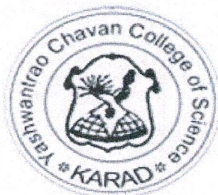


**Shri Shivaji Education Society's
Board for Higher Education Vidyanagar Karad.**



YASHWANTRAO CHAVAN COLLEGE OF SCIENCE, KARAD

DEPARTMENT OF CHEMISTRY

SHORT TERM COURSE

PREPARATION OF HOUSEHOLD CHEMICALS

2023-24

Index

Total Students: 40 Class: M. Sc. II Duration: 03 Months

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Estd. 1958

|| Be One with the downtrodden and the underprivileged ||
Shri Shiyaji Education Society Karad, Board For Higher Education's

YASHWANTRAO CHAVAN COLLEGE OF SCIENCE, KARAD

Vidyanagar, KARAD - 415 124 Dist. Satara (Maharashtra)

☎ 02164 - 271356, Fax : 02164-271356, e-mail : ychavan@bsnl.in, prinyccsk@gmail.com

Reaccredited B Level by NAAC, Bangalore

AN ISO 9001-2008 CERTIFIED COLLEGE REG. NO. : RQ91/5237

Department of Chemistry

Certificate course

In

“PREPARATION OF HOUSEHOLD CHEMICALS”

Year 2023-24

Board of Studies (BOS)

Date: 06 /11/2023

Certificate Course in “PREPARATION OF HOUSEHOLD CHEMICALS” will start in the Department of Chemistry, Yashwantrao Chavan College of Science, Karad. As per the decision made by the CDC and IQAC, a BOS of Chemistry compositions is as follows,

Board of Studies (BOS) members

Sr. No.	Name of the Member	Designation	Sign
1	Principal Dr. S. B. Kengar	Chairman	
2	Prof. Dr. S. H. Burungale	Head of the Department and IQAC Coordinator	
3	Dr. K. S. Jagadhane	Course Coordinator	

Short

Sr No	Course coordinator	Class Enrolled	Title of Course
1	Dr. Kishor Sambhaji Jagadhane	M. Sc. II	Short-term course on Preparation of household chemicals – M. Sc.- II

Syllabus Structure (UG)

Month	Credits (1 credit = 20H)	Total marks
3	2	50

Course outcome:

- To inspire the students towards entrepreneurship to survive independently for atmanirbhar Bharat which translates to 'self-reliant India',
- It is expected of the students to realize the subject's fundamentals, basic principles, concepts, and modern advances.
- To enhance comprehension of concepts, the practical course is related to the theory courses.

Program outcome:

- To promote student's entrepreneurship
- Students will become familiar with basic concepts of the Preparation of household chemicals.
- To prepare students for further studies helping in their bright career in the subject.

Program specification outcome:

- To develop skills required in various industries.
- To make the student knowledgeable with respect to the subject and its practicable applicability.

SYLLABUS

Contact Hrs.: 24

UNIT I

Introduction to Common Household Chemicals

Household chemicals: Outline of the history of the industry, Principles of Household Chemicals, Materials needed to make Household Products, and Manufacturing Processes in the Industry.

household products' roles in daily life.

UNIT II

Cleaning agents: Introduction, synthesis, and applications of Natural cleaning agents, cleaning action, Floor cleaner, Toilet Cleaner, Bathroom Cleaner, Kitchen Cleaner

UNIT III

The technology of Soap: Soap chemistry; selecting raw materials for the soap organization; hard fat- and oil-producing soaps; chemical reactions in soaps; Soaps, both hard and soft.

UNIT IV

Detergents and Surfactants: Introduction, Different terms used in cleaning products; Ingredients used to make detergents; the way detergents wash varieties of detergents the use of surfactants.

Recommended Books:

1. Small-scale industries and household industries in developing economy by Shetty M.C. (Unit I)
2. Manufacture of perfume cosmetics and detergents by Prasad Giri Raj (Unit V)
3. Industrial chemistry by B. K. Sharma (Unit I and II)
4. Flavors & Essential oils, Industries SBP Board (Unit III)
5. Perfumes soaps & cosmetics by Poucher. (Unit III)
6. Manufacture of perfumes, cosmetics and detergents by Giriraj Prasad (Unit IV)
7. Manufacture of perfumes, cosmetics, and detergents by Prasad. (Unit IV)

Learning Outcomes:

UNIT I

Introduction to Common Household Chemicals

1. Basic knowledge of household chemicals should be taught to the students.
2. Students should define household products and the different ways that they are made.
3. The preparations, reactions, and histories of common household chemicals should be explained by students.

UNIT II

Cleaning agents

1. The principles of various cleaning agents should be taught to the students.
2. Students should identify cleaning agents that are natural for floors, toilets, bathrooms, and kitchens.
3. The preparations and reactions of natural cleaning solutions for floors, toilets, bathrooms, and kitchens should be explained by students.

UNIT III

The technology of Soap

1. Students need to be learning soap technology.
2. Students should define liquid soap, hard soap, and soft soap.
3. Students should describe how soap is prepared and how liquid soap reacts.

UNIT IV

Detergents and Surfactants

1. Fundamentals of detergents and surfactants should be taught to the students.
2. Students need to define surfactants and detergents.
3. The preparations and different kinds of detergents and surfactants should be explained to the students.

Practical Course: Preparation of various household Products

Contact Hrs.: 48

1. Preparation of sanitary acid
2. Preparation of liquid soap
3. Preparation of white phenyl
4. Solid soap manufacture
5. Extraction of active principle of herbal products: Babul, Chandan, haldi, Jasmin, Reetha, and Neem.
6. Practical based on the preparation of various cosmetic products by using herbal principles: Shampoo and Mouth wash.

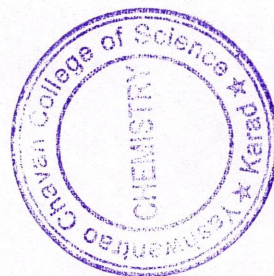
Project course: Project on household Chemicals

Yashwantrao Chavan College of Science, Karad

Department of Chemistry

Short-term Course - Preparation of Household Chemicals(2023-24)

Course Code	Short Term	Course:	Preparation of Household Chemicals	
Prepared by	Dr. K. S. Jagadhane	Date	2023-24	
Target Group: M.Sc. II				
Pre-requisites	• Basic (10+2) knowledge of science faculty • Good analytical skills. • Basic knowledge regarding laboratory concepts.			
Course Outcomes				
At the end of the course, the students should be able to:				
CO1	To inspire the students towards entrepreneurship to survive independently for atmanirbhar Bharat which translates to 'self-reliant India',			
CO2	To Understand the importance of chemicals day to day life			
CO3	It is expected of the students to realize the subject's fundamentals, basic principles, concepts, and modern advances.			
CO4	To enhance comprehension of concepts, the practical course is related to the theory courses.			



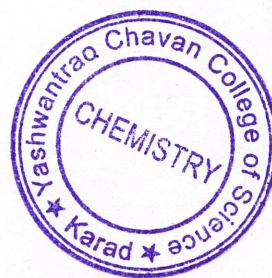
YASHWANTRAO CHAVAN COLLEGE OF SCIENCE, KARAD

Department of Chemistry

Notice

Date: 08/11/2023

All the Students of the B. Sc. III are hereby informed that the Department of Chemistry is going to run a short-term course entitled "**PREPARATION OF HOUSEHOLD CHEMICALS**" Interested Candidates enrol their names to Dr. K. S. Jagadhane (course Co-ordinator) on or before 30th November 2023.



YASHWANTRAO CHAVAN COLLEGE OF SCIENCE, KARAD

Department of Chemistry

Certificate course in "Preparation of Household Chemicals"

Year 2023-24

- | | |
|---------------------------|-------------------------|
| 1. Class | : M. Sc. II |
| 2. Duration of the course | : 3 months |
| 3. Capacity | : 20 |
| 4. No. Students Enrolled | : 20 |
| 5. Theory Examination | : Last week of February |
| 6. Practical Examination | : First Week of March |

Course Co-ordinator

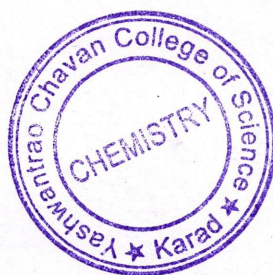
Co-ordinator,

Internal Quality Assurance Cell (IQAC),
Yashwantrao Chavan College
of Science, Karad

Head

Head

Department of Chemistry
Yashwantrao Chavan College of
Science, Karad



YASHWANTRAO CHAVAN COLLEGE OF SCIENCE, KARAD

Department of Chemistry

Short Term Course

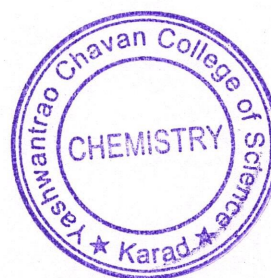
“Preparation of Household Chemicals”

Year 2023-24

Name of the Enrolled Students

Roll No.	Name of Student
1	Bagul Vijaya Bibichand
2	Bhosale Nitiraj Vasant ✓
3	Bhosale Pranali Rajendra
4	Chavan Prathamesh Sudam
5	Fasale Shubham Krushnat ✓
6	Jadhav Rutuja Sanjay
7	Jadhav Shruti Shivaji
8	Jamadar Irshad Ibrahim
9	Kale Shruti Mahesh
10	Kamble Shital Madhukar
11	Kazi Sahil Khudbuddin
12	Lohar Yogita Arjun
13	Mali Priyanka Dipak
14	Mankar Anushka Jalindar
15	Mohite Kalyani Gulabrao
16	Narute Pranit Balaso
17	Nikam Nikita Ramesh
18	Patel Sahil Rafik
19	Patil Amruta Ravindra
20	Patil Prathamesh Yashwantrao
21	Pawar Priya Ravindra
22	Rokade Priyanka Vinayak
23	Shinde Arpita Vishwas
24	Sutar Namrata Dhondiram
25	Tupe Ankita Anandrao
26	Yadav Anuja Tanajirao
27	Yadav Dipali Satish
28	Adake Swapnali Harishchandra
29	Bhosale Prajakta Nilakanth
30	Deshmukh Manisha Sanjay
31	Jadhav Kedar Deepak
32	Jadhav Tejasvi Prakash
33	Kale Prajakta Prakash

34	Magdum Snehal Rajendra
35	Patil Sumit Raghunath
36	Patil Tejas Giriah
37	Patil Vijay Dilip
38	Pawar Suraj Rabindra
39	Shinde Dhanashri Niwas
40	Yadav Arati Dasharath



YASHWANTRAO CHAVAN COLLEGE OF SCIENCE, KARAD

Department of Chemistry

Short Term Course

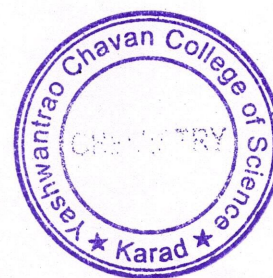
“Preparation of Household Chemicals”

Year 2023-24

Theory Time Table

Dec. 2023 to Jan.2024

Lect. time	Friday	Saturday
9.40 – 10.30	KSJ	AVM

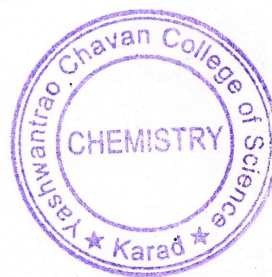


iv) Explain in detail the concept of Normality.

Q.3) Explain in detail (Any Three):

(Marks: 3*5=15)

- i) Explain the Arrhenius theory of acids and bases with a suitable example.
- ii) Explain Lewis theory of acids and bases with a suitable example.
- iii) Explain Bronsted-Lowry concept of acid & Base.
- iv) How will you prepare 1 litre 0.1 N NaOH Solution from 0.5 N NaOH Solution?
- v) Explain in detail the concept of molarity.
- vi) Explain in detail the concept of Normality.



Yashwantrao Chavan College of Science, Karad

Department of Chemistry

Short Term Course

“Preparation of Household Chemicals”

Year 2023-24

Practical Exam

Marks: 40

Instructions:

1. You are advised to express the results in tabular form
2. Draw neat labeled/circular diagrams wherever necessary
3. Take the signature of the examiner on experimental results

SECTION– A

[30 Marks]

Q.1 Preparation of soap

Q.2 Preparation of liquid soap

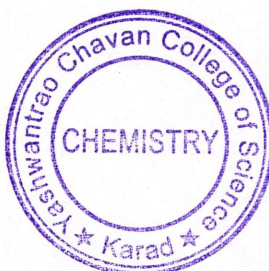
Q.3 Preparation of Phenyl

Q.4 Preparation of washing powder

SECTION – B

Oral

[10 Marks]



Yashwantrao Chavan College of Science, Karad

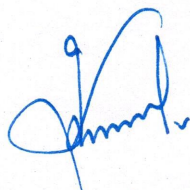
Department of Chemistry

Short-term Course - Preparation of Household Chemicals(2023-24)

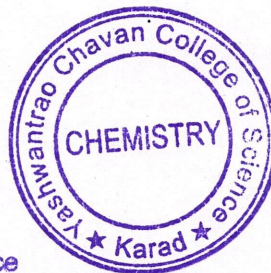
Mark list

Roll. No.	Name of Student	Mid-course exam (Out of 30)	Final Exam (Out of 30)	Practical Exam (Out of 40)	Total (Out of 100)
1	Bagul Vijaya Bibichand	21	24	40	85
2	Bhosale Nitiraj Vasant	22	25	40	87
3	Bhosale Pranali Rajendra	21	20	40	81
4	Chavan Prathamesh Sudam	21	24	40	85
5	Fasale Shubham Krushnat	25	25	40	90
6	Jadhav Rutuja Sanjay	19	27	40	86
7	Jadhav Shruti Shivaji	21	28	40	89
8	Jamadar Irshad Ibrahim	21	26	40	87
9	Kale Shruti Mahesh	17	24	40	81
10	Kamble Shital Madhukar	21	25	40	86
11	Kazi Sahil Khudbuddin	21	26	40	87
12	Lohar Yogita Arjun	25	20	40	85
13	Mali Priyanka Dipak	19	25	40	84
14	Mankar Anushka Jalindar	21	27	40	88
15	Mohite Kalyani Gulabrao	21	19	40	80
16	Narute Pranit Balaso	22	20	40	82
17	Nikam Nikita Ramesh	21	24	40	85
18	Patel Sahil Rafik	21	20	40	81
19	Patil Amruta Ravindra	25	27	40	92
20	Patil Prathamesh Yashwantrao	19	28	40	87
21	Pawar Priya Ravindra	21	24	40	85
22	Rokade Priyanka Vinayak	22	25	40	87
23	Shinde Arpita Vishwas	21	20	40	81
24	Sutar Namrata Dhondiram	21	24	40	85
25	Tupe Ankita Anandrao	25	25	40	90
26	Yadav Anuja Tanajirao	19	27	40	86
27	Yadav Dipali Satish	21	28	40	89
28	Adake Swapnali Harishchandra	21	26	40	87
29	Bhosale Prajakta Nilakanth	17	24	40	81
30	Deshmukh Manisha Sanjay	21	25	40	86
31	Jadhav Kedar Deepak	21	26	40	87
32	Jadhav Tejasvi Prakash	25	20	40	85
33	Kale Prajakta Prakash	19	25	40	84
34	Magdum Snehal Rajendra	21	27	40	88
35	Patil Sumit Raghunath	21	19	40	80
36	Patil Tejas Giriah	22	20	40	82

37	Patil Vijay Dilip	21	24	40	85
38	Pawar Suraj Rabindra	21	20	40	81
39	Shinde Dhanashri Niwas	25	27	40	92
40	Yadav Arati Dasharath	19	28	40	87



Principal
Yashwantrao Chavan College of Science
Karad



Yashwantrao Chavan College of Science, Karad

Department of Chemistry

Short-term Course - Preparation of Household Chemicals(2023-24)

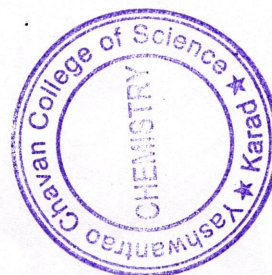
CO & PO attainment

Average Attainment	Target Attainment level	Remark
3	Level 5	Target achieved

Course code	Course Title	% of students above 60 % of Final exam marks	Level of attainment Final exam	80% of attainment Level in Final exam (I)	% of students above 80 % of mid-course exam marks	Level of attainment	20% of attainment Level in mid-course exam (II)	Attainment of course(I+II)
Short term	Chemical risk management	93.00	3	2.4	75.00	2	0.4	2.8

By using below attainment level 1,2,3 for the Percent of students in B	
For internal exam	
Level 1	Less than 60% of students scored more than average marks
Level 2	60% - 80% of students scoring more than average marks
Level 3	more than equal to 80% of students scoring more than average marks

Programme outcome level	Target Attainment
Level 1	0.5-1.0
Level 2	1.0-1.5
Level 3	1.5-2.0
Level 4	2.0-2.5
Level 5	2.5-3.0



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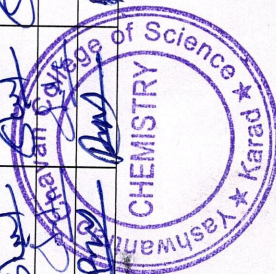
Department of Chemistry

Short-Term Course - "Preparation of Household Chemicals"

Year 2023-24

Attendance Dec-2023

Roll. No.	Name of Student	01/12	02/12	03/12	09/12	15/12	16/12	22/12	23/12	26/12
4201	Bagul Vijaya Bibichand	Bagul	Bagul	Bagul	Bagul	Bagul	Bagul	Bagul	Bagul	Bagul
4202	Bhosale Nitiraj Vasant	Bhosale	Bhosale	Bhosale	Bhosale	Bhosale	Bhosale	Bhosale	Bhosale	Bhosale
4203	Bhosale Pranali Rajendra	B	B	B	B	B	B	B	B	B
4204	Chavan Prathamesh Sudam	Chavan	Chavan	Chavan	Chavan	Chavan	Chavan	Chavan	Chavan	Chavan
4205	Fasale Shubham Krushnat	Fasale	Fasale	Fasale	Fasale	Fasale	Fasale	Fasale	Fasale	Fasale
4206	Jadhav Rutuja Sanjay	Jadhav	Jadhav	Jadhav	Jadhav	Jadhav	Jadhav	Jadhav	Jadhav	Jadhav
4207	Jadhav Shruti Shivaji	Jadhav	Jadhav	Jadhav	Jadhav	Jadhav	Jadhav	Jadhav	Jadhav	Jadhav
4208	Jamadar Irshad Ibrahim	Jamadar	Jamadar	Jamadar	Jamadar	Jamadar	Jamadar	Jamadar	Jamadar	Jamadar
4209	Kale Shruti Mahesh	Kale	Kale	Kale	Kale	Kale	Kale	Kale	Kale	Kale
4210	Kamble Shital Madhukar	Kamble	Kamble	Kamble	Kamble	Kamble	Kamble	Kamble	Kamble	Kamble
4211	Kazi Sahil Khudbuddin	Kazi	Kazi	Kazi	Kazi	Kazi	Kazi	Kazi	Kazi	Kazi
4212	Lohar Yogita Arjun	Lohar	Lohar	Lohar	Lohar	Lohar	Lohar	Lohar	Lohar	Lohar
4213	Mali Priyanka Dipak	Mali	Mali	Mali	Mali	Mali	Mali	Mali	Mali	Mali
4214	Mankar Anushka Jalindar	Mankar	Mankar	Mankar	Mankar	Mankar	Mankar	Mankar	Mankar	Mankar
4215	Mohite Kalyani Gulabrao	Mohite	Mohite	Mohite	Mohite	Mohite	Mohite	Mohite	Mohite	Mohite
4216	Narute Pranit Balaso	Narute	Narute	Narute	Narute	Narute	Narute	Narute	Narute	Narute
4217	Nikam Nikita Ramesh	Nikam	Nikam	Nikam	Nikam	Nikam	Nikam	Nikam	Nikam	Nikam
4218	Patel Sahil Rafik	Patel	Patel	Patel	Patel	Patel	Patel	Patel	Patel	Patel
4219	Patil Amruta Ravindra	Patil	Patil	Patil	Patil	Patil	Patil	Patil	Patil	Patil
4220	Patil Prathamesh Yashwantrao	Patil	Patil	Patil	Patil	Patil	Patil	Patil	Patil	Patil



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Yashwantrao Chavan College of
Science, Karad

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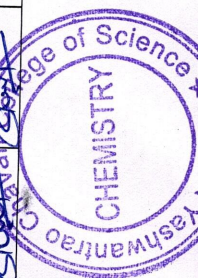
Department of Chemistry

Short-Term Course - "Preparation of Household Chemicals"

Year 2023-24

Attendance Jan-2024

Roll. No.	Name of Student	05/01	06/01	12/01	13/01	19/01	20/01	25/01	27/01	29/01
4201	Bagul Vijaya Bibichand	Bagul	Bagul	Bagul	Bagul	Bagul	Bagul	Bagul	Bagul	Bagul
4202	Bhosale Nitiraj Vasant	Bhosale	Bhosale	Bhosale	Bhosale	Bhosale	Bhosale	Bhosale	Bhosale	Bhosale
4203	Bhosale Pranal Rajendra	Bhosale	Bhosale	Bhosale	Bhosale	Bhosale	Bhosale	Bhosale	Bhosale	Bhosale
4204	Chavan Prathamesh Sudam	Chavan	Chavan	Chavan	Chavan	Chavan	Chavan	Chavan	Chavan	Chavan
4205	Fasale Shubham Krushnat	Fasale	Fasale	Fasale	Fasale	Fasale	Fasale	Fasale	Fasale	Fasale
4206	Jadhav Rutuja Sanjay	Jadhav	Jadhav	Jadhav	Jadhav	Jadhav	Jadhav	Jadhav	Jadhav	Jadhav
4207	Jadhav Shruti Shivaji	Jadhav	Jadhav	Jadhav	Jadhav	Jadhav	Jadhav	Jadhav	Jadhav	Jadhav
4208	Jamadar Irshad Ibrahim	Jamadar	Jamadar	Jamadar	Jamadar	Jamadar	Jamadar	Jamadar	Jamadar	Jamadar
4209	Kale Shruti Mahesh	Kale	Kale	Kale	Kale	Kale	Kale	Kale	Kale	Kale
4210	Kamble Shital Madhukar	Kamble	Kamble	Kamble	Kamble	Kamble	Kamble	Kamble	Kamble	Kamble
4211	Kazi Sahil Khudbuddin	Kazi	Kazi	Kazi	Kazi	Kazi	Kazi	Kazi	Kazi	Kazi
4212	Lohar Yogita Arjun	Lohar	Lohar	Lohar	Lohar	Lohar	Lohar	Lohar	Lohar	Lohar
4213	Mali Priyanka Dipak	Mali	Mali	Mali	Mali	Mali	Mali	Mali	Mali	Mali
4214	Mankar Anushka Jalindar	Mankar	Mankar	Mankar	Mankar	Mankar	Mankar	Mankar	Mankar	Mankar
4215	Mohite Kalyani Gulabrao	Mohite	Mohite	Mohite	Mohite	Mohite	Mohite	Mohite	Mohite	Mohite
4216	Narute Pranit Balaso	Narute	Narute	Narute	Narute	Narute	Narute	Narute	Narute	Narute
4217	Nikam Nikita Ramesh	Nikam	Nikam	Nikam	Nikam	Nikam	Nikam	Nikam	Nikam	Nikam
4218	Patel Sahil Rafik	Patel	Patel	Patel	Patel	Patel	Patel	Patel	Patel	Patel



Department of Chemistry
Yashwantrao Chavan College of
Science, Karad

YASHWANTRAO CHAVAN COLLEGE OF SCIENCE, KARAD

Department of Chemistry

Short-Term Course - "Preparation of Household Chemicals"

Year 2023-24

Attendance Feb-2024

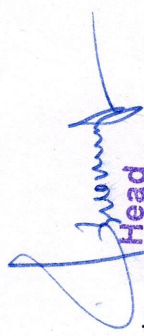
Roll. No.	Name of Student	02/02	03/02	09/02	10/02	16/02	17/02	23/02	24/02	25/02
4201	Bagul Vijaya Bibichand	VBAGUL	VBAGUL	VBAGUL	VBAGUL	VBAGUL	VBAGUL	VBAGUL	VBAGUL	VBAGUL
4202	Bhosale Nitiraj Vasant	BHOSALE	BHOSALE	BHOSALE	BHOSALE	BHOSALE	BHOSALE	BHOSALE	BHOSALE	BHOSALE
4203	Bhosale Pranali Rajendra	B	B	B	B	B	B	B	B	B
4204	Chavan Prathamesh Sudam	CHAVAN	CHAVAN	CHAVAN	CHAVAN	CHAVAN	CHAVAN	CHAVAN	CHAVAN	CHAVAN
4205	Fasale Shubham Krushnat	FASALE	FASALE	FASALE	FASALE	FASALE	FASALE	FASALE	FASALE	FASALE
4206	Jadhav Rutuja Sanjay	JADHAV	JADHAV	JADHAV	JADHAV	JADHAV	JADHAV	JADHAV	JADHAV	JADHAV
4207	Jadhav Shruti Shivaji	JADHAV	JADHAV	JADHAV	JADHAV	JADHAV	JADHAV	JADHAV	JADHAV	JADHAV
4208	Jamadar Irshad Ibrahim	JAMADAR	JAMADAR	JAMADAR	JAMADAR	JAMADAR	JAMADAR	JAMADAR	JAMADAR	JAMADAR
4209	Kale Shruti Mahesh	KALE	KALE	KALE	KALE	KALE	KALE	KALE	KALE	KALE
4210	Kamble Shital Madhukar	KAMBLE	KAMBLE	KAMBLE	KAMBLE	KAMBLE	KAMBLE	KAMBLE	KAMBLE	KAMBLE
4211	Kazi Sahil Khudbuddin	KAZI	KAZI	KAZI	KAZI	KAZI	KAZI	KAZI	KAZI	KAZI
4212	Lohar Yogita Arjun	LOHAR	LOHAR	LOHAR	LOHAR	LOHAR	LOHAR	LOHAR	LOHAR	LOHAR
4213	Mali Priyanka Dipak	MALI	MALI	MALI	MALI	MALI	MALI	MALI	MALI	MALI
4214	Mankar Anushka Jalindar	MANCAR	MANCAR	MANCAR	MANCAR	MANCAR	MANCAR	MANCAR	MANCAR	MANCAR
4215	Mohite Kalyani Gulabrao	MOHITE	MOHITE	MOHITE	MOHITE	MOHITE	MOHITE	MOHITE	MOHITE	MOHITE
4216	Narute Pranit Balaso	NARUTE	NARUTE	NARUTE	NARUTE	NARUTE	NARUTE	NARUTE	NARUTE	NARUTE
4217	Nikam Nikita Ramesh	NIKAM	NIKAM	NIKAM	NIKAM	NIKAM	NIKAM	NIKAM	NIKAM	NIKAM
4218	Patel Sahil Rafik	PATEL	PATEL	PATEL	PATEL	PATEL	PATEL	PATEL	PATEL	PATEL
4219	Patil Amruta Ravindra	PATIL	PATIL	PATIL	PATIL	PATIL	PATIL	PATIL	PATIL	PATIL
4220	Patil Prathamesh Yashwantrao	PATIL	PATIL	PATIL	PATIL	PATIL	PATIL	PATIL	PATIL	PATIL



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4221	Pawar Priya Ravindra	Pawar	Pawar	Pawar	Pawar	Pawar	Pawar	Pawar
4222	Rokade Priyanka Vinayak	Rokade	Rokade	Rokade	Rokade	Rokade	Rokade	Rokade
4223	Shinde Arpita Vishwas	Shinde	Shinde	Shinde	Shinde	Shinde	Shinde	Shinde
4224	Sutar Namrata Dhondiram	Sutar	Sutar	Sutar	Sutar	Sutar	Sutar	Sutar
4225	Tupe Ankita Anandrao	Tupe	Tupe	Tupe	Tupe	Tupe	Tupe	Tupe
4226	Yadav Anuja Tanajirao	Yadav	Yadav	Yadav	Yadav	Yadav	Yadav	Yadav
4227	Yadav Dipali Satish	Yadav	Yadav	Yadav	Yadav	Yadav	Yadav	Yadav
4228	Adake Swapnali Harishchandra	Adake	Adake	Adake	Adake	Adake	Adake	Adake
4229	Bhosale Prajakta Nilakanth	Bhosale	Bhosale	Bhosale	Bhosale	Bhosale	Bhosale	Bhosale
4230	Deshmukh Manisha Sanjay	Deshmukh	Deshmukh	Deshmukh	Deshmukh	Deshmukh	Deshmukh	Deshmukh
4231	Jadhav Kedar Deepak	Jadhav	Jadhav	Jadhav	Jadhav	Jadhav	Jadhav	Jadhav
4232	Jadhav Tejasvi Prakash	Jadhav	Jadhav	Jadhav	Jadhav	Jadhav	Jadhav	Jadhav
4233	Kale Prajakta Prakash	Kale	Kale	Kale	Kale	Kale	Kale	Kale
4234	Magdum Snehal Rajendra	Magdum	Magdum	Magdum	Magdum	Magdum	Magdum	Magdum
4235	Patil Sumit Raghunath	Patil	Patil	Patil	Patil	Patil	Patil	Patil
4236	Patil Tejas Giriah	Patil	Patil	Patil	Patil	Patil	Patil	Patil
4237	Patil Vijay Dilip	Patil	Patil	Patil	Patil	Patil	Patil	Patil
4238	Pawar Suraj Rabindra	Pawar	Pawar	Pawar	Pawar	Pawar	Pawar	Pawar
4239	Shinde Dhanashri Niwas	Shinde	Shinde	Shinde	Shinde	Shinde	Shinde	Shinde
4240	Yadav Arati Dasharath	Yadav	Yadav	Yadav	Yadav	Yadav	Yadav	Yadav




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Short Term Course

Certificate of Completion

This is to certify that Mr./Miss. Fasale Shubham Krushnat
of Class M. Sc. II has Completed Short Term Course (3 Months) in Preparation
as Household chemicals conducted by the department of
Chemistry during the academic year 2023 - 2024

Shivamurthy
Course Co-ordinator

Shivamurthy
Head of the Department

Shivamurthy
IQAC Co-ordinator

Shivamurthy
Principal

Estd.:

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of Class M. Sc. II has Completed Short Term Course (3 Months) in Preparation

of Household chemicals conducted by the department of

Chemistry during the academic year 2023 - 2024

Pravin
Course Co-ordinator

Pravin
Head of the Department

Pravin
IQAC Co-ordinator

Pravin
Principal

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of Class M. Sc. II has Completed Short Term Course (3 Months) in Preparation
of Household Chemicals conducted by the department of
Chemistry during the academic year 2023 - 2024

Shrinikesh
Course Co-ordinator

Shrinikesh
Head of the Department

Shrinikesh
IGAC Co-ordinator

Shrinikesh
Principal

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of Class M.Sc. II has Completed Short Term Course (3 Months) in Preparation
of Household chemicals conducted by the department of
Chemistry during the academic year 2023 - 2024

Shrinivasa
Course Co-ordinator

Shant
Head of the Department

Shant
IQAC Co-ordinator

Shant
Principal

Estd.:

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This is to certify that Mr./Miss. Kamble Shital Madhukar
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of Household Chemicals conducted by the department of
Chemistry during the academic year 2023 - 2024

Shriniketh ..
Course Co-ordinator

Shriniketh ..
Head of the Department

Shriniketh ..
IQAC Co-ordinator

Shriniketh ..
Principal