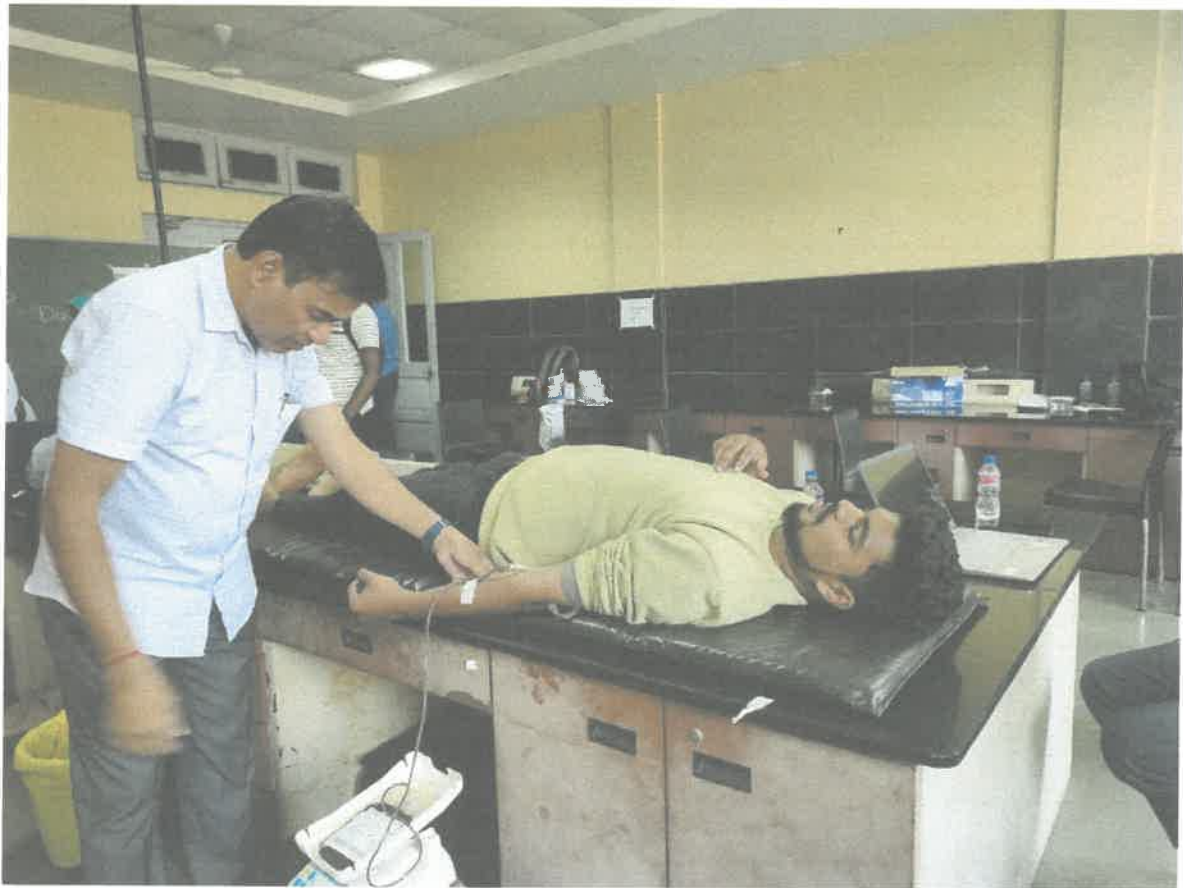


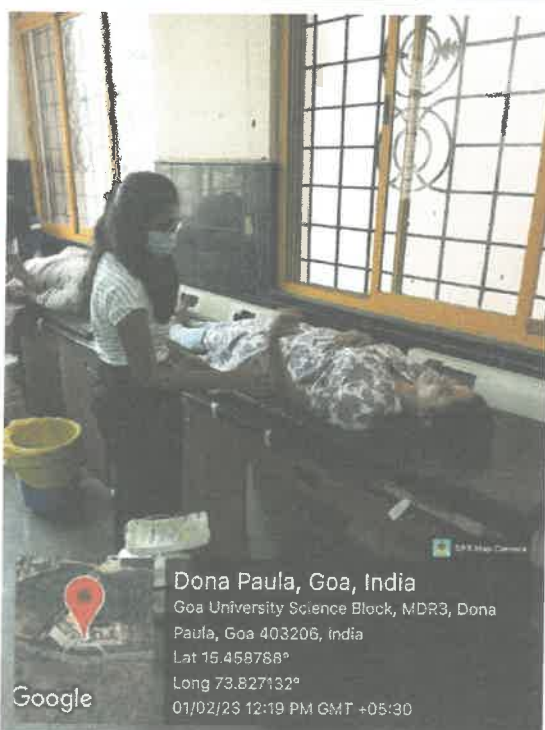












ACTIVITY 2

Activity: Compilation of Blood Donors Data

Date: 01 February 2023

Venue: Block E, SCS, Goa University

The goal of this exercise was to collect data of blood donors that may be utilized in the future to assist those in need of any blood type in an emergency. We took the information of those who came for blood donation with their permission because they were willing to help. With this useful information, we can contact donors and request blood donations anytime someone is in need. Data Collected is provided below in the table.

NAME	EMAIL ID	AGE	BLOOD GROUP	CONTACT NO.
Anis Sayyed	anis7sayyed@gmail.com	22	A+	7378695409
Mohammed Anas Munaf	anasmunaf1805@gmail.com	22	A-	7666528657
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Asmita Phadte	asmiphadte5@gmail.com	21	B+	7666320098
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Rishabh Sameer Keny	rishabhkeny@gmail.com	21	AB+	9763682436

Table 2.1: Data collection of people willing to donate blood in an emergency.

ACTIVITY 3

Activity: Water Quality Assessment of Miramar Beach

Date: 27 March 2023 - 06 April 2023

Venue: Analytical Laboratory, Block E, SCS, Goa University

As a result of increasing pollution, several bodies of water have become contaminated with fecal and chemical contaminants. To determine the quality of the water, In March, a sample was obtained from Miramar Beach and many physicochemical and microbiological parameters were examined. Presence of different pathogens was also checked in the water sample. The procedures for physicochemical parameters were taken from the book "Standard Methods for the Examination of Water and Wastewater," and the procedures for microbiological parameters were from the book "Experiments in Microbiology, Plant Pathology, and Biotechnology." Guidelines were referred to from the Central Pollution Control Board, Government of India.

Assessment of Water Quality of Miramar Beach - Sample Collection Spot



Figure 3.1 Picture showing geographical location of Miramar Beach

The observations of the different parameters are given below.

1. Recreational seawater analysis of the sample from Miramar Beach (MIB) in the month of March showed that the temperature was 30°C
2. Total Dissolved solids were 45.8 mg/L.
3. Total suspended solids were 10.23 mg/L.
4. The turbidity value recorded in the water sample was 7.97 NTU. Turbidity was within the acceptable limit i.e. 30 NTU according to recreational water standards.
5. The electrical conductivity value recorded of the water sample was 58 ms.
6. The pH of the seawater sample recorded was 8.01. pH was within the acceptable limit i.e., between 6.5 to 8.5 as per recreational water standards.
7. The dissolved oxygen in the water sample recorded was 0.73 mg/L. DO was less than the acceptable limit i.e., less than 3.5 mg/L according to recreational water standards.
8. The biochemical oxygen demand of the water sample was 32 mg/L. BOD was not within the recreational water standards i.e. 3.0 mg/L.
9. The total Coliforms in the water sample based on the MPN test was 2400/100 ml. As per recreational water standards, the seawater sample exceeded the limit.

Observed values for different parameters for the water sample from Miramar Beach (MIB) are presented in Table (3.1 and 3.2) given below.

Parameters		Water Sample (Miramar Beach)
		MIB
Physical	Temperature	30°C
	Total Dissolved Solids	45.8 mg/L
	Total Suspended Solids	10.23 mg/L
	Turbidity	7.97 NTU
	Electrical Conductivity	58 ms
Chemical	pH	8.01
	Dissolved Oxygen	0.73 mg/L

	Biochemical Oxygen Demand	32 mg/L
Microbiological	Most Probable Number	2400/100 ml

Table 3.1: Observations of Physiochemical & Microbiological Parameters of Water Sample from Miramar Beach

	Pathogens			
Sample	<i>Salmonella</i>	<i>Shigella</i>	<i>Staphylococcus</i>	<i>Yeast & Molds</i>
MIB	Absent	Absent	Absent	Absent

Table 3.2: Presence of Pathogens in Seawater Samples

Result of the Study

1. Biochemical oxygen demand value was very high for the seawater sample.
2. Turbidity was within the water standards.
3. Amount of total coliforms in the water sample was also high as given by the MPN test.
4. No pathogens were found in the sweater sample.

Conclusion of the Study

Based on the examination of physicochemical and microbiological parameters, it is possible to infer that the Miramar beach water is polluted since it exceeds the recreational water criterion set by the Central Pollution Control Board, government of India.

ACTIVITY 4

Activity: Talk & Awareness on Mental Health

Date: 31 March 2023

Venue: Analytical Classroom II, Block E, SCS, Goa University

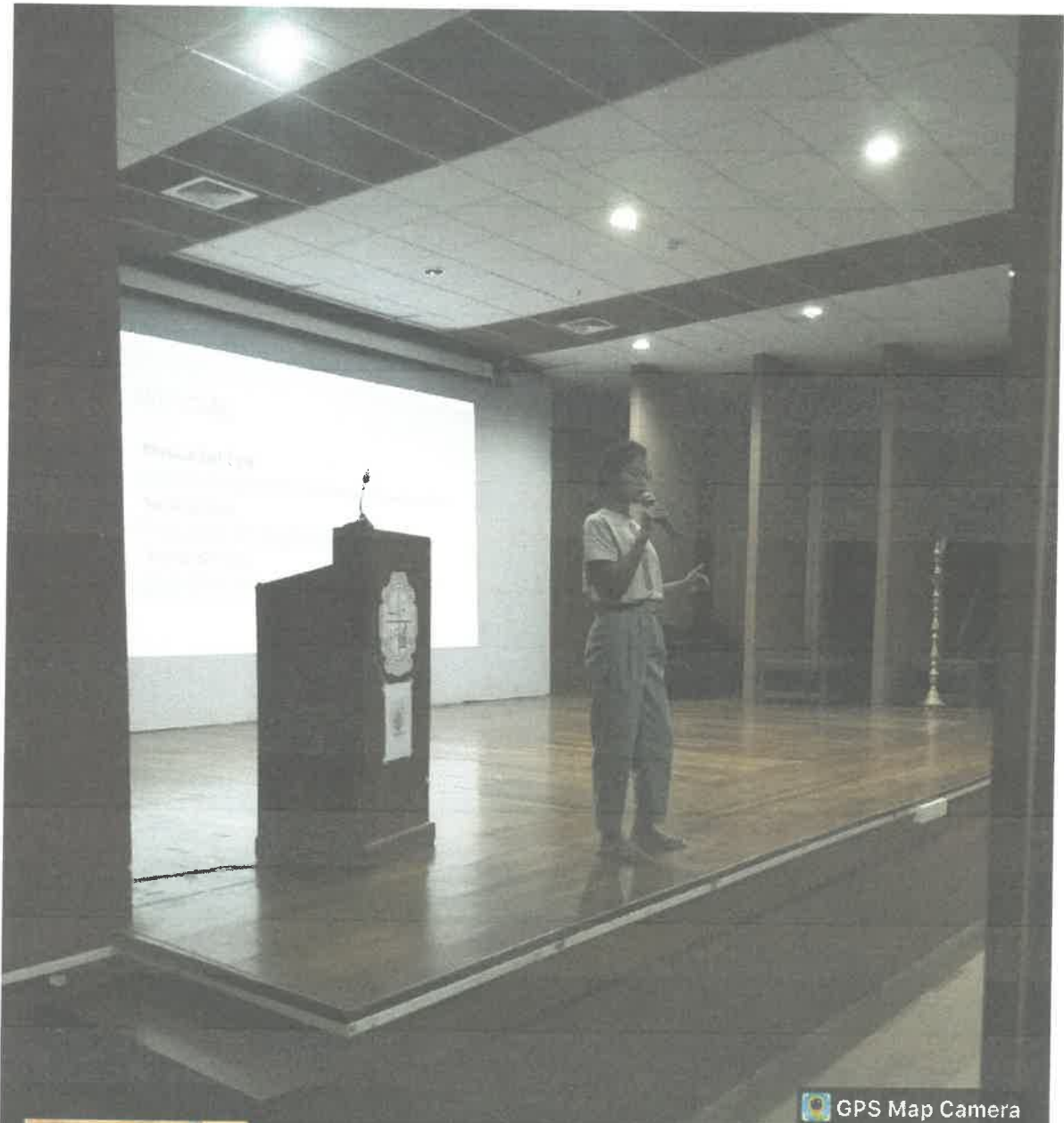
Other platform: Social Media

A person's emotional, psychological, and social well-being are all referred to as their mental health. How effectively a person can deal with common stressors serves as a standard metric for measuring the quality of their mental health. People who are in good mental health are able to make decisions, use their strengths, and contribute to their communities. It's common to conflate having a mental disease with having poor mental health. However, the term "mental health" actually refers to a person's overall mental well-being, regardless of whether they have a psychiatric disorder. Suicide is the fourth highest cause of mortality in those aged 15 to 29. People with serious mental illnesses die prematurely – up to two decades earlier – as a result of preventable physical diseases. Despite improvements in some nations, people with mental illnesses are frequently subjected to severe human rights breaches, discrimination, and stigma. Many mental health issues can be adequately treated at little cost, but the gap between those who need care and those who have access to care remains significant. Treatment coverage is still extremely low.

In order to address these various mental health challenges, we organized a mental health seminar. Ms. Anushka Laad, Counsellor at Goa University, was invited as the guest speaker. The event was held in Block E, SCS, Goa University's main hall. Faculty and students from Goa University attended the talk. The talk benefited more than 100 participants. We also hosted a question and answer session where people could ask their questions. Overall, the event was a huge success. Aside from the talk, we raised awareness about mental health by displaying charts with encouraging and uplifting quotes in the School of Chemical Sciences, Goa University as well as on social media.

Pictures of Talk & Awareness on Mental Health





GPS Map Camera



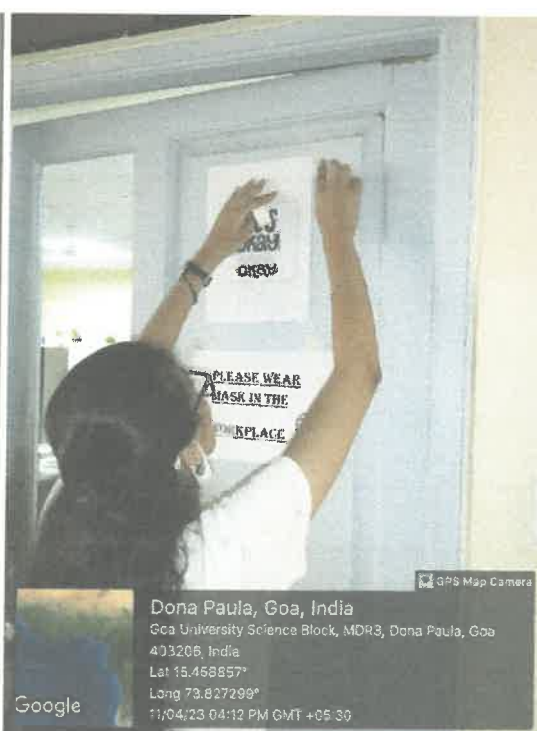
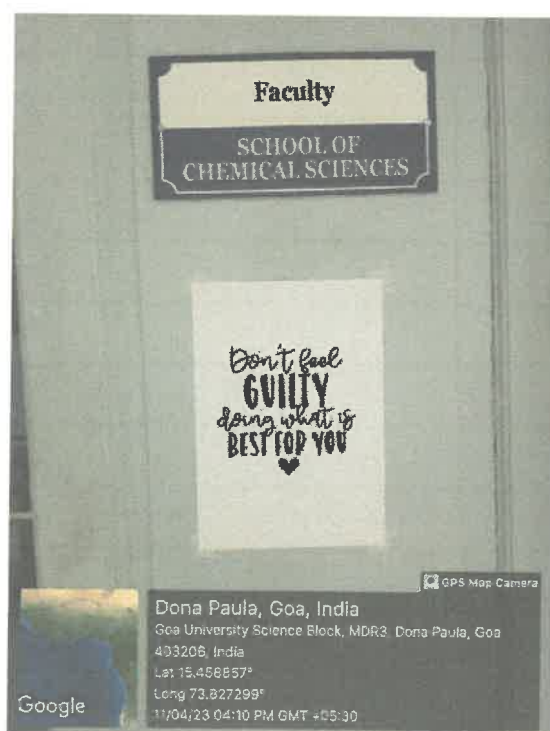
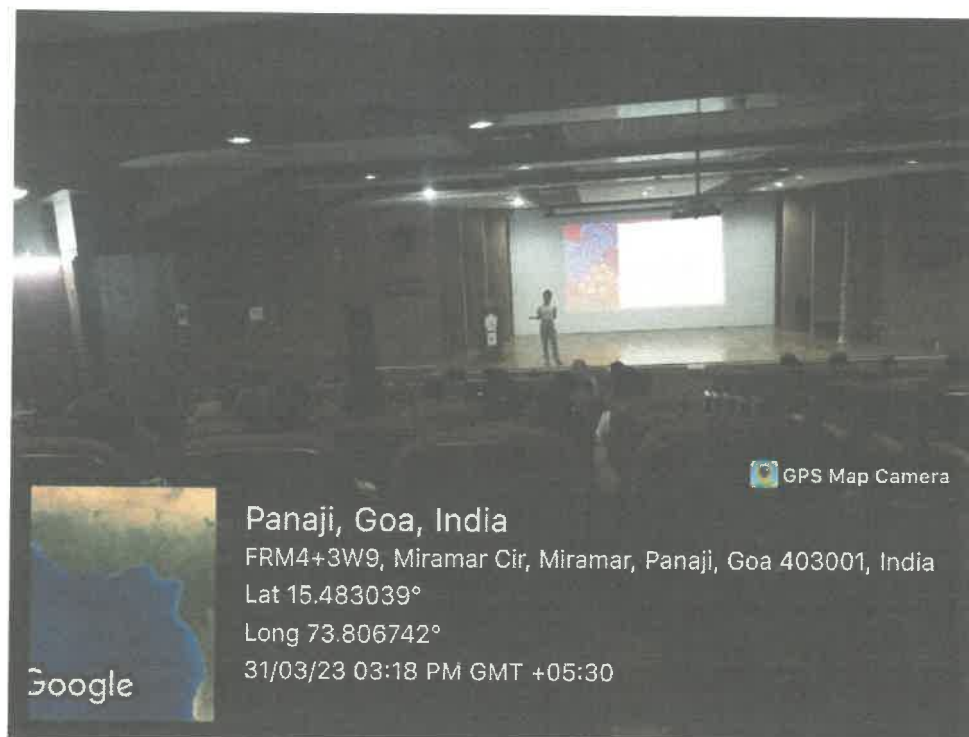
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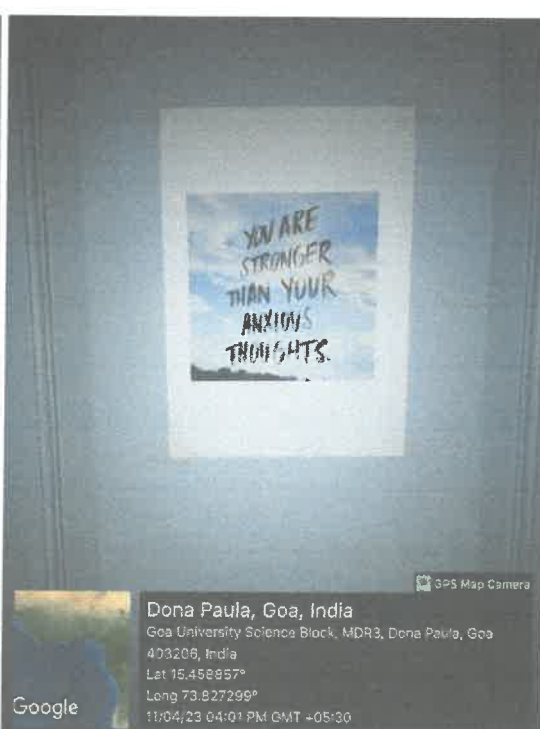
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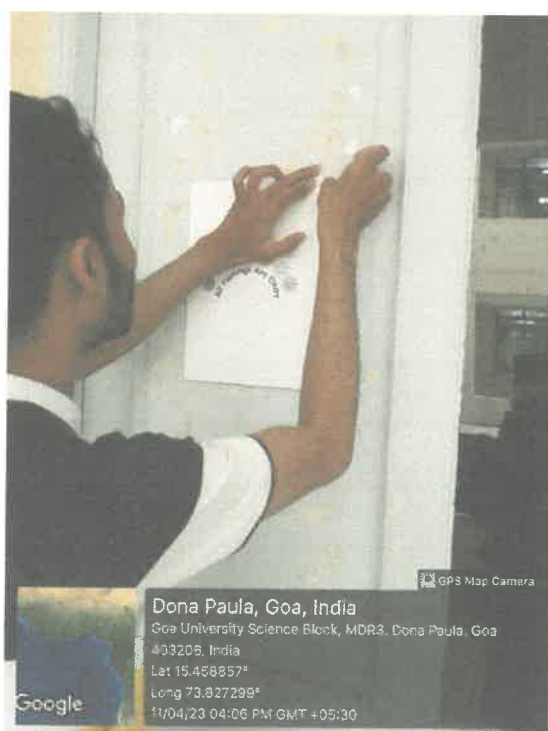
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ACTIVITY 5

Activity: Awareness Programme on Personal Hygiene with Emphasis on Menstrual Hygiene

Date: 17 March 2023

Venue: Analytical Classroom, Block E, SCS, Goa University

Keeping our bodies clean is critical for fighting and preventing illness in ourselves and others. Hand washing can help prevent germs from moving from one person to another or from one part of your body to another. Oral and other illnesses can be avoided by flossing and brushing our teeth. Menstrual cleanliness and management might be critical in ensuring that menstruation does not disrupt your daily life. It ensures that you can go about your everyday schedule, such as going to school, working, or doing housework. It can also help to avoid embarrassing situations, making one feel better about themselves and their bodies. In this regard, appropriate menstrual hygiene is essential for one's overall health and growth. We organized a seminar in the Analytical classroom to raise awareness about personal and menstrual hygiene among the Eco clean personnel. We discussed numerous methods for maintaining personal hygiene. Ms. Neha Maurya addressed several menstrual hygiene topics. The session was followed by answering some of their doubts regarding personal and menstrual hygiene.

Pictures of Awareness Programme on Personal Hygiene with Emphasis on Menstrual Hygiene



ACTIVITY 6

Activity: Awareness on Health and Diet Facts Using Social Media Platform

Date: 22 April 2023 - 25 April 2023

Platform: Social Media

Health is essential for living life to the fullest. A healthy lifestyle keeps the body healthy while keeping the mind engaged and fresh. Maintaining excellent health is not something that happens by chance. Fiber, whole grains, fresh fruits and vegetables, "good" or unsaturated fats, and omega-3 fatty acids are all important components of a balanced diet. These nutrients reduce inflammation, which can harm tissue, joints, artery walls, and organs. Another aspect of healthy eating is limiting your intake of processed foods. Sweets, foods prepared with highly refined carbohydrates, and sugar-sweetened beverages can cause blood sugar increases, which can contribute to hunger. Diabetes, obesity, heart disease, and even dementia have all been related to high blood sugar levels. We used a social media platform to raise health and diet awareness.

Pictures of Awareness on Health and Diet Facts Using Social Media Platform



