



**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**

2022-23

**Index**

**Total Students: 43    Class: M. Sc. II    Duration: 03 Months**  
**Course Code: CCE-06**

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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 2022-23**

**Board of Studies (BOS)**

Date: 07 /11/2022

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	Dr. G. G. Potdar	IQAC Coordinator	
3	Prof. Dr. S. H. Burungale	Head of the Department	
4	Mrs. S. B. Shete	Course Coordinator	





Estd. 1958

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## DEPARTMENT OF CHEMISTRY

**Year 2022-23**

### Syllabus Approved Letter

The IQAC Committee has approved the syllabus of the short-term course to be conducted by the Department of Chemistry.

Sr. NO.	Name of The Course	Type of the Course
1.	Preparation of Household Chemicals	Short-term Course

  
**Course  
Co-Ordinator**

  
**IQAC  
Coordinator**

  
**HOD**

  
**Principal**

**Co-ordinator,**  
Internal Quality Assurance Cell (IQAC),  
Yashwantrao Chavan College  
of Science, Karad

**Head** Yashwantrao Chavan College of Science  
**Department of Chemistry**  
Yashwantrao Chavan College of  
Science, Karad



**Yashwantrao Chavan College of Science, Vidyanagar, Karad**

**(AFFILIATED TO SHIVAJI UNIVERSITY, KOLHAPUR)**

**Department of Chemistry**

**Certificate course**

**In**

**“PREPARATION OF HOUSEHOLD CHEMICALS”**

**Course Code: CCE-06**





Short

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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

### Course Code: CCE-06

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**

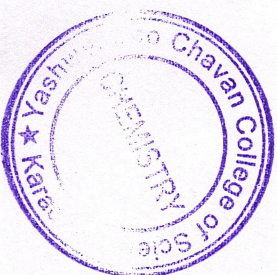


**Yashwantrao Chavan College of Science, Karad**

**Department of Chemistry**

**Short-term Course - Preparation of Household Chemicals (2022-23)**

Course Code	Short Term	Course:	Preparation of Household Chemicals	
Prepared by	Mrs. S. B. Shete	Date	2022-23	
Target Group: M.Sc. II				
Pre-requisites	<ul style="list-style-type: none"><li>• Basic (10+2) knowledge of science faculty</li><li>• Good analytical skills.</li><li>• Basic knowledge regarding laboratory concepts.</li></ul>			
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.			





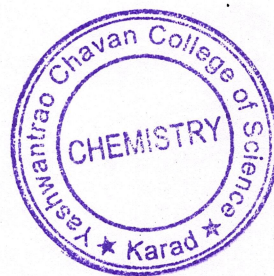
# **YASHWANTRAO CHAVAN COLLEGE OF SCIENCE, KARAD**

## **Department of Chemistry**

### **Notice**

Date: 08/11/2022

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 Mrs. S. B. Shete (course Co-ordinator) on or before 30th November 2023.





# **YASHWANTRAO CHAVAN COLLEGE OF SCIENCE, KARAD**

## **Department of Chemistry**

### **Short Term Course**

#### **“Preparation of Household Chemicals”**

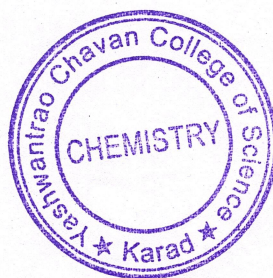
Year 2022-23

Name of the Enrolled Students

<b>Roll No.</b>	<b>Name of Student</b>
4201	Anuse Digvijay Dipak
4202	Bhingardeve Pratik Dhondiram
4203	Bhise Sangram Madhukar
4204	Chopdar Supriya Vijay
4205	Desai Pratiksha Manikrao
4206	Dugane Dhananjay Sadashiv
4207	Gangurde Kamlesh Gulab
4208	GhashiSwaliyaYusufali
4209	Gotal Jayesh Tanaji
4210	Gurav Pradnya Laxman
4211	Jadhav Priyanka Mahadev
4212	Jadhav Shrutika Amrut
4213	Jagadale Priyanka Shamrao
4214	Jagtap Vaishnavi Prakash
4215	Kadam Esha Ramesh
4216	Kanase Digvijay Atul
4217	Karale Akshata Ananda
4218	Khawale Akash Sunil
4219	Kumbhar Prasad Pandurang
4220	Mahamuni Arati Vilas
4221	Mohite Tejashri Tanaji
4222	Mohite Viraj Ramchandra
4223	More Komal Pratap
4224	Mulla Dastagir Rafik
4225	Naikawadi Samir Shoukat
4226	Nikam Akshay Ashok
4227	Patil Amruta Ramesh
4228	Patil Mahek Sunil
4229	Patil Pooja Tanaji



4230	Patil Pratiksha Atmaram
4231	Patil Satyajit Dhanaji
4232	Patil Shubham Jaysing
4233	Rakate Nikita Ramesh
4234	Salunkhe Komal Sunil
4235	Salunkhe Rutuja Dhanaji
4236	Shant Sanika Sadashiv
4237	Shete Avadhut Ajit
4238	Shewale Sujata Shivaji
4239	Shinde Shubham Shivaji
4240	Takale Ajit Surendra
4241	Taware Achal Vinayak
4242	Thorat Sayali Sunil
4243	Thorawade Ankita Amar





# **YASHWANTRAO CHAVAN COLLEGE OF SCIENCE, KARAD**

## **Department of Chemistry**

Short Term Course

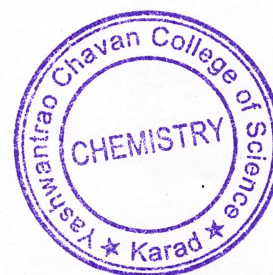
**“Preparation of Household Chemicals”**

Year 2022-23

Theory Time Table

Dec. 2022 to Jan.2023

Lect. time	Friday	Saturday
9.40 – 10.30	KSJ	AVM





**Yashwantrao Chavan College of Science, Karad**

**Department of Chemistry**

**Short Term Course**

**“Preparation of Household Chemical”**

**Year 2022-23**

**Date: 13/03/2023**

**Marks: 30**

**Day: Monday**

**Time: 11 am to 12:30 pm**

**Q.1) Multiple Choice Questions:**

**(Marks: 1\*5=05)**

i) Which of the following is the unit of concentration?

- a) Normality
- b) Molarity
- c) Molality
- d) All of these

ii) Metal ion acts as.

- a) Lewis base
- b) Lewis base and base
- c) Lewis's acid
- d) None

iii).....is the base according to Bronsted theory concept as well as Lewis's concept.

- a)  $\text{NH}_3$
- b)  $\text{NaOH}$
- c)  $\text{C}_6\text{H}_5\text{OH}$
- d)  $\text{CH}_3\text{OH}$

iv)  $\text{HNO}_3 + \text{NH}_3 \longrightarrow \text{NH}_4^+ + \text{NO}_3^-$  in this reaction the conjugate base of nitric acid is.....

- a)  $\text{NO}_3^-$
- b)  $\text{NH}_4^+$
- c)  $\text{NH}_3$
- d)  $\text{HNO}_3$

v) Equivalent weight of  $\text{NaOH}$  is .....

- a) 40
- b) 50
- c) 30
- d) 60

**Q.2) Answer the following questions (Any Two):**

**(Marks: 2\*5=10)**

i) Explain Bronsted-Lowry concept of acid & Base.

ii) Who will you prepare 1 litre of 0.1 N  $\text{NaOH}$  Solution from 0.5 N  $\text{NaOH}$  Solution?

iii) Explain in detail the concept of molarity.



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.

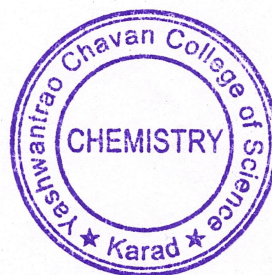
ii) Explain Lewis theory of acids and bases with a suitable example.

iii) Explain Bronsted-Lowry concept of acid & Base.

iv) How will you prepare 1 liter 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 2022-23**

**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

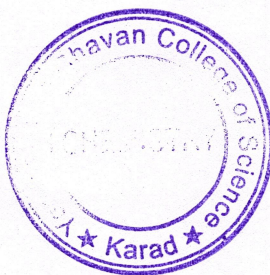
**Q.3** Preparation of Phenyl

**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(2022-23)**

**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)
4201	Anuse Digvijay Dipak	21	24	40	85
4202	Bhingardeve Pratik Dhondiram	22	25	40	87
4203	Bhise Sangram Madhukar	21	20	40	81
4204	Chopdar Supriya Vijay	21	24	40	85
4205	Desai Pratiksha Manikrao	25	25	40	90
4206	Dugane Dhananjay Sadashiv	19	27	40	86
4207	Gangurde Kamlesh Gulab	21	28	40	89
4208	GhashiSwaliyaYusufali	21	26	40	87
4209	Gotal Jayesh Tanaji	17	24	40	81
4210	Gurav Pradnya Laxman	21	25	40	86
4211	Jadhav Priyanka Mahadev	21	26	40	87



4212	Jadhav Shrutika Amrut	25	20	40	85
4213	Jagdale Priyanka Shamrao	19	25	40	84
4214	Jagtap Vaishnavi Prakash	21	27	40	88
4215	Kadam Esha Ramesh	21	19	40	80
4216	Kanase Digvijay Atul	22	20	40	82
4217	Karale Akshata Ananda	21	24	40	85
4218	Khawale Akash Sunil	21	20	40	81
4219	Kumbhar Prasad Pandurang	25	27	40	92
4220	Mahamuni Arati Vilas	19	28	40	87
4221	Mohite Tejashri Tanaji	21	24	40	85
4222	Mohite Viraj Ramchandra	22	25	40	87
4223	More Komal Pratap	21	20	40	81
4224	Mulla Dastagir Rafik	21	24	40	85
4225	Naikawadi Samir Shoukat	25	25	40	90
4226	Nikam Akshay Ashok	19	27	40	86
4227	Patil Amruta Ramesh	21	28	40	89
4228	Patil Mahek Sunil	21	26	40	87
4229	Patil Pooja Tanaji	17	24	40	81
4230	Patil Pratiksha Atmaram	21	25	40	86
4231	Patil Satyajit Dhanaji	21	26	40	87
4232	Patil Shubham Jaysing	25	20	40	85
4233	Rakate Nikita Ramesh	19	25	40	84



4234	Salunkhe Komal Sunil	21	27	40	88
4235	Salunkhe Rutuja Dhanaji	21	19	40	80
4236	Shant Sanika Sadashiv	22	20	40	82
4237	Shete Avadhut Ajit	21	24	40	85
4238	Shewale Sujata Shivaji	21	20	40	81
4239	Shinde Shubham Shivaji	25	27	40	92
4240	Takale Ajit Surendra	19	28	40	87
4241	Taware Achal Vinayak	21	20	40	81
4242	Thorat Sayali Sunil	25	27	40	92
4243	Thorawade Ankita Amar	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 (2022-23)**

**CO & PO attainment**

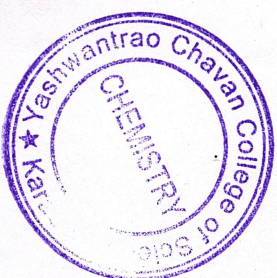
Average Attainment	Target Attainment level	Remark
3	Level 5	Target achieved

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





# YASHWANTRAO CHAVAN COLLEGE OF SCIENCE, KARAD

## Department of Chemistry

### Short-Term Course - "Preparation of Household Chemicals"

Year 2022-23

Attendance Dec-2022

Roll. No.	Name of Student	02/12	03/12	09/12	10/12	16/12	17/12	23/12	24/12	26/12
4201	Anuse Digvijay Dipak	Anuse	Anuse	Anuse	Anuse	Anuse	Anuse	Anuse	Anuse	Anuse
4202	Bhingardeve Pratik Dhondiram	Bhingardeve	Bhingardeve	Bhingardeve	Bhingardeve	Bhingardeve	Bhingardeve	Bhingardeve	Bhingardeve	Bhingardeve
4203	Bhise Sangram Madhukar	Bhise	Bhise	Bhise	Bhise	Bhise	Bhise	Bhise	Bhise	Bhise
4204	Chopdar Supriya Vijay	Chopdar	Chopdar	Chopdar	Chopdar	Chopdar	Chopdar	Chopdar	Chopdar	Chopdar
4205	Desai Pratiksha Manikrao	Desai	Desai	Desai	Desai	Desai	Desai	Desai	Desai	Desai
4206	Dugane Dhananjay Sadashiv	Dugane	Dugane	Dugane	Dugane	Dugane	Dugane	Dugane	Dugane	Dugane
4207	Gangurde Kamlesh Gulab	Gangurde	Gangurde	Gangurde	Gangurde	Gangurde	Gangurde	Gangurde	Gangurde	Gangurde
4208	Ghashi Swaliya Yusufali	Ghashi	Ghashi	Ghashi	Ghashi	Ghashi	Ghashi	Ghashi	Ghashi	Ghashi
4209	Gotal Jayesh Tanaji	Gotal	Gotal	Gotal	Gotal	Gotal	Gotal	Gotal	Gotal	Gotal
4210	Gurav Pradnya Laxman	Gurav	Gurav	Gurav	Gurav	Gurav	Gurav	Gurav	Gurav	Gurav
4211	Jadhav Priyanka Mahadev	Jadhav	Jadhav	Jadhav	Jadhav	Jadhav	Jadhav	Jadhav	Jadhav	Jadhav
4212	Jadhav Shrutika Amrut	Jadhav	Jadhav	Jadhav	Jadhav	Jadhav	Jadhav	Jadhav	Jadhav	Jadhav
4213	Jagdale Priyanka Shamrao	Jagdale	Jagdale	Jagdale	Jagdale	Jagdale	Jagdale	Jagdale	Jagdale	Jagdale
4214	Jagtap Vaishnavi Prakash	Jagtap	Jagtap	Jagtap	Jagtap	Jagtap	Jagtap	Jagtap	Jagtap	Jagtap
4215	Kadam Esha Ramesh	Kadam	Kadam	Kadam	Kadam	Kadam	Kadam	Kadam	Kadam	Kadam
4216	Kanase Digvijay Atul	Kanase	Kanase	Kanase	Kanase	Kanase	Kanase	Kanase	Kanase	Kanase
4217	Karale Akshata Ananda	Karale	Karale	Karale	Karale	Karale	Karale	Karale	Karale	Karale
4218	Khawale Akash Sunil	Khawale	Khawale	Khawale	Khawale	Khawale	Khawale	Khawale	Khawale	Khawale
4219	Kumbhar Prasad Pandurang	Kumbhar	Kumbhar	Kumbhar	Kumbhar	Kumbhar	Kumbhar	Kumbhar	Kumbhar	Kumbhar
4220	Mahamuni Arati Vilas	Mahamuni	Mahamuni	Mahamuni	Mahamuni	Mahamuni	Mahamuni	Mahamuni	Mahamuni	Mahamuni

Head

Department of Chemistry  
Yashwantrao Chavan College of  
Science, Karad



4221	Mohite Tejashri Tanaji	<u>Mohite</u>	<u>Mohite</u>	<u>Mohite</u>	<u>Mohite</u>	<u>Mohite</u>	<u>Mohite</u>
4222	Mohite Viraj Ramchandra	<u>Mohite</u>	<u>Mohite</u>	<u>Mohite</u>	<u>Mohite</u>	<u>Mohite</u>	<u>Mohite</u>
4223	More Komal Pratap	<u>More</u>	<u>More</u>	<u>More</u>	<u>More</u>	<u>More</u>	<u>More</u>
4224	Mulla Dastagir Rafik	<u>Rafik</u>	<u>Rafik</u>	<u>Rafik</u>	<u>Rafik</u>	<u>Rafik</u>	<u>Rafik</u>
4225	Naikawadi Samir Shoukat	<u>Samir</u>	<u>Samir</u>	<u>Samir</u>	<u>Samir</u>	<u>Samir</u>	<u>Samir</u>
4226	Nikam Akshay Ashok	<u>Nikam</u>	<u>Nikam</u>	<u>Nikam</u>	<u>Nikam</u>	<u>Nikam</u>	<u>Nikam</u>
4227	Patil Amruta Ramesh	<u>Patil</u>	<u>Patil</u>	<u>Patil</u>	<u>Patil</u>	<u>Patil</u>	<u>Patil</u>
4228	Patil Mahek Sunil	<u>S.M. Patil</u>	<u>S.M. Patil</u>	<u>S.M. Patil</u>	<u>S.M. Patil</u>	<u>S.M. Patil</u>	<u>S.M. Patil</u>
4229	Patil Pooja Tanaji	<u>P.A. Patil</u>	<u>P.A. Patil</u>	<u>P.A. Patil</u>	<u>P.A. Patil</u>	<u>P.A. Patil</u>	<u>P.A. Patil</u>
4230	Patil Pratiksha Atmaram	<u>Patil</u>	<u>Patil</u>	<u>Patil</u>	<u>Patil</u>	<u>Patil</u>	<u>Patil</u>
4231	Patil Satyajit Dhanaji	<u>Satil</u>	<u>Satil</u>	<u>Satil</u>	<u>Satil</u>	<u>Satil</u>	<u>Satil</u>
4232	Patil Shubham Jaysing	<u>Spatil</u>	<u>Spatil</u>	<u>Spatil</u>	<u>Spatil</u>	<u>Spatil</u>	<u>Spatil</u>
4233	Rakate Nikita Ramesh	<u>Nakate</u>	<u>Nakate</u>	<u>Nakate</u>	<u>Nakate</u>	<u>Nakate</u>	<u>Nakate</u>
4234	Salunkhe Komal Sunil	<u>Skomal</u>	<u>Skomal</u>	<u>Skomal</u>	<u>Skomal</u>	<u>Skomal</u>	<u>Skomal</u>
4235	Salunkhe Rutuja Dhanaji	<u>Salunkhe</u>	<u>Salunkhe</u>	<u>Salunkhe</u>	<u>Salunkhe</u>	<u>Salunkhe</u>	<u>Salunkhe</u>
4236	Shant Sanika Sadashiv	<u>Shant</u>	<u>Shant</u>	<u>Shant</u>	<u>Shant</u>	<u>Shant</u>	<u>Shant</u>
4237	Shete Avadhut Ajit	<u>Shete</u>	<u>Shete</u>	<u>Shete</u>	<u>Shete</u>	<u>Shete</u>	<u>Shete</u>
4238	Shewale Sujata Shivaji	<u>Shewale</u>	<u>Shewale</u>	<u>Shewale</u>	<u>Shewale</u>	<u>Shewale</u>	<u>Shewale</u>
4239	Shinde Shubham Shivaji	<u>Shinde</u>	<u>Shinde</u>	<u>Shinde</u>	<u>Shinde</u>	<u>Shinde</u>	<u>Shinde</u>
4240	Takale Ajit Surendra	<u>A.S.T</u>	<u>A.S.T</u>	<u>A.S.T</u>	<u>A.S.T</u>	<u>A.S.T</u>	<u>A.S.T</u>
4241	Taware Achal Vinayak	<u>AV Taware</u>	<u>AV Taware</u>	<u>AV Taware</u>	<u>AV Taware</u>	<u>AV Taware</u>	<u>AV Taware</u>
4242	Thorat Sayali Sunil	<u>Thorat</u>	<u>Thorat</u>	<u>Thorat</u>	<u>Thorat</u>	<u>Thorat</u>	<u>Thorat</u>
4243	Thorawade Ankita Amar	<u>Ankita</u>	<u>Ankita</u>	<u>Ankita</u>	<u>Ankita</u>	<u>Ankita</u>	<u>Ankita</u>

*[Signature]*  
Head

Department of Chemistry  
Yashwantrao Chavan College of  
Science, Karad





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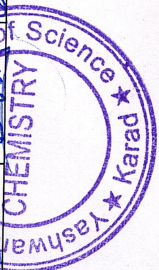
## Department of Chemistry

### Short-Term Course - "Preparation of Household Chemicals"

Year 2022-23

Attendance Jan-2023

Roll. No.	Name of Student	06/01	07/01	13/01	14/01	20/01	21/01	27/01	28/01	31/01
4201	Anuse Digvijay Dipak	Anuse	Anuse	Anuse	Anuse	Anuse	Anuse	Anuse	Anuse	Anuse
4202	Bhingardeve Pratik Dhondiram	Bh	Bh	Bh	Bh	Bh	Bh	Bh	Bh	Bh
4203	Bhise Sangram Madhukar	B.S.M	B.S.M	B.S.M	B.S.M	B.S.M	B.S.M	B.S.M	B.S.M	B.S.M
4204	Chopdar Supriya Vijay	C.S.V.	C.S.V.	C.S.V.	C.S.V.	C.S.V.	C.S.V.	C.S.V.	C.S.V.	C.S.V.
4205	Desai Pratiksha Manikrao	Desai	Desai	Desai	Desai	Desai	Desai	Desai	Desai	Desai
4206	Dugane Dhananjay Sadashiv	D.S.	D.S.	D.S.	D.S.	D.S.	D.S.	D.S.	D.S.	D.S.
4207	Gangurde Kamlesh Gulab	G.K.	G.K.	G.K.	G.K.	G.K.	G.K.	G.K.	G.K.	G.K.
4208	Ghashi Swaliya Yusufali	Ghashi	Ghashi	Ghashi	Ghashi	Ghashi	Ghashi	Ghashi	Ghashi	Ghashi
4209	Gotal Jayesh Tanaji	G.K.	G.K.	G.K.	G.K.	G.K.	G.K.	G.K.	G.K.	G.K.
4210	Gurav Pradnya Laxman	G.L.	G.L.	G.L.	G.L.	G.L.	G.L.	G.L.	G.L.	G.L.
4211	Jadhav Priyanka Mahadev	P.M.	P.M.	P.M.	P.M.	P.M.	P.M.	P.M.	P.M.	P.M.
4212	Jadhav Shrutika Amrut	S.A.	S.A.	S.A.	S.A.	S.A.	S.A.	S.A.	S.A.	S.A.
4213	Jagdale Priyanka Shamrao	P.S.	P.S.	P.S.	P.S.	P.S.	P.S.	P.S.	P.S.	P.S.
4214	Jagtap Vaishnavi Prakash	V.P.	V.P.	V.P.	V.P.	V.P.	V.P.	V.P.	V.P.	V.P.
4215	Kadam Esha Ramesh	K.E.	K.E.	K.E.	K.E.	K.E.	K.E.	K.E.	K.E.	K.E.
4216	Kanase Digvijay Atul	K.D.	K.D.	K.D.	K.D.	K.D.	K.D.	K.D.	K.D.	K.D.
4217	Karale Akshata Ananda	K.A.	K.A.	K.A.	K.A.	K.A.	K.A.	K.A.	K.A.	K.A.
4218	Khawale Akash Sunil	K.A.	K.A.	K.A.	K.A.	K.A.	K.A.	K.A.	K.A.	K.A.
4219	Kumbhar Prasad Pandurang	K.P.	K.P.	K.P.	K.P.	K.P.	K.P.	K.P.	K.P.	K.P.
4220	Mahamuni Arati Vilas	M.A.	M.A.	M.A.	M.A.	M.A.	M.A.	M.A.	M.A.	M.A.



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Science, Karad







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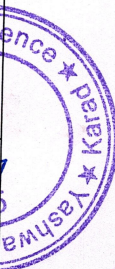
## Department of Chemistry

### Short-Term Course - "Preparation of Household Chemicals"

Year 2022-23

Attendance Feb-2023

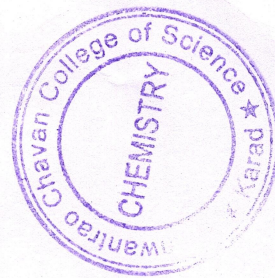
Roll. No.	Name of Student	03/02	04/02	10/02	11/02	17/02	18/02	24/02	25/02	27/02
4201	Anuse Digvijay Dipak	<del>Amul</del>	<del>Amul</del>	<del>Amul</del>	<del>Amul</del>	<del>Amul</del>	<del>Amul</del>	<del>Amul</del>	<del>Amul</del>	<del>Amul</del>
4202	Bhingardeve Pratik Dhondiram	<del>Amul</del>	<del>Amul</del>	<del>Amul</del>	<del>Amul</del>	<del>Amul</del>	<del>Amul</del>	<del>Amul</del>	<del>Amul</del>	<del>Amul</del>
4203	Bhise Sangram Madhukar	B.S.M	B.S.M	B.S.M	B.S.M	B.S.M	B.S.M	B.S.M	B.S.M	B.S.M
4204	Chopdar Supriya Vijay	C.S.V	C.S.V	C.S.V	C.S.V	C.S.V	C.S.V	C.S.V	C.S.V	C.S.V
4205	Desai Pratiksha Manikrao	<del>Desai</del>	<del>Desai</del>	<del>Desai</del>	<del>Desai</del>	<del>Desai</del>	<del>Desai</del>	<del>Desai</del>	<del>Desai</del>	<del>Desai</del>
4206	Dugane Dhananjay Sadashiv	<del>DS</del>	<del>DS</del>	<del>DS</del>	<del>DS</del>	<del>DS</del>	<del>DS</del>	<del>DS</del>	<del>DS</del>	<del>DS</del>
4207	Gangurde Kamlesh Gulab	<del>Ker</del>	<del>Ker</del>	<del>Ker</del>	<del>Ker</del>	<del>Ker</del>	<del>Ker</del>	<del>Ker</del>	<del>Ker</del>	<del>Ker</del>
4208	Ghashi Swaliya Yusufali	<del>Shashi</del>	<del>Shashi</del>	<del>Shashi</del>	<del>Shashi</del>	<del>Shashi</del>	<del>Shashi</del>	<del>Shashi</del>	<del>Shashi</del>	<del>Shashi</del>
4209	Gotal Jayesh Tanaji	<del>Jayesh</del>	<del>Jayesh</del>	<del>Jayesh</del>	<del>Jayesh</del>	<del>Jayesh</del>	<del>Jayesh</del>	<del>Jayesh</del>	<del>Jayesh</del>	<del>Jayesh</del>
4210	Gurav Pradnya Laxman	<del>Gurav</del>	<del>Gurav</del>	<del>Gurav</del>	<del>Gurav</del>	<del>Gurav</del>	<del>Gurav</del>	<del>Gurav</del>	<del>Gurav</del>	<del>Gurav</del>
4211	Jadhav Priyanka Mahadev	<del>Priyanka</del>	<del>Priyanka</del>	<del>Priyanka</del>	<del>Priyanka</del>	<del>Priyanka</del>	<del>Priyanka</del>	<del>Priyanka</del>	<del>Priyanka</del>	<del>Priyanka</del>
4212	Jadhav Shrutika Amrut	<del>Shrutika</del>	<del>Shrutika</del>	<del>Shrutika</del>	<del>Shrutika</del>	<del>Shrutika</del>	<del>Shrutika</del>	<del>Shrutika</del>	<del>Shrutika</del>	<del>Shrutika</del>
4213	Jagdale Priyanka Shamrao	<del>Priyanka</del>	<del>Priyanka</del>	<del>Priyanka</del>	<del>Priyanka</del>	<del>Priyanka</del>	<del>Priyanka</del>	<del>Priyanka</del>	<del>Priyanka</del>	<del>Priyanka</del>
4214	Jagtap Vaishnavi Prakash	<del>Vaishnavi</del>	<del>Vaishnavi</del>	<del>Vaishnavi</del>	<del>Vaishnavi</del>	<del>Vaishnavi</del>	<del>Vaishnavi</del>	<del>Vaishnavi</del>	<del>Vaishnavi</del>	<del>Vaishnavi</del>
4215	Kadam Esha Ramesh	<del>Esha</del>	<del>Esha</del>	<del>Esha</del>	<del>Esha</del>	<del>Esha</del>	<del>Esha</del>	<del>Esha</del>	<del>Esha</del>	<del>Esha</del>
4216	Kanase Digvijay Atul	<del>Atul</del>	<del>Atul</del>	<del>Atul</del>	<del>Atul</del>	<del>Atul</del>	<del>Atul</del>	<del>Atul</del>	<del>Atul</del>	<del>Atul</del>
4217	Karale Akshata Ananda	<del>Akshata</del>	<del>Akshata</del>	<del>Akshata</del>	<del>Akshata</del>	<del>Akshata</del>	<del>Akshata</del>	<del>Akshata</del>	<del>Akshata</del>	<del>Akshata</del>
4218	Khawale Akash Sunil	<del>Akash</del>	<del>Akash</del>	<del>Akash</del>	<del>Akash</del>	<del>Akash</del>	<del>Akash</del>	<del>Akash</del>	<del>Akash</del>	<del>Akash</del>
4219	Kumbhar Prasad Pandurang	<del>Prasad</del>	<del>Prasad</del>	<del>Prasad</del>	<del>Prasad</del>	<del>Prasad</del>	<del>Prasad</del>	<del>Prasad</del>	<del>Prasad</del>	<del>Prasad</del>
4220	Mahamuni Arati Vilas	<del>Arati</del>	<del>Arati</del>	<del>Arati</del>	<del>Arati</del>	<del>Arati</del>	<del>Arati</del>	<del>Arati</del>	<del>Arati</del>	<del>Arati</del>

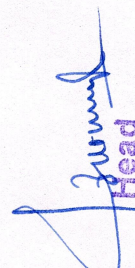


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4221	Mohite Tejashri Tanaji	Mohite	Shr.	Mohite	Mohite	Mohite	Mohite
4222	Mohite Viraj Ramchandra	Shr.	Shr.	Shr.	Shr.	Shr.	Shr.
4223	More Komal Pratap	Shr.	Shr.	Shr.	Shr.	Shr.	Shr.
4224	Mulla Dastagir Rafik	Shr.	Shr.	Shr.	Shr.	Shr.	Shr.
4225	Naikawadi Samir Shoukat	Shr.	Shr.	Shr.	Shr.	Shr.	Shr.
4226	Nikam Akshay Ashok	Shr.	Shr.	Shr.	Shr.	Shr.	Shr.
4227	Patil Amruta Ramesh	Shr.	Shr.	Shr.	Shr.	Shr.	Shr.
4228	Patil Mahek Sunil	Shr.	Shr.	Shr.	Shr.	Shr.	Shr.
4229	Patil Pooja Tanaji	Shr.	Shr.	Shr.	Shr.	Shr.	Shr.
4230	Patil Pratiksha Atmaram	Shr.	Shr.	Shr.	Shr.	Shr.	Shr.
4231	Patil Satyajit Dhanaji	Shr.	Shr.	Shr.	Shr.	Shr.	Shr.
4232	Patil Shubham Jaysing	Shr.	Shr.	Shr.	Shr.	Shr.	Shr.
4233	Rakate Nikita Ramesh	Shr.	Shr.	Shr.	Shr.	Shr.	Shr.
4234	Salunkhe Komal Sunil	Shr.	Shr.	Shr.	Shr.	Shr.	Shr.
4235	Salunkhe Rutuja Dhanaji	Shr.	Shr.	Shr.	Shr.	Shr.	Shr.
4236	Shant Sanika Sadashiv	Shr.	Shr.	Shr.	Shr.	Shr.	Shr.
4237	Shete Avadhut Ajit	Shr.	Shr.	Shr.	Shr.	Shr.	Shr.
4238	Shewale Sujata Shivaji	Shr.	Shr.	Shr.	Shr.	Shr.	Shr.
4239	Shinde Shubham Shivaji	Shr.	Shr.	Shr.	Shr.	Shr.	Shr.
4240	Takale Ajit Surendra	Shr.	Shr.	Shr.	Shr.	Shr.	Shr.
4241	Taware Achal Vinayak	Shr.	Shr.	Shr.	Shr.	Shr.	Shr.
4242	Thorat Sayali Sunil	Shr.	Shr.	Shr.	Shr.	Shr.	Shr.
4243	Thorawade Ankita Amar	Shr.	Shr.	Shr.	Shr.	Shr.	Shr.



  
 Head  
 Department of Chemistry  
 Yashwantrao Chavan College of  
 Science, Karad



Estd.:

1958

|| Be one with the downtrodden and the underprivileged ||

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Board for Higher Education's, Vidyanagar Karad's

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## Short Term Course

## Certificate of Completion

This is to certify that Mr./Miss.

Desai Pratiksha Manikrao

of Class M.Sc. II

has Completed Short Term Course (3 Months) in

of Household chemicals

conducted by the department of

Chemistry

during the academic year 2022-2023

Shastri  
Course Co-ordinator

Prasad  
Head of the Department

Prasad  
IQAC Co-ordinator

Prasad  
Principal



Estd.:

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## Short Term Course

## Certificate of Completion

This is to certify that Mr. ~~Miss.~~

Kanase Digvijay Atul

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 2022-2023

Shete

Course Co-ordinator

Sharma

Head of the Department

Pule

IQAC Co-ordinator

Shinde

Principal



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## Short Term Course

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This is to certify that Mr. Miss. Kumbhar Prasad Panduram  
of Class M.Sc. II has Completed Short Term Course (3 Months) in Preparations  
as Household chemicals conducted by the department of  
Chemistry during the academic year 2022-2023

Shete  
Course Co-ordinator

Samud  
Head of the Department

Pule  
IQAC Co-ordinator

Shinde  
Principal



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## Short Term Course

## Certificate of Completion

This is to certify that ~~Mr./Miss.~~

More Karmel Pratap

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

Preparation

at Household chemicals conducted by the department of

Chemistry during the academic year 2022-2023

Shetkar

Course Co-ordinator

Sharma

Head of the Department

Pillai

IQAC Co-ordinator

Sharma

Principal



Estd.:

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Board for Higher Education's, Vidyanagar Karad's

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## Short Term Course

## Certificate of Completion

This is to certify that Mr. ~~Miss~~ Takale Ajit Suresh

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 2022-2023

Course Co-ordinator

Head of the Department

IQAC Co-ordinator

Principal