

A Report on
“COMMUNITY ENGAGEMENT PROGRAMME”

Submitted

To



इचलकरंजी

Department of Chemistry

For the partial fulfilment of the award of the degree of

Bachelor of Science

in

Chemistry

By

Riya Jaysing Bhosale

Under the guidance of

Dr. Vinayak V. Gawade

[M.Sc. Ph. D, SET.]

DEPARTMENT OF CHEMISTRY

DATTAJIRAO KADAM ARTS, SCIENCE AND COMMERCE

COLLEGE, ICHALKARANJI -416 004 (MS) India

2025-26



Dissemination of education for Knowledge, Science and Culture

-Shikshan Maharshi Dr. Bapuji Salunkhe



Shri Swami Vivekanand Shikshan Sanstha's

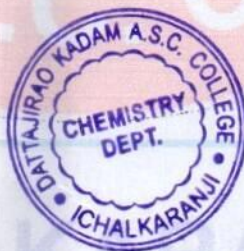
**DATTAJIRAO KADAM ARTS, SCIENCE AND COMMERCE
COLLEGE, ICHALKARANJI**

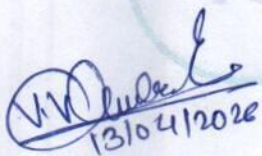
District - Kolhapur 416 115

DEPARTMENT OF CHEMISTRY

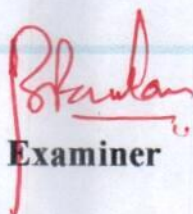
CERTIFICATE

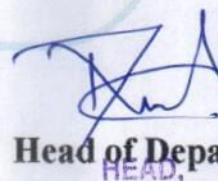
This is to certify that **Mr./Ms. Riya Jaysing Bhosale**
Seat No. ³²⁰⁷⁹⁴..... has satisfactorily completed the required
Community Engagement Programme (CEP) prescribed by
the Shivaji University, Kolhapur at B.Sc. Part-II (Major)
in the year 2025-26.




13/04/2026

Teacher In Charge


Examiner


HEAD,

Department of Chemistry,
Dattajirao Kadam Arts, Science
& Commerce College,
ICHALKARANJI.

DECLARATION

I, **Miss. Riya Jaysing Bhosale**, hereby declare that work has been done by me and my group only and it has not previously formed the basis for the award of any degree or diploma. I am the student of **Department of Chemistry, Dattajirao Kadam Arts, Science and Commerce College, Ichalkaranji Dist- Kolhapur** hereby declare that the "**Community Engagement Programme**" written and submitted by me under the guidance of **Dr. V. V. Gawade** is our original work. The empirical findings presented in this report are based on experimental and field work carried by me and my group during the course.

Date: 12/04/2026

Place: Ichalkaranji

R. Bhosale

Miss. Riya Jaysing Bhosale



ACKNOWLEDGEMENT

*We have great pleasure to express our deep sense of gratitude to **Dr. V. V. Gawade**, Department of Chemistry, Dattajirao Kadam Arts, Science and Commerce College, Ichalkaranji Dist- Kolhapur for their esteemed guidance, constructive criticism, inspiration and constant encouragement during our work.*

*We are grateful to thanks to **Dr. D. A. Kumbhar**, Head, department of Chemistry for his continues encouragement during this programme. He is such kind hearted person which heavenly strength, who transformed us and sowed the seeds of zeal, positive attitude and research ambitions during the toughest time of our life. We feel overwhelmed, while expressing our reverence and gratitude to our respected teacher.*

*Also, we thankful to faculty members of the department **Dr. A. A. Yadav, Dr. A. A. Patravle, Mr. R. P. Bharsat. and Dr. S. V. Mulik.***

*We are also thankful to **Principal Dr. S. K. Khade** for his incessant inspiration during our project as well as academic carrier during the institution study.*

We are also thankful to non-teaching staff and our friends.

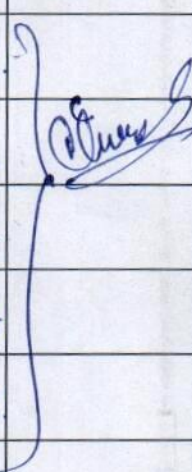
**Dattajirao Kadam Arts Science and Commerce
College Ichalkaranji**

COMMUNITY ENGAGEMENT PROGRAMME (CEP)

IN CHEMISTRY

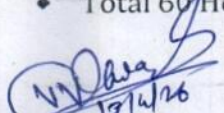
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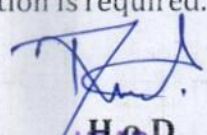
Name of Student: <u>Riya J. Bhosale</u>	Roll No. <u>5318</u>
Exam Seat No: <u>320794</u>	

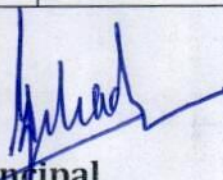
Sr. No.	Date	Activity	Type of Activity	Time Duration	Sign of Student	Signature of Teacher
1	28/01/2026	Water Analysis	Laboratory + Field activity	10 hrs.	<u>RJBhosale</u>	
2	29/01/2026	Soil Analysis	Laboratory + Field activity	10 hrs.	<u>RJBhosale</u>	
3	03/02/2026	Water awareness ss & community survey	Field activity	10 hrs.	<u>RJBhosale</u>	
4	04/02/2026	Science Awareness program	Field activity	10 hrs.	<u>RJBhosale</u>	
5	13/02/2026	Poster Presentation		10 hrs.	<u>RJBhosale</u>	
6	18/02/2026	Pesticide Awareness program	Field activity	10 hrs.	<u>RJBhosale</u>	



- Total 60 Hours participation is required.


Teacher in Charge


H.O.D.
Department of Chemistry,
Dattajirao Kadam Arts, Science
& Commerce College,
Ichalkaranji.


Principal
Principal,
D.K.A.S.C. College,
Ichalkaranji.

WATER ANALYSIS

Parameters Analysed

INDEX

Expt.No.	Name of Experiment
1	Temperature of Water
2	pH of Water
3	Electrical conductivity of Water
4	Acidity/Alkalinity of Water
5	Hardness of Water



Experiment No. 1

Tempreture of Water

Procedure

1. Ensure that the thermometer is calibrated correctly before use.
2. If using a sample beaker, make sure it is clean and rinsed with distilled water.
3. Place the thermometer into the water without touching the bottom or sides of the beaker.
4. Allow the thermometer to stabilize for a few moments until the reading becomes steady.
5. Read the temperature directly from the thermometer and record it.

Observation table :

Sample No.	Location	Source	Tempreture In °C
1	Yadrav	Well	29°C
2	Kabnur	Boar	24°C
3	Chandur	Well	28°C

Result :

Tempreture of the Sample is 29°C



Experiment No. 2

pH of Water

Procedure :

- Calibrate the Instrument before each measurement by using buffer solution of pH 4 or 7
- Rinse the Electrode with distilled water, dry it with soft tissue paper .
- Dip the Electrode in sample water and note down the reading.

Observation table :

Sample NO.	Location	Source	pH
1	Yadav	Well	7.16
2	Kabnur	Boar	7.15
3	Chandur	Well	7.06

Result :

Given water sample is **Neutral**.



Experiment No. 3

Electrical conductivity of water

Procedure :

1. Calibrate the Conductivity Meter
2. Use a clean beaker to collect the water whose conductivity you wish to measure.
3. Rinse the conductivity probe with distilled water to avoid cross-contamination from previous samples.
4. Insert the conductivity cell into the sample solution. Make sure it is fully submerged but not touching the bottom of the container.
5. Record the Reading note the conductivity value displayed on the meter. This is usually expressed in microsiemens per centimeter ($\mu\text{S}/\text{cm}$) or millisiemens per centimeter (mS/cm).

Observation Table :

Sample No.	Location	Source	Conductance
1	Yadrav	Well	1.136×10^{-3}
2	Kabnur	Boar	1.278×10^{-5}
3	Chandur	Well	1.275×10^{-3}

Result :

Given Water sample is contains **high minirals** .



Experiment No. 4

Alkalinity of Water

Procedure :

1. Fill the burette with the standard NaOH 0.02N solution.
2. **Take sample of** the water 100 ml in conical flask.
3. Add a few drops of a methyl orange indicator to the water sample in the conical flask.
4. If solution becomes yellow color note down burette reading and calculate mineral acidity.
5. If solution becomes orange color then titrates with 0.02 N NaOH from the burette to the water sample while continuously stirring.
6. Observe the color change methyl orange to yellow and two drops of phenolphthalein indicator
7. The endpoint is reached when the color of the solution changes permanently (e.g., from yellow to orange).
8. **Record the Final** endpoint is reached; record the final volume of NaOH in the burette. V_1 ml

Observation :

Burette 1: Water Sample

Burette 2: 0.02 N NaOH Solution

End point: Orange to yellow (Methyl Orange)

End point: Pink to colorless (Phenolphthalein Indicator)

Observation Table :

	Burette Reading			Constant burette reading
Burette 1: Water Sample	20ml	20ml	20ml	14.5ml
Burette 2: H ₂ SO ₄ Solution	14.0ml	14.5ml	14.5ml	

Result :

Alkalinity of Water is 725.



Experiment No. 5

Hardness of Water

Procedure :

1. Fill the burette with the standard 0.01 M EDTA solution.
2. Take 50 ml of water sample in conical flask.
3. Add a few drops of Eriochrome Black T indicator to the water sample in the flask. The solution will turn pink if calcium and magnesium ions are present.
4. Slowly add the EDTA solution from the burette to the water sample while continuously stirring (if using a magnetic stirrer).
5. Observe the color change of the indicator.
6. The endpoint is reached when the pink color changes to blue.
7. Once the endpoint is reached, record the final volume of EDTA in the burette.

Calculations :

Use the formula:

Hardness (mg/L as CaCO_3) = $\frac{\text{Volume of EDTA (L)} \times \text{Normality of EDTA (N)} \times 100.09 \text{ g/mol}}{\text{Volume of Sample (L)}} \times 1000$

Here, 100.09 g/mol is the equivalent weight of calcium carbonate (CaCO_3).

$$= \frac{11.8 \times 1000}{25}$$

$$= 472$$

Result:

Hardness of given water sample is **472**





Center Name:

Department of Chemistry, Dattajirao Kadam
Arts, Science and Commerce College,
Ichalkaranji



WATER HEALTH CARD

Sample Information

Plot Address: Near Datta Nagar,
Yadav.

Geographic Position (GPS):

Pf8q + gvg, Yadav,
Maharashtra 416146, India.

Testing Date: 28/01/2026

Sampling Date: 27/01/2026

Card Issued to:

Name: Chandrakant Salokhe

Phone no. 9322828486

Address: Yadav

Parameters in Water Analysis

Temperature

Range: 20- 30 °C

Remark: 28°C

pH:

Range: (5.5-8.5)

Remark: 7.16

Electrical Conductivity

Range: 0.7 – 2.5 mS/cm

Remark: 1.136 ms/cm

Acidity/Alkalinity

Range: 200-800 ppm

Remark: 725 ppm

Hardness

Range: 200-600 ppm

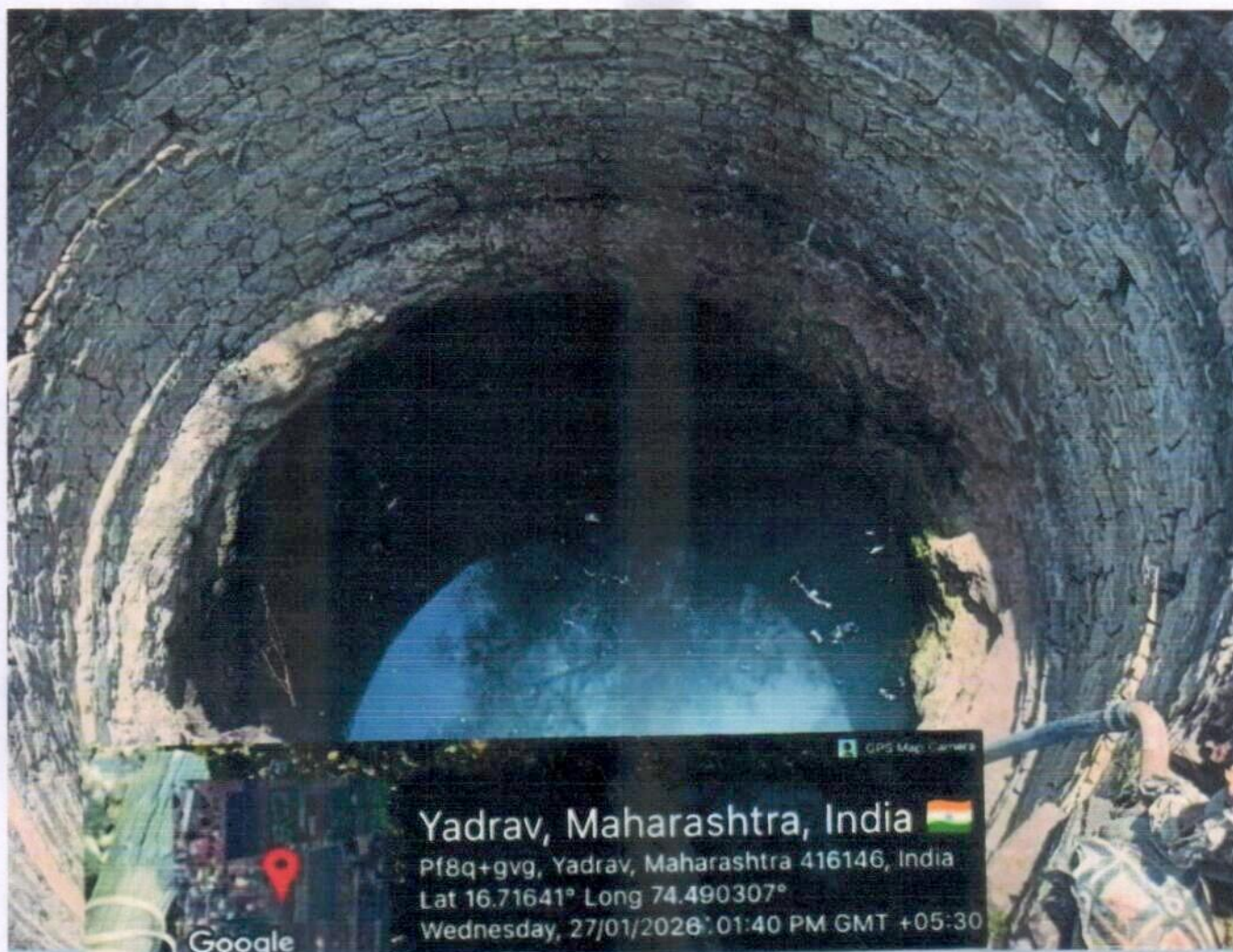
Remark: 472 ppm

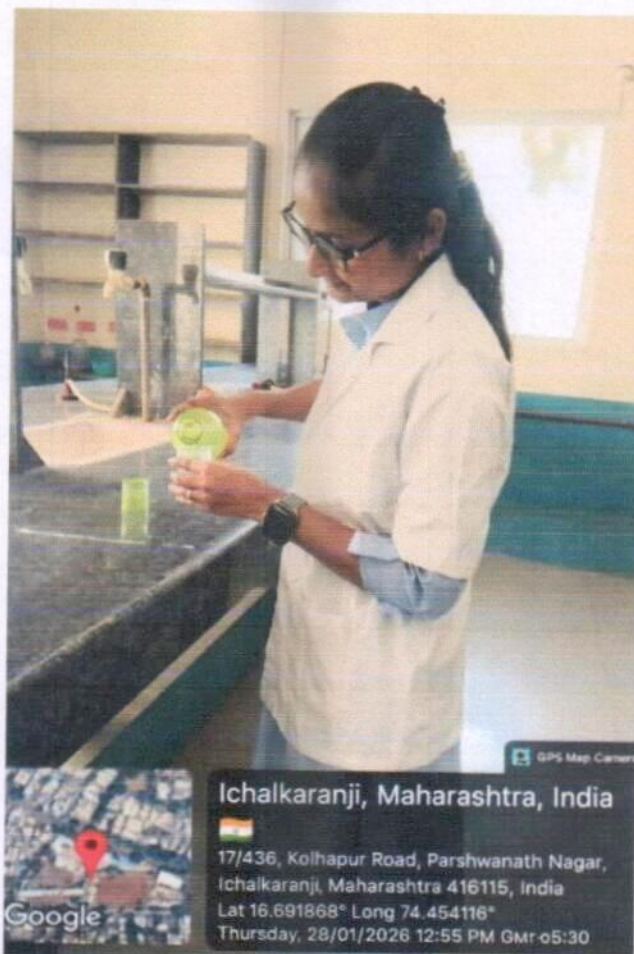


Head,

Department of Chemistry

Department of Chemistry,
Dattajirao Kadam Arts, Science
& Commerce College,
ICHALKARANJI.







SOIL ANALYSIS

Parameters Analysed

INDEX

Expt.NO.	Name of Exeperiments
1.	pH of soil
2.	Electrical conductivity of soil
3.	Calcium available in soil
4.	Water holding capacity of soil



Experiment No. 1

pH of soil

Procedure :

- a) Soil suspension – Prepare 1:5 soil suspension by shaking 20gm of soil in 100 ml of dist. Water for about one hour . filter the suspension through Whatman No. 50 filter paper using Buchner funnel and vaccum pump . This clear solution is used to determine pH.
- b) Calibrate the instrument before each measurement by using buffer solution of pH 4 or 7
- c) Rinse the electrode with distilled water , dry it with soft tissue paper.
- d) Dip the soil and note down the reading electrode in clear solution of soil

Observation table :

Sample No.	Location	Source	pH of soil
1.	Yadrav	Farm	7.04
2.	Kabnur	Farm	7.07
3	Chandur	Farm	7.22

Result :

The pH of given soil is 7.04.



Experiment No. 2

Eelectrical Conductivity of soil

Procedure :

- a) Soil suspension – Prepare 1:5 soil suspension by shaking 20gm of soil in 100 ml of dist. Water for about one hour . filter the suspension through Whatman No. 50 filter paper using Buchner funnel and vaccum pump . This clear solution is used to determine conductance.
- b) Standardise the conductometer.
- c) Rinse the conductivity cell with conductivity water , dry it with soft tissue paper.
- d) Measure the conductance of soil.

Observation table :

Sample No.	Location	Source	Conductance of soil
1.	Yadrav	Farm	0.99
2.	Kabnur	Farm	0.83
3	Chandur	Farm	0.75

Result :

The given sample of soil **has no effect on crops.**



Experiment No. 3

Calcium available in soil

Procedure:

1. Take 10 g of air-dried soil sample. 2. Add 50 mL of 1N ammonium acetate solution (pH 7). 3. Shake for 10 minutes to extract exchangeable calcium. 4. Filter through Whatman filter paper the solution and collect the filtrate. 5. Pipette 25 mL of the soil extract into a conical flask. 6. Add 5 mL of ammonium buffer/NaOH solution (pH 10) to maintain alkalinity. 7. Add a 2-3 drops of Eriochrome Black T indicator (color turns wine red). 8. Fill the burette with 0.01 M EDTA solution. 9. Titrate the soil extract until the color changes from wine red to pure blue (end point). 10. Note the volume of EDTA used.

Observation:

- 1) Burette No. 1: 0.01 M EDTA solution 2) Burette No. 2: Soil solution
3) Indicator: Eriochrome Black T 4) End point: Wine Red to blue

Observation Table :

Soil sample	25ml	25ml	25ml	25ml
Burette No.1	20.5	20.0	20.5	20.5

Calculations:

Calculation of amount of calcium present in unknown soil sample Calcium (mg/kg)

= Volume of EDTA solution $\times$ Molarity of EDTA / Volume of soil sample $\times 1000$ Where: V = Volume of EDTA used (mL)

$$= 20.5 \times 0.01 \div 10 \times 1000$$

$$= 20.5 \text{ mg/L}$$

Result:

1 Weight of soil sample (g) - **10g**

2 Required amount of EDTA solution (ml) – **20.5 ml**

3 Amount of calcium present in unknown soil sample (mg/L) - **20.5 mg/L**



Exeperiment No. 4

Water holding capacity of soil

Procedure :

a) Take 10 gm of soil sample in a Kjeldahl's flask and add 25 ml distilled water to moisten the soil. b) Add 20 gm of digestion catalyst and 35 ml conc. H_2SO_4 gentle stirring. c) Heat the contents on low heat for first 10-30 until the frothing stops. d) Continue the digestion with keeping on rotating the flask at intervals, till contents light yellow. e) Heat further for about 1 hour to release all the residual nitrogen. f) Cool the digest and add 100 ml of distilled water. Mix thoroughly, keep for few minutes and transfer the supernatant in 1 litre distillation flask. Take 4-5 washings in same distillation flask. g) Add slowly 100 ml of 40% NaOH through dropping funnel (Add Zn granules in it for smooth boiling of mixture). h) Place a conical flask of 500 ml capacity containing 25 ml of boric acid and mixed indicator below the condenser so that tip of condenser dips into the solution. i) Commence distillation and collect 150 ml of condensate, the solution turns blue due to dissolution of ammonia.

Calculation :

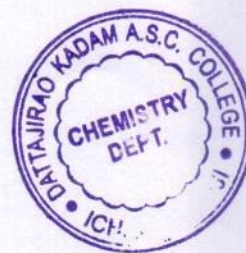
Water holding capacity = (Total quantity of water present in the wet soil ÷ Oven dry weight of soil) × 100

$$= (10 \div 20.11) \times 100$$

$$= 49.72\%$$

Result :

Water holding capacity of given soil sample is 49.72%



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SOIL HEALTH CARD



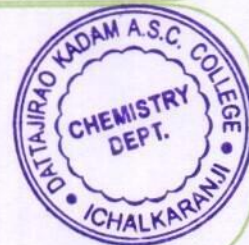
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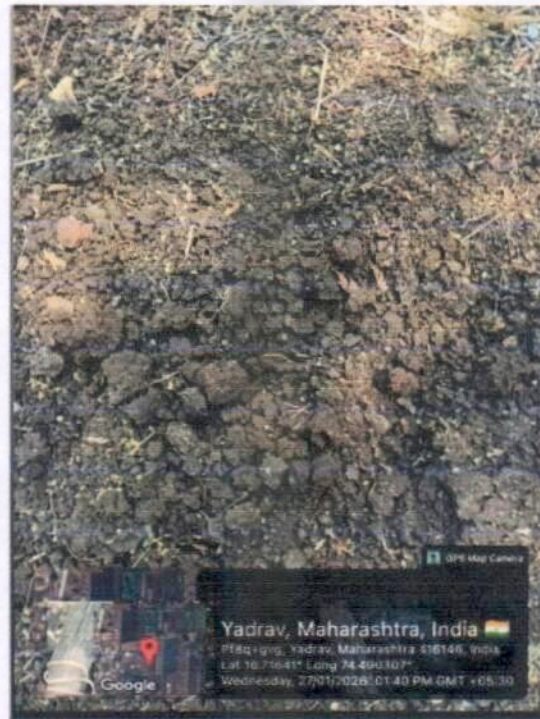
Testing Date:**Sample Information**

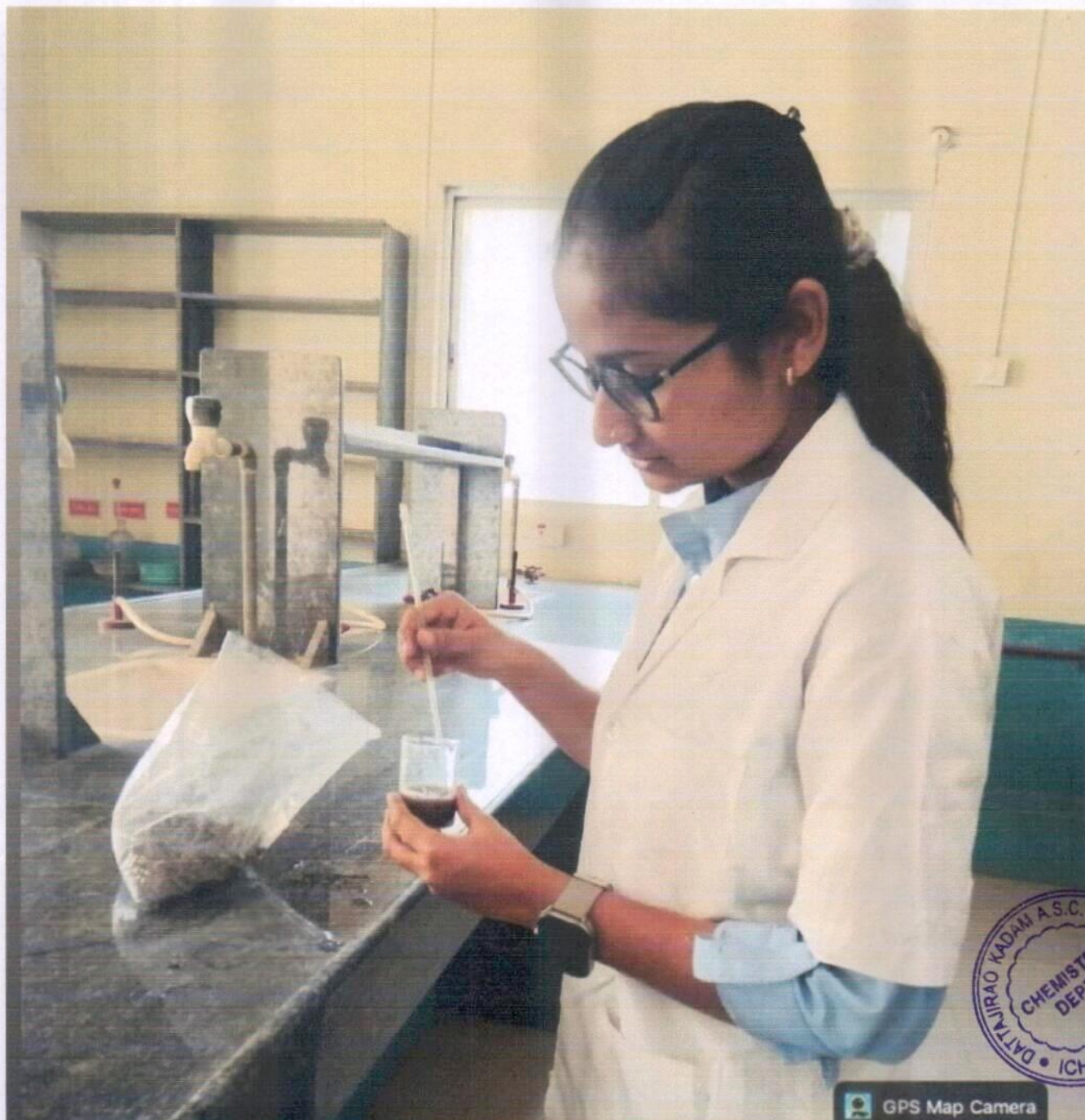
Plot Address: Near Dattanagae
Yadav.

Geographic Position (GPS):
Pf8q+gvg, Yddrav,
Maharashtra 416146, India

Sampling Date: 29-01-2026**Card Issued to:****Name:** Chandrakant Salokhe**Phone no.** 9322828486**Address:** Yadav**Sample Information****Water Holding Capacity:****Range:** 30-60% by weight**Remark:** 49.72%**EC:****Range:****Optimal Range:** 0.8-1.8 mS/cm.**Ideal Growth:** 0.7-2.5 mS/cm.**Low Salt:** <0.2 mS/cm (or 200 μ S/cm).**High/Saline:** >4 mS/cm**Remark:** 0.99 ms/cm**Available Calcium (Ca):****Range:** 1000-2000ppm**Remark:** 1500ppm**pH:****Range:** (5.5-8.5)**Remark:** 7.04**Head,****Department of Chemistry**

Department of Chemistry
Dattajirao Kadam Arts, Science
& Commerce College,
Ichalkaranji.





GPS Map Camera



Google

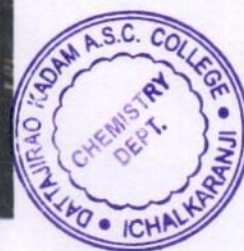
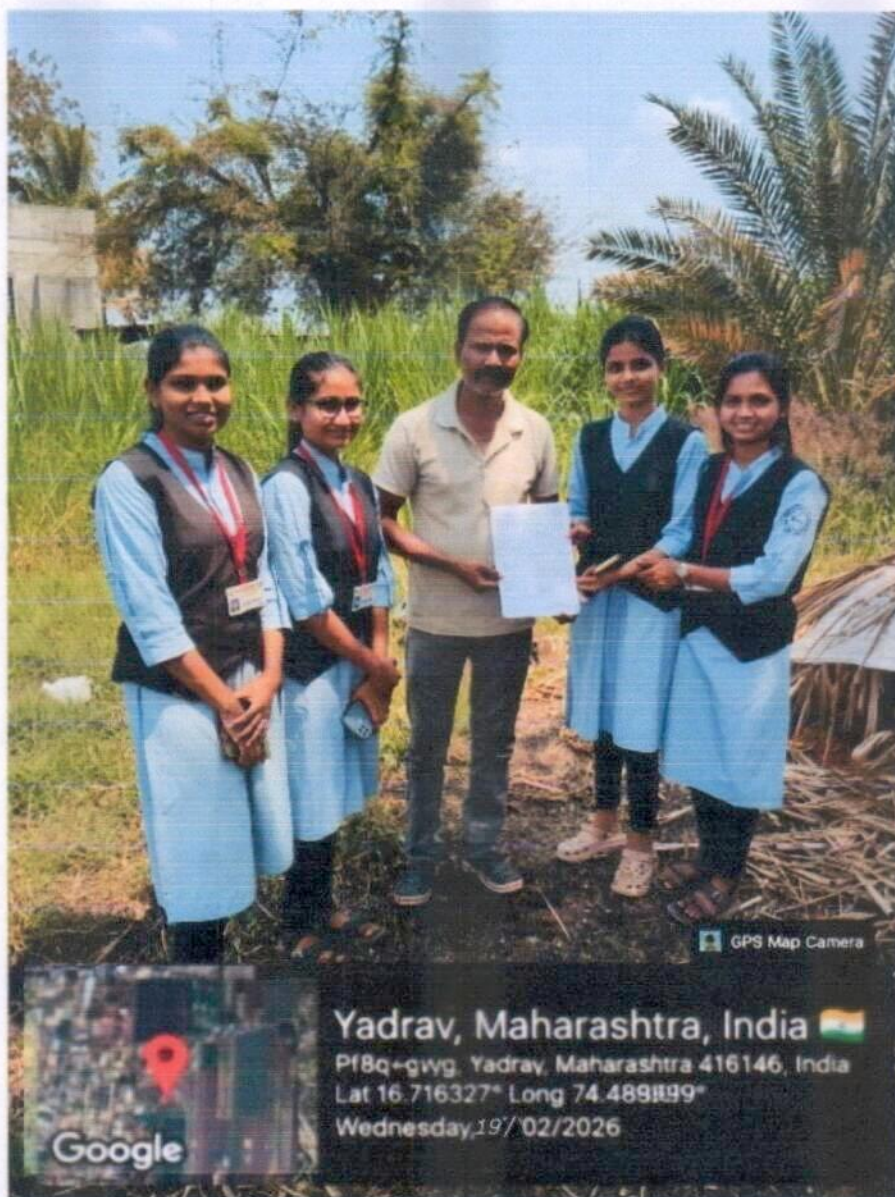
Ichalkaranji, Maharashtra, India



17/436, Kolhapur Road, Parshwanath Nagar,
Ichalkaranji, Maharashtra 416115, India

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Friday, 29/01/2026 01:08 PM GMT+05:30



Conclusion from soil & water analysis :

The analysis of water samples for pH, electrical conductance, temperature, hardness, and acidity/alkalinity indicates that the water is generally within acceptable limits. The pH shows that the water is **neutral**, which is suitable for most domestic and agricultural uses. Electrical conductance suggests a **high** level of dissolved salts, reflecting the mineral content of water. The temperature recorded is **normal** and does not adversely affect water quality. Hardness values indicate that the water is **hard**, mainly due to the presence of calcium and magnesium salts. The **alkalinity** balance shows that the water has adequate buffering capacity, making it relatively stable and suitable for use, although minor treatment may be needed if values exceed limits.

The soil analysis for pH, electrical conductance, water holding capacity, and available calcium reveals that the soil is **neutral** in nature. The conductance value indicates **moderate salinity**, which influences nutrient availability. The water holding capacity of the soil is **good**, suggesting its ability to retain moisture for plant growth. The presence of available calcium indicates that the soil has **low nutrient** content, which is beneficial for plant structure and growth.

Overall, both soil and water samples show moderate quality for agricultural purposes. With proper management practices such as balanced fertilization and efficient water use, productivity and sustainability can be improved.



Dattajirao Kadam Arts, Science and Commerce College, Ichalkaranji

Department of Chemistry

Survey Questionnaire: Water, Health, and Hygiene (WASH)

Section I: Personal Information

1. Name: Chandrakant Salakhe
2. Address: Yadav
3. Age: 48 years
4. Gender: ☒ Male ☐ Female ☐ Other
5. Education level: ☐ No formal ☐ Primary ☒ Secondary ☐ Graduate+
6. Occupation: Business
7. Household size: 5 persons
8. Area of residence: ☒ Rural ☐ Urban ☐ Semi-urban

Section II: Water Source and Availability

7. Main source of drinking water:
☐ Piped water ☐ Borewell ☒ Open well ☐ River/Lake ☐ Tanker ☐ Bottled
8. Is drinking water available throughout the year?
☐ Yes ☒ No
9. Distance to water source:
☒ Within home ☐ <100 m ☐ 100-500 m ☐ >500 m
10. Do you experience water shortages?
☒ Never ☐ Sometimes ☐ Often

Section III: Water Quality and Treatment

11. Do you treat drinking water before use?
☒ Yes ☐ No
12. If yes, which method do you use?
☐ Boiling ☒ Filtration ☐ Chlorination ☐ Solar disinfection
13. How would you rate the quality of drinking water?
☒ Very good ☐ Good ☐ Fair ☐ Poor
14. Have you noticed any issues with water?
☐ Bad smell ☐ Color ☐ Taste ☐ Sediments ☒ None

Section IV: Sanitation Facilities

15. Type of toilet facility used:
☒ Flush toilet ☐ Pit latrine ☐ Community toilet ☐ Open defecation



16. Is the toilet regularly cleaned?

☒ Yes ☐ No

17. Is water available in the toilet area?

☒ Always ☐ Sometimes ☐ Never

Section V: Hygiene Practices

18. Do you wash hands with soap:

- Before eating? ☒ Yes ☐ No
- After toilet use? ☒ Yes ☐ No

19. What do you usually use for handwashing?

☒ Soap ☐ Ash ☐ Water only

20. Do children in your household wash hands regularly?

☒ Yes ☐ No

Section VI: Health and Disease History

21. Have any household members suffered from the following in the last 6 months?

☐ Diarrhea ☐ Typhoid ☐ Cholera ☐ Skin infection ☒ None

22. Do you believe poor water quality can cause disease?

☒ Yes ☐ No ☐ Not sure

23. How often do you visit a healthcare facility for water-related illness?

☐ Never ☒ Occasionally ☐ Frequently

Section VII: Awareness and Education

24. Have you received any training or awareness programs on water health and hygiene?

☒ Yes ☐ No

25. Source of information on hygiene practices:

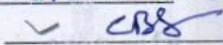
☐ School ☐ Health worker ☐ Media ☒ Community programs

Self-Declaration by Participant:

I acknowledge the importance of safe drinking water, proper sanitation, and good hygiene practices. I agree to follow the recommended instructions and guidelines related to water safety, health, and hygiene in my daily life for the betterment of my family and community.

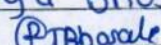
Further declare that the information stated above is true and correct to the best of my knowledge.

Name of Participant: Chandrakant Salokhe

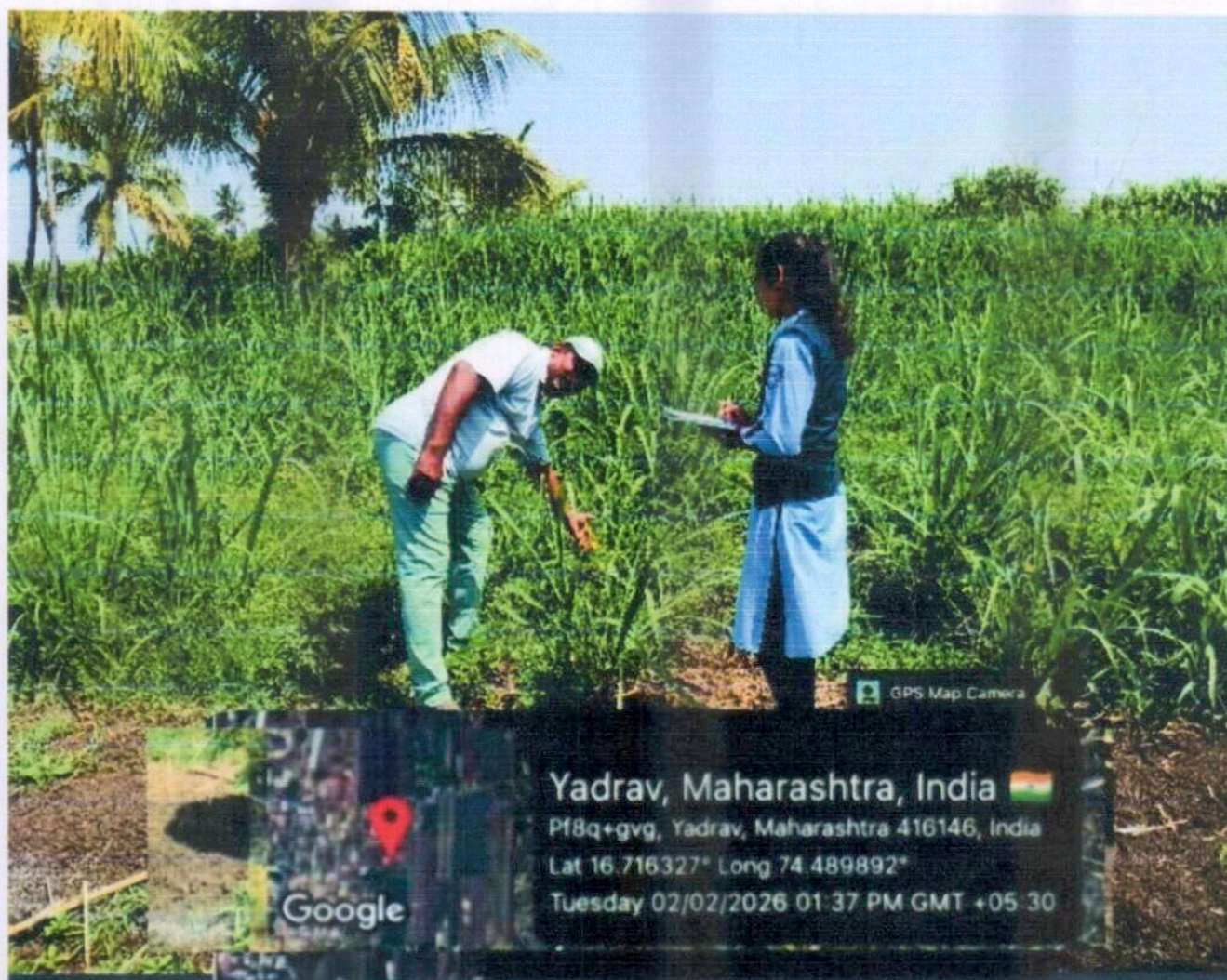
Signature/Thumb Impression: 

Date: 02/02/2026

Name of Investigator: Riya Bhosale

Signature of Investigator: 





SCIENCE AWARENESS PROGRAMME

We conducted a Science Awareness Program at Jawaharnagar Highschool Jawaharnagar , to create interest in science among students. During the program, we performed science magic experiments in front of the students. These experiments looked like magic and immediately caught their attention, making the session fun and exciting.

List of magical experiments and conclusion

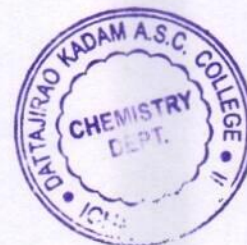
• List of magical experiments :

Sr.No.	Name of the experiments
1.	Drangon's breathe blast
2.	Magical chamenol
3.	Fake blood
4.	Volcano eruption
5.	Blue precipitate mystery

• Conclusion of science awareness programme :

After each experiment, the scientific reason behind it was explained in a simple way. This helped students understand that science is present in everyday life and can be learned through interesting activities. The demonstrations increased their curiosity and encouraged them to ask questions.

The students and teachers responded very positively and enjoyed the program. This activity was a great experience for me as it helped spread scientific awareness and inspired young minds through fun learning.



स्थापना : जुन १९६२



ICHALKARANJI

NAAC- "B+" Grade

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ज्यु. कॉलेज-शासन आदेश क्रमांक - एचएससी/०७/वीस/एकवीस, दि. ६-५-१९७६ Jr. Index No. J-23.06.001

Founder Shikshanmaharshi Dr. Bapuji Salunkhe	President Hon. Chandrakant (Dada) Patil Minister, Higher and Technical Education, Gov. of Maharashtra	Chairman Hon. Prin. Abhaykumar Salunkhe M.A.	Secretary Hon. Prin. Mrs. Shubhangi Gawade M.Sc., B.Ed.	Principal Prof. (Dr.) S. K. Khade M.Sc. Ph.D.
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Outward No. : DKASC /

Date :

To,

The Head Master,

Mr. R. R. Jadhav

Sir.

Subject: Regarding permission and the date to organise "Science Awareness Programme" at Jawahar nagar Highschool

Respected Sir,

With reference to above cited subject, Department of Chemistry wish to organise "Science Awareness Programme" at the Jawahar nagar Highschool for your school students. The Programme is to be conducted by B. Sc. II (Chemistry) students. Their Programme will be beneficial to students to create interest for science and awareness through science experiments. So please inform us the date of visit, so we can arrange this programme.

Thanking You,



Yours faithfully,

(Prof. Dr. S. K. Khade)
Principal,
D.K.A.S.C. College,
Ichalkaranji.

सुखबाध्यापक
22/02/2026

जवाहरनगर हायस्कूल जवाहरनगर
इचलकरंजी-४१६११७ ता. हातकणंगले
जि. कोल्हापूर.





APPRECIATION LETTER

Date: 04/02/2026

To,

Riya Bhosle
Akashi Ghoxpade
Vaishali Boxade
Pooja Salokhe
Vaishali Somane

Department of Chemistry

Dattajirao Kadam, Arts, Science and Commerce College,
Ichalkaranji, 416 115.

Subject: Appreciation for Conducting Science Awareness Programme

Dear Students,

It gives me immense pleasure to express my heartfelt appreciation for your passionate efforts in successfully organizing and conducting the Science Awareness Programme. Your devotion, and teamwork towards spreading scientific knowledge among the community are truly commendable.

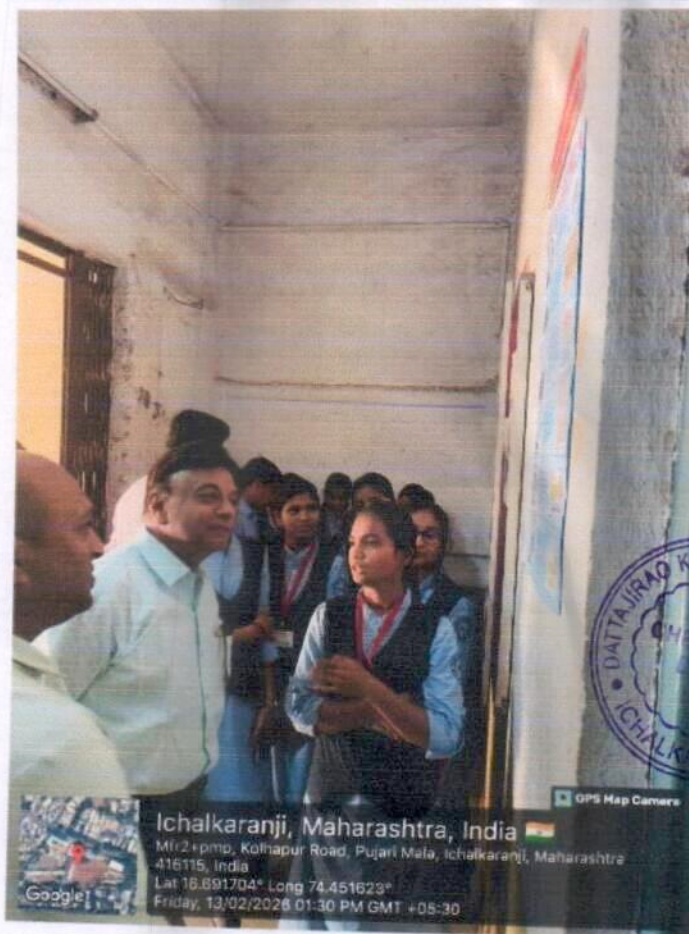
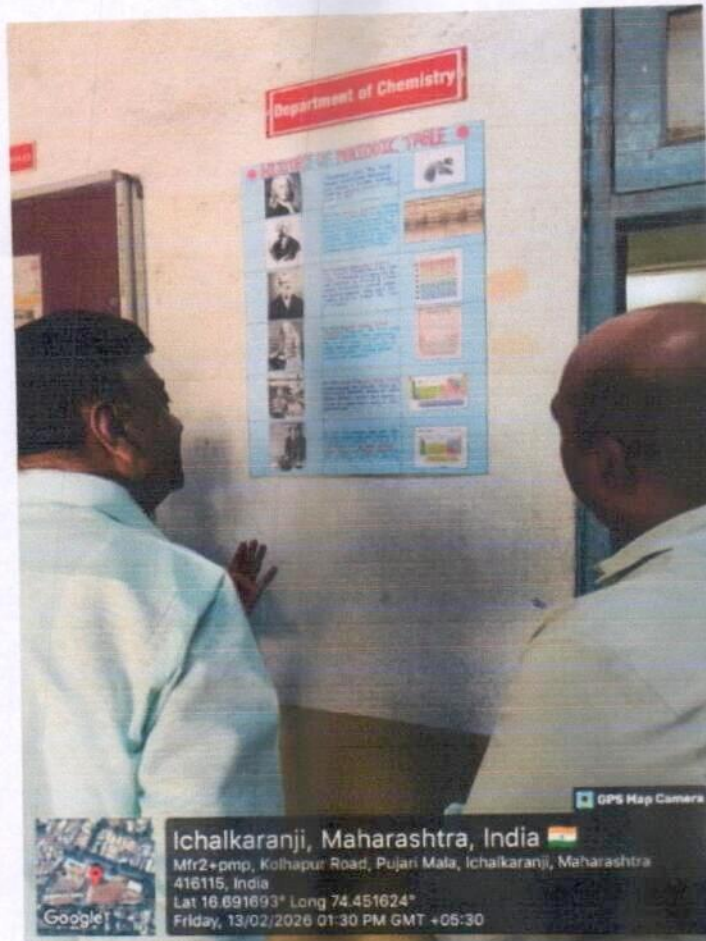
The programme was well-planned, informative, and engaging, showing your hard work and passion for promoting scientific awareness. Your contribution has not only enhanced awareness but also inspired our students to value the importance of science in everyday life.

I congratulate each one of you for your outstanding performance.

Wishing you all the very best in your academic and future endeavors.




Principal
Jawaharnagar, High School
Jawaharnagar, Ichalkaranji.
Tal. Hatkanangale, Dist. Kolhapur



**Dattajirao Kadam Arts, Science and Commerce College,
Ichalkaranji Department of Chemistry
Survey Questionnaire: Awareness of Pesticides**

Section A: Demographic Information

1. Name: Chandrakant Solokhe
2. Address: Yadav
3. Age: ☐ Under 25 ☐ 25-34 ☐ 35-44 ☒ 45-54 ☐ 55+
4. Gender: ☒ Male ☐ Female ☐ Other
5. Education level:
☐ No formal education ☐ Primary ☒ Secondary ☐ Higher
6. Farming experience:
☐ <5 years ☐ 5-10 years ☒ 11-20 years ☐ >20 years
7. Type of farming:
☐ Crop ☐ Livestock ☒ Mixed
8. Farm size:
☐ Small ☒ Medium ☐ Large

Section B: Pesticide Usage

7. Do you use pesticides in your farming activities?
☒ Yes ☐ No
8. Types of pesticides used (tick all that apply):
☒ Insecticides ☒ Herbicides ☐ Fungicides ☐ Rodenticides
9. How often do you apply pesticides?
☐ Weekly ☒ Monthly ☐ Seasonally ☐ Rarely
10. Source of pesticides:
☒ Agro-dealer ☐ Cooperative ☐ Government supply ☐ Others



Section C: Awareness and Knowledge

11. Are you aware of the purpose of pesticides?
☒ Yes ☐ No
12. Do you read and understand pesticide labels before use?
☒ Always ☐ Sometimes ☐ Never

13. Are you aware of the health risks of pesticide exposure?
☒ Yes ☐ No
14. Are you aware of environmental effects of pesticide misuse?
☒ Yes ☐ No
15. Which of the following risks are you aware of?
☒ Skin problems ☐ Breathing issues ☐ Water pollution ☐ Soil damage ☐ Crop residue

Section D: Safety Practices

16. Do you use protective equipment when applying pesticides?
☒ Always ☐ Sometimes ☐ Never
17. Protective equipment used (tick all that apply):
☒ Gloves ☒ Mask ☒ Boots ☒ Goggles ☒ Protective clothing
18. How do you store pesticides?
☒ Original container ☐ Locked place ☐ Open area ☐ Inside home
19. Do you follow recommended dosage instructions?
☒ Yes ☐ No

Section E: Training and Information

20. Have you received any training on safe pesticide use?
☒ Yes ☐ No
21. Source of information about pesticides:
☐ Extension officers ☒ Agro-dealers ☐ Media ☐ Fellow farmers
22. Would you like more training on pesticide safety?
☒ Yes ☐ No

Section F: Perception and Attitude

23. Pesticides are necessary for good crop yield:
☐ Strongly agree ☒ Agree ☐ Neutral ☐ Disagree ☐ Strongly disagree
24. Organic or alternative pest control methods are effective:
☐ Strongly agree ☒ Agree ☐ Neutral ☐ Disagree ☐ Strongly disagree



Self-Declaration on Awareness of Pesticides

I, Chandrakant Salokhe residing at Yadrov, I am engaged in farming activities.

I hereby declare that I am aware of the proper use of pesticides and agro-chemicals. I understand the importance of using only recommended pesticides, following label instructions, prescribed dosage, and safety guidelines issued by agricultural authorities.

I am aware of the potential health risks and environmental hazards associated with improper handling and misuse of pesticides. I undertake to:

- Use protective equipment while handling and spraying pesticides
- Store pesticides safely away from children, food, and livestock
- Dispose of empty containers responsibly as per guidelines
- Avoid the use of banned or unapproved pesticides

I further declare that the information stated above is true and correct to the best of my knowledge, and I take full responsibility for safe and responsible use on my farm.



Place: Yadrov

Signature: [Signature] ✓

Date:

Name: Chandrakant Salokhe

