

**Shri Vijaysinha Yadav College, Pethvadgaon**  
**Department of Chemistry**  
**Student Centric Activity: Project 2021-22**

Every year department of Chemistry organizes Project for B. Sc. III students. The aims of the personal project are to allow students to demonstrate the personal abilities and skills required to produce and present an extended piece of work. Engage in personal inquiry, action and reflection on specific topics and issues. Focus on, and demonstrate an understanding of, the areas of interaction.

**Objective:**

- Initiation, planning, execution, regulation and closure as well as the guidance of the project team's operations towards achieving all the agreed upon goals within the set scope, time, quality and budget standards.
- Think positive to stay focused.
- Stay resilient.
- Make time to read.
- Manage your time.

**B.SC. III CHEMISTRY STUDENT PROJECT LIST**

| Sr. No. | Name of Student  | Name of Project   | Name of Guide    |
|---------|--|---|------------------|
| 1.      | Gayatri Dilip Shinde<br>Anuja Bhikaji Mulik<br>Sanjivani Sanjay Sadalkar | Water Analysis  | Dr. C. B. Mane   |
| 2.      | Nikita Anil Powar<br>Trupti Mnik Patil<br>Priyanka Raju Kamble           | Fragmentation of Fruit<br>Jouice                                | Dr. C. B. Mane   |
| 3.      | Kavita Vishwanath Mali<br>Ankita Babaso Patil<br>Sandhya Sanjay Kamble   | Estimation of Nicotine<br>from Different<br>Samples of Cigarets | A.R. Jangam      |
| 4.      | Komal Ravindra Shete<br>Pratiksha Manohar Mali<br>Sonal Mohan Patil      | Study of Oxalate Ion<br>Content in Fruits and<br>Vegetables     | Dr. H. M. Shinde |
| 5.      | Vaishnavi Vishwas Lad<br>Anjali Ashok Madhale<br>Gayatri Bhimrao Shinge  | Natural Dye on Fabrics  | Dr. H. M. Shinde |
| 6       | Neha Mohan Patil<br>Pratiksha Jeevanrao Shinde                           | Investigation and<br>Analysis of Milk &                         | Dr. C. B. Mane   |

|     |  |   |                  |
|-----|--|---|------------------|
| 7.  | Patil Shubhangi Shivaji<br>Aniket Maruti Patil<br>Swapnil Prakash Nikam<br>Prathamesh Anil Nikam | Milk Products<br>Analysis of Sand                           | Dr. H. M. Shinde |
| 8.  | Akash Ashok Shinde<br>Pratikraj Vasant Patil   | Mnufacture of Ethyl<br>Alcohol                              | Dr. C. B. Mane   |
| 9.  | Dashrath Sambhaji Khot<br>Vikas Sunil Kamble<br>Suraj Shivaji Chavan                             | Analysis of Milk and<br>Products                            | Dr. H. M. Shinde |
| 10. | Aniket Maruti Sutar<br>Rohit Mohan Dhotare<br>Tejas Madhukar Khade                               | Bio CNG from Sugar<br>Cane Press-Mud                        | Dr. C. B. Mane   |
| 11. | Tushar Krushnat Kshid<br>Pravin Deepak Kalekar<br>Subhodh Bandu Patil                            | To Study  | Dr. C. B. Mane   |
| 12. | Saurabh Shahaji Patil<br>Chaitanya Jalindar Patil<br>Rushikesh Namdev Powar                      | Study of Milk and<br>Milk Products                          | Dr. C. B. Mane   |
| 13. | Sndesh Sambhaji Farane<br>Satyajeet Sambhaji Patil<br>Shubham Gajanan Patil                      | Analysis of Drugs   | Dr. H.M. Shinde  |
| 14. | Aniket Sanjay Ghatage<br>Siddhart Dashrath Kamble<br>Shravan Mallikarjun<br>Jagadannaver         | Pharamacetical<br>Introduction &<br>Classification of Drugs | Mrs. R. A. Pawar |



**Principal**

**Shri. Vijaysinha Yadav College  
Peth Vadgaon, Dist. Kolhapur.**



**Head**

**Department of Chemistry  
Shri. Vijaysinha Yadav College  
Peth Vadgaon, Dist. Kolhapur**

Seat no. – 25216

**Shri Shahu Shikshan Prasarak Seva Mandal Sanchalit**  
**SHRI VIJAYSINHA YADAV COLLEGE, PETH**  
**VADGAON**

**A**  
**PROJECT REPORT ON**  
***“Water Analysis”***

**Submitted to**  
**Department of Chemistry**



**AS PARTIAL FULFILMENT OF THE DEGREE**  
**BACHELOR OF SCIENCE IN CHEMISTRY**

**Submitted by**  
**Miss. Mulik Anuja Bhikaji**

**Under the**  
**Guidance of**  
**Dr. C. B. Mane**

**2021-2022**

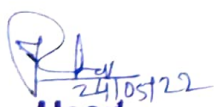
# CERTIFICATE

This is to certify that, **Miss. Mulik Anuja Bhikaji** has submitted the project entitled "**Water Analysis**" to department of Chemistry, Shri Vijaysinha Yadav College, Peth Vadgaon, As a part of curriculum of B.Sc. Chemistry Affiliated to Shivaji University, Kolhapur for the+9 award of degree of Bachelor of Science in Chemistry. This Project report is based on the results of investigations carried out by him under my supervision and guidance at the college during academic year 2021-2022.


Physical:-

Inorganic:-

Organic:-

  
24/05/22  
**Head**  
Department of Chemistry  
Shri. Vijaysinha Yadav College  
Peth Vadgaon, Dist. Kolhapur.  
(Head of Department)

Signature of Examiner

  
**Dr. C. B. Mane**  
(Guide)

Date: 12/ 05 /2022.

Place: Peth Vadgaon



# DECLARATION OF CANDIDATE

*I declare that, the project entitled **Miss. Mulik Anuja Bhikaji** has submitted the project entitled "**Water Analysis**" to department of Chemistry, Shri Vijaysinha Yadav College, Pethvadgaon, as a part of curriculum of B.Sc. Chemistry Affiliated to Shivaji University, Kolhapur for the award of degree of Batchelor of Science in Chemistry. This Project report is based on the results of investigations carried out by me under supervision and guidance of Dr. C. B. Mane at the college during academic year 2021-2022.*

**Miss. Mulik Anuja Bhikaji**

**B.Sc. Chemistry**

**Date:** 12/05/2022.

**Place:** Peth Vadgaon.

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## CHAPTER – 1

### INTRODUCTION –

Water is a “Cradle of life” on which all organism play water makes up to 60-65 percent of weight of any functioning organism and all equal or even greater proportion of the weight of any living cell. It is a common liquid by far the most common. The common should not be mistaken with ordinary. Water is not in the least an ordinary liquid. In fact is extraordinary in the compares on with other liquids, if it were not, it is most probable that life at least our form of life could never have evolved.

The amount of water which is present on the earth is vast most of the earth surface is covered with water. The water which is present today was formed eons ago during a time when our earth was changing from a molten mass to essentially the form in which we know it today. During the cooling period chemical changes occurred gases were released and from this gases water was formed this water has appeared at different time in different ways and has covered varying amount of the earth, but, over all of these changes and times and places the amount of water has remained essentially the same.

Water is one of the most important resources which humans begins has exploited than any other resources for the substance of his life water is the substance which is present in all the three state of matter, that is gaseous, liquid and solid within the ranges of temperature and pressure common to the earth show that approximately by present of the total water exist in gigantic oceans. This water is of little importance in our daily requirement remaining 3 percent of water is distributed In the form surface sheets ; underground sources, lakes, river, dam , well, borewell water atmosphere & biological.

Water contained in the living organism. The surface fresh water in from of lakes and rivers is hardly 0.01 percent of total water in the earth since our demand for water are mostly for fresh water. We have to depend mainly on the fraction of the total water percent on this planet, further, the uneven distribution of water on the surface of the earth, makes it a scarce resource at several place.