Parul® University NAAC A++ ACCREDITED UNIVERSITY

RAJKOT HOMOEOPATHIC MEDICAL COLLEGE

DEPARTMENT OF COMMUNITY MEDICINE

Proposal Letter

Date –14.06.2025.

To
The Principal
Rajkot Homoeopathic Medical College,
Parul University, Rajkot.
Gujarat.

SUBJECT – TO ARRANGE AN ACADEMIC VISIT TO ANY WATER TREATMENT PLANT.

Respected Sir,
As per the curriculum by the National Commission for Homoeopathy (Govt. of India) it is mandatory to arrange an academic visit for the students of 4th BHMS at any Water Treatment Plant to gain the knowledge about purification of water. So, in this regard we are seeking your permission to conduct an academic visit at any Water Treatment Plant which will be convenient for our students, preferably 1st Week of July 2025.
Your Kind co-operation is highly solicited.

Thanking you,
Yours sincerely,

DEPARTMENT OF COMMUNITY MEDICINE RHMC

Dom 14/6/25

Prof (Dr) A. K. Das.
H.O.D
Department of Community Medicine.

HOD
Department of
Community Medicine

14/6/25

Prof (Dr) H.N. Mehta.
PRINCIPAl
Rajkot Homoeopathic Medical College.

PRINCIPAL
RAJKOT HOMOEOPATHIC MEDICAL COLLEGE
RAJKOT.

Parul® University

DEPARTMENT OF COMMUNITY MEDICINE

INDIA'S YOUNGEST NAAC A++ ACCREDITED UNIVERSITY

Date – 14.06.2025

To
The Addi. City Engineer,
Rajkot Municipal Corporation,
Central Zone, Rajkot.

SUBJECT – TO GRANT PERMISSION FOR ACADEMIC VISIT.

Respected Sir,

As per the curriculum by the Central Council of Homoeopathy it is mandatory to arrange an academic visit of the students of 4th BHMS at Water Treatment Plant. So, in this regard we are seeking your permission to arrange an academic visit at Aji water treatment plant preferably 1st week of July 2025 or at any date convenient to you. Our students will follow the rules and regulations of the visit and 96 students will attend in batches under the supervision of the faculty member of the Department of Community Medicine, Rajkot Homoeopathic Medical College.

Your co-operation is highly solicited.

DEPARTMENT OF COMMUNITY MEDICINE * RHMC

Thanking you,
Yours sincerely,

Prof (Dr) A. K. Das.
H.O.D
Department of Community Medicine.

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Department of
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Prof (Dr) H.N. Mehta.
PRINCIPAL.
Rajkot Homoeopathic Medical College.

PRINCIPAL
RAJKOT HOMOEOPATHIC MEDICAL COLLEGE
RAJKOT.

Visited this plant
97 student with
2 faculties.
17/25

Rajkot Homoeopathic Medical College
Faculty of Homoeopathy

0281 2361372 rhmc@paruluniversity.ac.in Gondal Road, Rajkot - 360002, Gujarat, India

PARUL UNIVERSITY
RAJKOT HOMOEOPATHIC MEDICAL COLLEGE
DEPARTMENR OF COMMUNITY MEDICINE

Date – 01-07-2025

CIRCULAR

All the students of 4th (2025-26) BHMS are hereby informed that Department of Community Medicine has organized an academic visit to Aji Water Treatment plant ..... On 03-07-2025

Your presence is mandatory. Absence without prior permission will attract a disciplinary action.

DEPARTMENT OF COMMUNITY MEDICINE ✣ RHMC

01/07/25

H.O.D.
Department of Community Medicine.

HOD
Department of
Community Medicine

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RAJKOT HOMOEOPATHIC MEDICAL COLLEGE

A Report on Visit of

WATER TREATMENT PLANT

Aji Water Treatment Plant,
Rajkot 360003
On 3rd July 2025

ORGANISED BY,

DEPARTMENT OF COMMUNITY MEDICINE

DEPARTMENT OF COMMUNITY MEDICINE RHMC

GUIDED BY :
DR. ANUP KUMAR DAS (HOD)
DR. HASTI DEKEVADIYA (ASSISTANT PROFESSOR)

PREPARED BY :
VISAPARA MIHIR
Roll no : 70
4th BHMS (2025-2026)

PRINCIPAL
RAJKOT HOMOEOPATHIC MEDICAL COLLEGE
RAJKOT.

04/07/25
HOD
Department of
Community Medicine

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DATE OF VISIT : On 3rd July 2025

PLACE OF VISIT : Aji Water Treatment Plant, Rajkot 360003

AIM OF VISIT :

The excursion to the Water Purification Plant at Aji , served as a practical extension to our academic learning, offering firsthand insights into the intricacies of water treatment procedures, thereby enriching our understanding beyond classroom teachings.

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WATER PURIFICATION

THERE ARE TWO METHODS USED IN THE WATER PURIFICATION PLANT AT BEDI.

1. RAPID SAND FILTERATION:

Rapid sand filtration is a crucial process in water treatment, aimed at removing suspended solids and impurities from raw water sources swiftly. It involves passing water through a granular medium, typically sand, to trap contaminants. This rapid filtration method is essential for producing clean and potable water for various uses, from municipal supplies to industrial applications.

STAGES OF RAPID SAND FILTERATION :

1. **Coagulation/*Flocculation:*** Prior to filtration, chemicals are added to the raw water to promote the aggregation of fine particles into larger, easier-to-remove flocs. This stage helps improve the efficiency of filtration by aiding in the removal of suspended solids.

2. **Sedimentation:** After coagulation and flocculation, the water is allowed to settle in a sedimentation basin or clarifier. During this stage, the larger flocs settle to the bottom of the basin, forming a layer of sediment known as sludge. This clarifies the water further before it enters the filtration process.

3. Filtration: The clarified water then passes through a bed of granular media, typically sand, at a rapid rate. As the water flows through the sand bed, suspended particles and impurities are trapped within the interstitial spaces between the sand grains. This stage effectively removes remaining solids, turbidity, and pathogens from the water.

4. Backwashing: Periodically, the filter bed needs to be cleaned to remove accumulated debris and restore filtration efficiency. Backwashing involves reversing the flow of water through the filter, dislodging trapped particles and flushing them out of the system. This process helps prevent clogging and maintain optimal filter performance.

5. Disinfection: After filtration, the treated water undergoes disinfection to kill any remaining bacteria, viruses, or other pathogens. Common disinfection methods include chlorination, ozonation, or UV irradiation, depending on the specific requirements and regulations.

6. Distribution: Finally, the treated water is distributed to consumers through a network of pipes or storage reservoirs. This stage ensures that clean and safe drinking water reaches the end-users for various domestic, commercial, and industrial purposes.

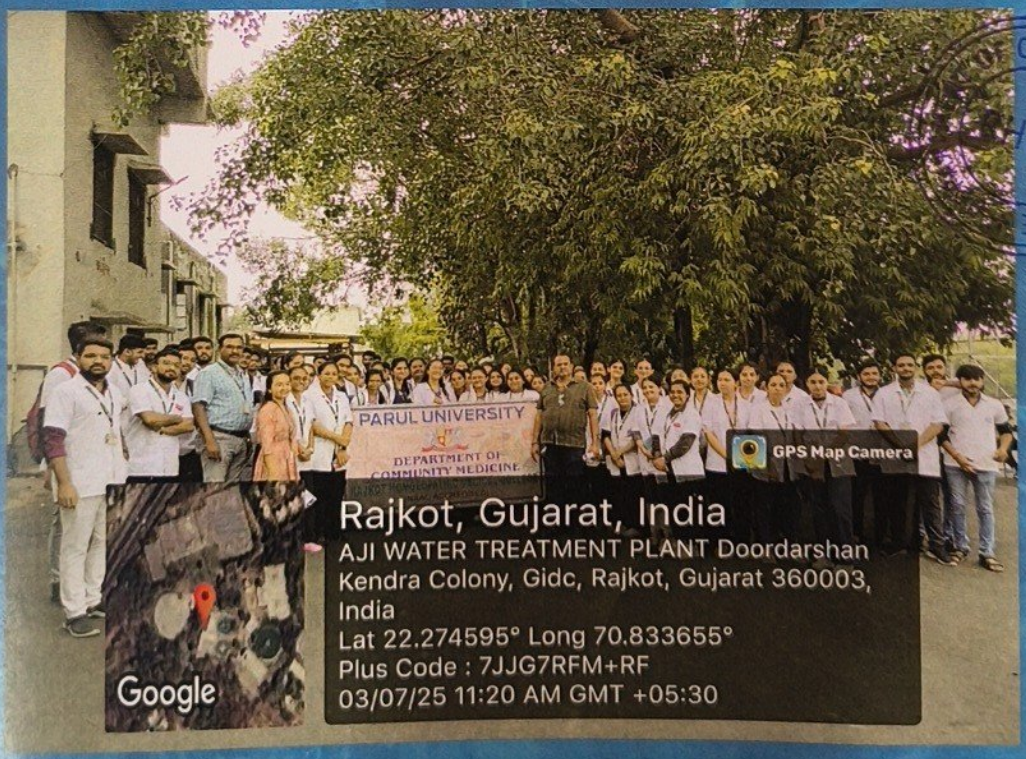
2. CHLORINATION OF WATER

STAGES OF CHLORINATION OF WATER :

1. **Pre-chlorination:** In this initial stage, chlorine is added to the raw water before any treatment processes begin. Pre-chlorination helps to disinfect the water, kill pathogens, and control algae growth. It also oxidizes certain organic and inorganic compounds, making them easier to remove during subsequent treatment steps.
2. **Coagulation/Flocculation:** After pre-chlorination, the water undergoes coagulation and flocculation processes. Chemical coagulants are added to the water to destabilize suspended particles and colloids, causing them to clump together into larger aggregates called flocs. Flocculants may also be added to enhance the formation and settling of these flocs.
3. **Sedimentation:** The water then moves into a sedimentation basin or clarifier, where the floc particles settle out of the water under the force of gravity. This stage allows the removal of larger suspended particles, as well as some organic matter and microorganisms, further clarifying the water.
4. **Filtration:** Following sedimentation, the clarified water passes through a filtration system to remove remaining suspended particles, turbidity, and microorganisms. Filtration can involve various media, such as sand, activated carbon, or membranes, depending on the specific requirements of the water treatment plant.

5. Post-chlorination: After filtration, chlorine is added to the water again in a process known as post-chlorination. This step ensures that any remaining pathogens or bacteria are killed before the water is distributed to consumers. Post-chlorination also helps to maintain a residual level of chlorine throughout the distribution system, providing continuous disinfection and protecting against microbial regrowth.

6. Residual Chlorine Monitoring: Throughout the chlorination process, the concentration of chlorine in the water is closely monitored to ensure that adequate disinfection is achieved without exceeding regulatory limits. Residual chlorine levels are measured at various points in the treatment process and in the distribution system to verify disinfection effectiveness and safety.



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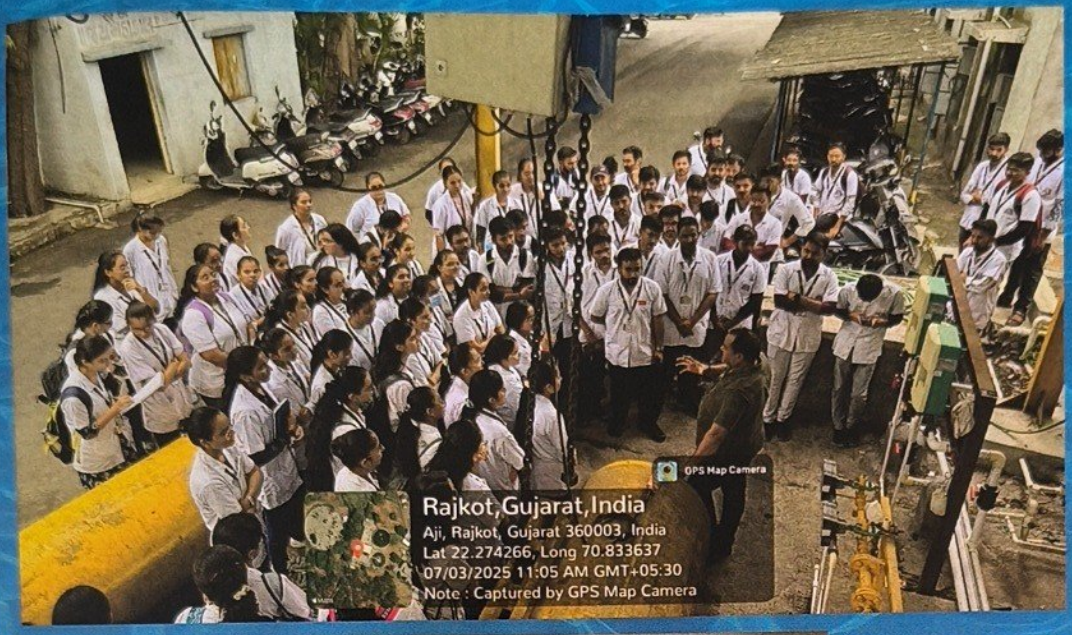

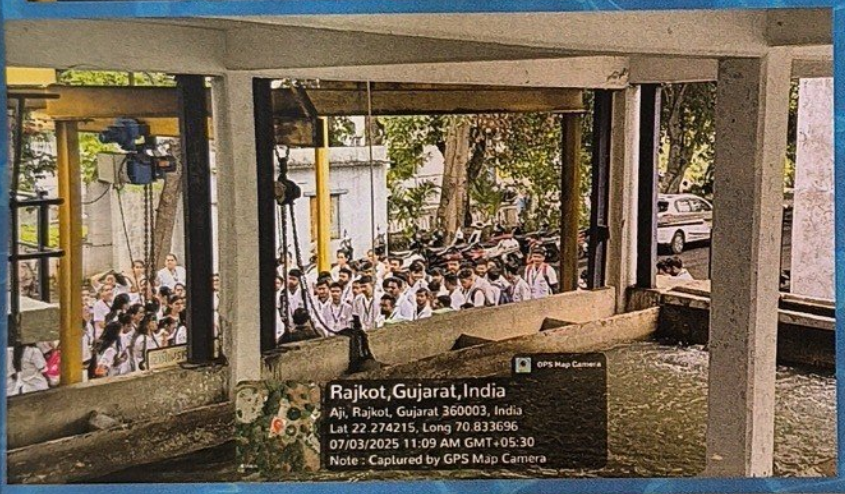

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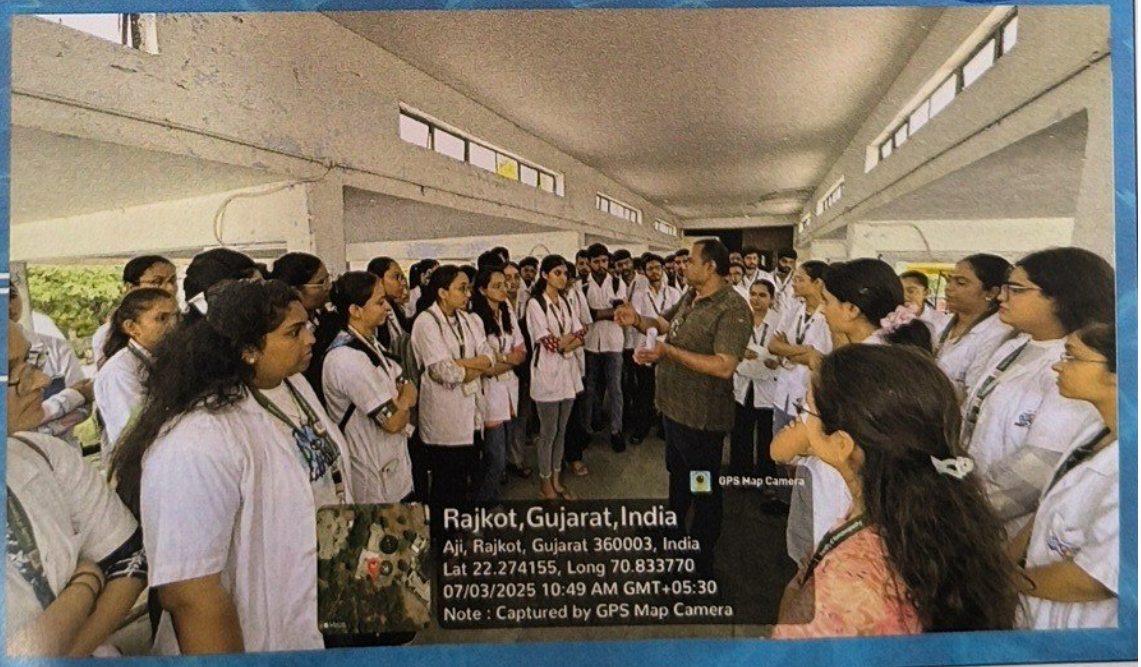
RHMC



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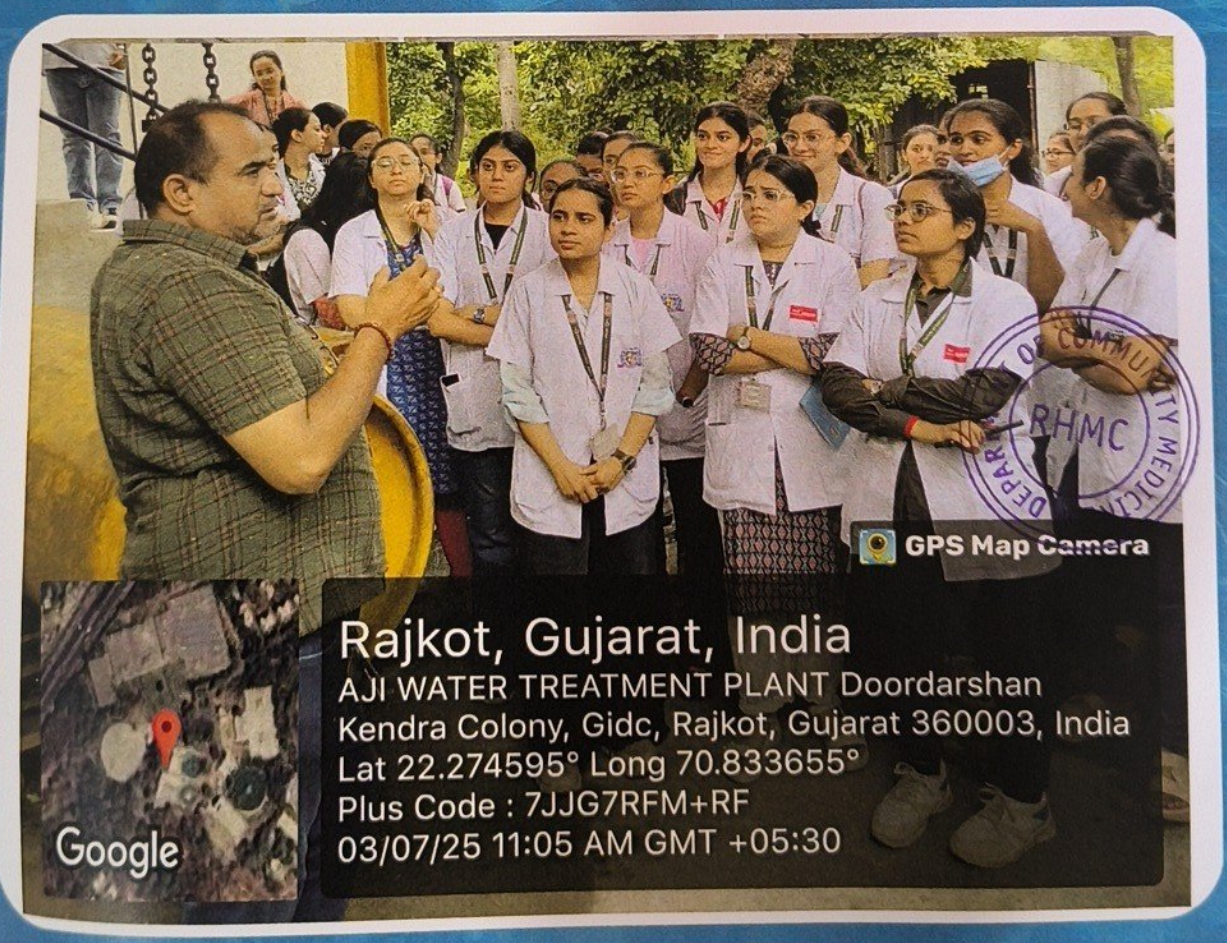
WATER :

USES OF WATER :

1. INDUSTRIAL USE
2. POWER PRODUCTION
3. DOMESTIC USE: for drinking, bathing, washing, flushing of toilets, gardening etc.
4. PUBLIC PURPOSE: for cleaning streets and recreational purposes like swimming pools and public parks.
5. Carrying away waste from all manners of establishment and institution.
6. Agriculture Purpose



Corporator

Parul® University | NAAC A++

WATER SOURCES MUST MEET TWO ESSENTIAL CRITERIA:

A) ADEQUATE QUANTITY TO FULFILL CURRENT AND FUTURE DEMANDS.

B) MAINTAINING AN ACCEPTABLE STANDARD OF WATER QUALITY.

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IMPURITIES OF WATER :

1. DUST
2. FINE SAND
3. CLAY
4. DIRT
5. BIOLOGICAL CONTAMINANTS LIKE (VIRUS, BACTERIA, OTHER MICROORGANISMS.)

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WATER BORN DISEASES :

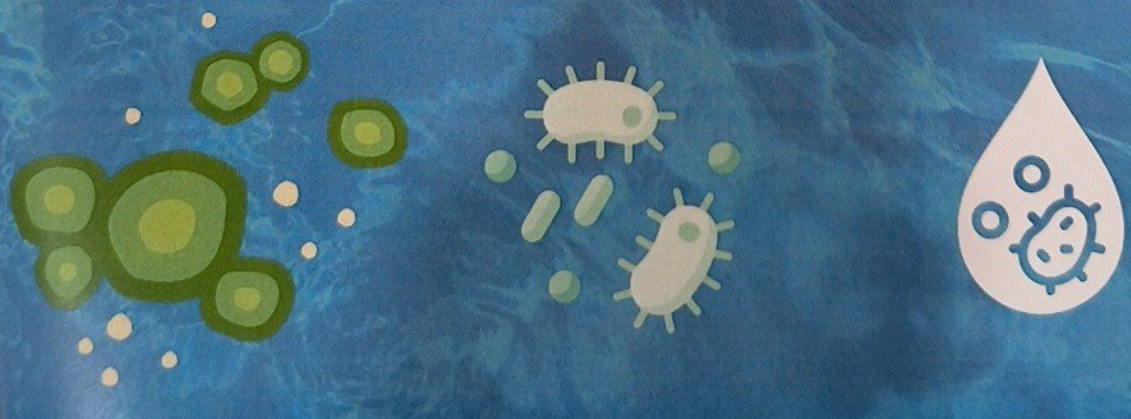
1. BIOLOGICAL

A) CAUSED BY INFECTIVE AGENTS :

- Bacterial: Typhoid and Paratyphoid Fever, Bacillary Dysentery.
- Viral: Hepatitis A, Hepatitis B, Poliomyelitis, Rotavirus causing diarrhoea in infants.
- Protozoal: Amoebiasis, Giardiasis.
- Helminthic: roundworm, threadworm, hydatid disease.
- leptospiral: Weil's disease

B) DUE TO THE PRESENCE OF AN AQUATIC HOST :

- snail: schistosomiasis
- cyclops: guinea worm, fish tapeworm.



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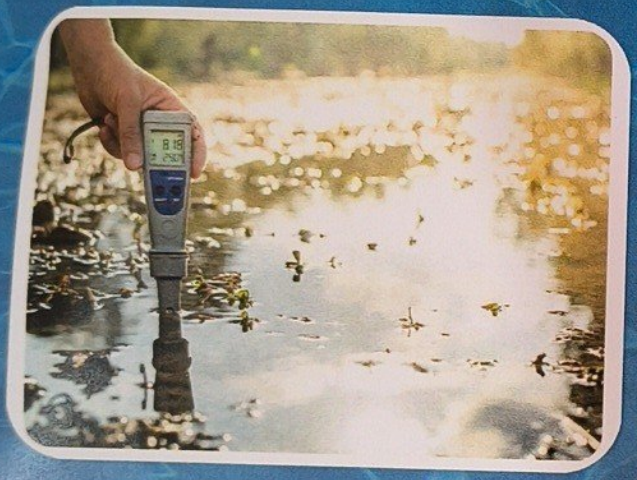
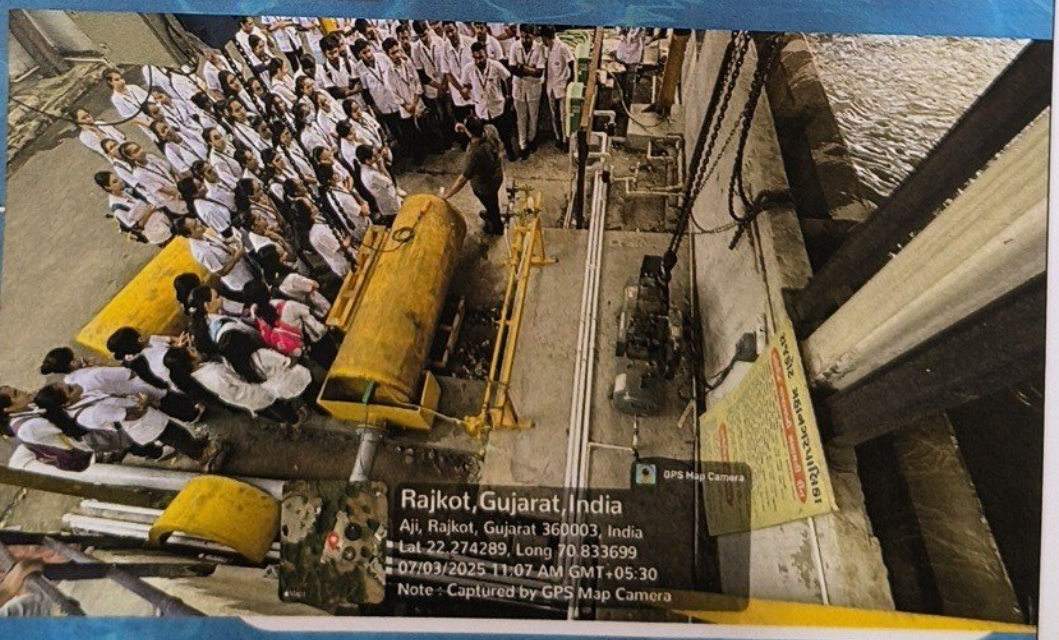
2. CHEMICAL

- Cyanosis in infant
- CVS disease
- Due to carrying insects®
- Breeding: malaria, filaria arbovirus, Onchocerciasis,
- African trypanosomiasis.
- Dental problem





ડૉ. અલ્પેશ મોરઝરીયા
સભ્ય-સ્ટેન્ડિંગ કમિટી (પ્રજાપતિ)
કોર્પોરેટર વોર્ડ નં.૧

☎ : મોબાઈલ : ૮૪૯૦૯ ૦૭૦૮૯
૯૮૨૪૨ ૪૭૮૮૧

રાજકોટ મહાનગરપાલિકા
ડૉ. આંબેડકર ભવન,
ઢેબરભાઈ રોડ, રાજકોટ - ૧.

તા. 04/07/2025

CERTIFICATE

TO WHOM IT MAY CONCERN

This is to certify that total 97 students of 4th year BHMS (2025-2026), of Rajkot Homoeopathic Medical College, Parul University, had visited Aji Water Treatment Plant, run and managed by Rajkot Municipal Corporation, on dated 03-07-2025 under the guidance of Department of Community Medicine.

Prof (Dr) Anup Kumar Das HOD and Assistant professor Dr Hasti Dekivadiya, Department of Community Medicine accompanied and guided the students during visit.

4/7/25

Corporator
Rajkot Municipal Corporation

42 Jiniala Payal Jivrajbhai

Rajkot Homoeopathic Medical College, Rajkot
Parul University

Dept. : Community Medicine | **Sub.: Academic Visit to Aji Water Treatment Plant**

4th (Jr.) BHMS | Date: 03-07-2025

No	Name	Signature	Remark
1	Ajani Vishakha Rajeshbhai		
2	Ardeshna Nirali Kalpeshbhai		
3	Bavaliya Isha Vipulbhai		
4	Bhalodiya Divyata Kiritbhai		
5	Bhatti Deep Mineshbhai		
6	Bhensadadiya Vrunda Rajeshbhai		
7	Bhetariya Karan Ramshibhai		
8	Bhuva Khushi Ashokbhai		
9	Boghara Akshit Hareshbhai		
10	Busa Naisargi Sanjaybhai		
11	Chaudhari Sohangiben Anilbhai		
12	Chauhan Lalji Punabhai		
13	Chauhan Monika Narayanbhai		
14	Chauhan Vishvrajsinh Arvindsinh		
15	Chavda Hardik Maheshbhai		
16	Chavda Mansiben pankajbhai		
17	Chhayani Vishna Sureshbhai		
18	Damor Laxmiben Dineshbhai		
19	Dela Munir Rajakbhai		
20	Desai Vishal Manjibhai		
21	Dharaviya Monika Jasabhai		
22	Dikhit Ravikumar Rajansinh		
23	Doshi Krina Mayurbhai		
24	Gadara Viren Kamleshbhai		
25	Gadhiya Shruti Maganbhai		
26	Gadhvi Dev Aidan		
27	Galani Jenisha Sureshbhai		
28	Garasiya Miteshkumar Maganlal		
29	Geda Divyesh Narendrabhai		
30	Geriya Nidhi Manojbhai		
31	Gevariya Arpit Sanjaybhai		
32	Gohel Pratik Lalitkumar		
33	Goswami Darshangiri Maheshgiri		
34	Gumasana Janki Sanjaybhai		
35	Hadiyal Ankita Jagdishbhai		
36	Hariyani Bipin Ishwarbhai		
37	Harsora Krisha Vijaybhai		
38	Hirapara Krushita Jentibhai		
39	Humbal Mansi Atulbhai		
40	Jadeja Chhatrapalsinh N.		
41	Jariya Darshna Natvarbhai		
42	Jinjala Payal Jivrajbhai		
43	Joshi Mansi Jayeshbhai		
44	Kaliya Falguni Hardevbhai		
45	Kamaliya Kavita Vallabhbhai		
46	Kanzariya Poojaben Dineshbhai		
47	Kavita Kalsaria		

DEPARTMENT OF COMMUNITY MEDICINE * RHMC

HOD
Department of

Rajkot Homoeopathic Medical College, Rajkot

No	Name	Signature	Remark
48	Katariya Krinal Hareshbhai		
49	Katrodiya Jatin Karsanbhai		
50	Ladumor Abhay Nagjibhai		
51	Ladumor Urvashiben Dineshbhai		
52	Lalkiya Aasta Bhikhubhai		
53	Limbasiya Dixit Jagdishbhai		
54	Limbasiya Hetvi Arvindbhai		
55	Makwana Paril Nileshbhai		
~~56~~	~~Malani Ayush Bipinbhai~~		
57	Maradiya Anjani Gautambhai		
58	Mehta Aayushi Ghanshyam		
59	Merani Vishal Ashvinbhai		
60	Mogal Faizal Javedbhai		
61	Mungara Dhrumil Ashvinbhai		
62	Nimavat Pallavi Kiritbhai		
63	Pansuriya Ritika Manojbhai		
64	Parmar Ishita Govindbhai		
65	Parmar Omkesh Bhikhabhai		
66	Parmar Prarthna Kalpeshbhai		
67	Parmar Urvikumar Vibhuvanbhai		
68	Patel Devika Satishbhai		
69	Patel Vrund Mahendrabhai		
70	Pathak Hetvi Jayeshbhai		
71	Patvana Komal Nileshbhai		
72	Pipaliya Shrut Manishbhai		
73	Pipalva Rutika Jayeshbhai		
74	Rathod Geetaben Bhupatbhai		
75	Rathod Hiren Anilbhai		
76	Rathod Pruthvirajsinh Samatsinh	P.S. Rathod	
~~77~~	~~Rathod Sagar Kathdabhai~~		
78	Rathod Shailee Nayanbhai		
79	Sakhiya Shruti Jayeshbhai		
80	Sanghani Ridham Dipakbhai		
81	Saresa Deepali Vijaybhai		
82	Solanki Anjali Bharatbhai		
83	Solanki Shivangi Maldebhai		
84	Sorathiya Isha Manishbhai		
85	Tarapada Darshita Bharatbhai		
86	Timbadiya Swati Bhaveshbhai		
87	Umraniya Himanshu Rohit		
88	Umretiya Aevanshi Narendrabhai		
89	Undhad Jay Kamleshbhai		
90	Vadoliya Divyesh Maheshbhai		
91	Vaishnav Vishva Mehulbhai		
92	Vekariya Dipal Hareshbhai		
93	Vekariya Pratik Kanubhai		
94	Vekaria Komal Vimalbhai		
95	Vidja Vivekkumar Hareshbhai		
96	Visapara Mihir Jitendrabhai		
97	Wadhar Dhruvi Mukulbhai		
98	Pabari Esha Kishor		

DEPARTMENT OF COMMUNITY MEDICINE RHMC

Rajkot Homoeopathic Medical College, Rajkot
Parul University

Dept. : Community Medicine **Sub.: Academic Visit to Aji Water Treatment Plant**

4th (Jr.) BHMS Date: 03-07-2025

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3/7/25
HOD
Department of
Community Medicine