



## REPORT

### Industrial Visit at Kisan Veer Co-operative Sugar Factory

Date : 11/02/2023

An Industrial visit at Kisan Veer Co-operative Sugar Factory, Bhujinj was organized by Department of chemistry on Saturday 11/02/2023 for the students of B. Sc. III.

Production of Cane Sugar involves a series of unit operations the respected persons and workers explained the process to students as below :

- 1. Extraction of juice:** the cane is washed to remove dirt and mud then cut diagonally into small pieces. The chips sent to milling train two rolled crusher followed by four rolled mills. The pans below 2<sup>nd</sup>, 3<sup>rd</sup> & 4<sup>th</sup> mills are simple containers. The juice sent to boiling house.
- 2. Clarification of juice:** the extracted cane juice is acidic ,opaque and greenish liquid. It contains soluble impurities like glucose, fructose, organic acids, proteins etc. and insoluble impurities like finely divided pith fibre and mud. Firstly they are removed by lime defecation process. Also the purity of juice extracted from each mill is checked by Hydrometer. if it is 16-17 briks then purity is 75-80%. Sucrose scan machine is used to check transparency of clear juice extracted from 4<sup>th</sup> mill. Transparency should be between 50-55%. In each two hour new sample of clear juice is checked by the sucrose scan machine. The pH of freshly extracted juice is 5.1-5.7 is increased to 7.5-8.5 by adding milk of lime.
- 3. Concentration of juice to syrup:** The clarified juice is dilute and has about 85% of water it is concentrated in two stages by evaporating water.
- 4. Crystallization of sugar:** to crystallize sugar water content of sugar syrup is further reduced in single effect vaccum pan.
- 5. Centrifugation :** The sugar crystals are separated from mother liquor in centrifuge machine.
- 6. By-products of sugar Industry:**
  1. bagasse
  2. molasses
  - Manufacture of Ethyl Alcohol : The most important use of molasses is in manufacture of ethyl

alcohol. The yeast cells are grown in molasses nutrient medium. They incompletely oxidize the sugars present in molasis to form ethyl alcohol. Rectified spirit is (99.9% pure alcohol). The daily production of the factory is about 4000-5000 metric ton.

- Visit to soil testing laboratory :

The students had visited to the soil testing laboratory near the sugar factory. There Mrs. Rupali Khare madam gave valuable information to our students. They explained firstly how to collect sample from field by digging the the soil from several areas of field. The soil testing envolves the detection of elements and nutrients present in the soil. She also suggest to use biofertilisers for farming.

Total 72 students in which 49 were male students and 23 were female students along with 7 faculty members had visited the sugary industry.



*D. S. S.*  
Head

Department Of Chemistry  
Kisan Veer Mahavidyalaya, Wai

Department of Chemistry,  
Kisan Veer Mahavidyalaya, Wai.  
Date: 08.02.2023

## NOTICE

All the students of B.Sc. III are hereby informed that a study tour at Sugar factory and Alcohol Unit (Kisan Veer Sahakari Sakhar Karkhana, Ltd. Bhuj) is organized by department of chemistry on Saturday 11.02.2023 at 10:00 am. So, all students should remain present for the same.



A handwritten signature in blue ink, appearing to be "D. S. Patil", written over a horizontal line.

Head  
Department of Chemistry



जनता शिक्षण संस्थेचे

# किसन वीर महाविद्यालय, वाई

ता. वाई, जि. सातारा, महाराष्ट्र पिन - ४१२ ८०३

शिवाजी विद्यापीठ, कोल्हापूर संलग्नीत

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UDISE No. : 27311111516

Index No. : J21.11.001



किसन महादेव वीर

संस्थापक-अध्यक्ष

जनता शिक्षण संस्था, वाई

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डॉ. गुरुनाथ जी. फगरे

प्राचार्य

त. नं. ९४२९९०७६३५ / ९४०४९४०३७९

श्री. शंकरराव दाजीबा गाठवे

उपाध्यक्ष

जनता शिक्षण संस्था, वाई

श्री. मदन प्रतापराव भीसले

अध्यक्ष

जनता शिक्षण संस्था, वाई

संदर्भ क्र. : 109/1318

To,

दिनांक : 07-02-2023

The Managing Director,  
Kisan Veer Satara Sahakari Sakhar Karkhana Ltd,  
Kisan Veer Nagar,  
Bhuinj, Tal- Wai, Dist-Satara.

Sub:- Visit to Sugar factory & alcohol unit.....

Respected Sir,

Our B.Sc. part – III, (Chemistry) students are interested to visit the Sugar factory and Alcohol unit on Saturday, 11.02.2023 at 10.00 am. Please grant the Permission.

Thanking you,

Yours faithfully,



*Sawant*  
Principal

*Dr. G. S. Patil*  
07/2/23

*Dr. G. S. Patil*  
07/02/23

*ok*  
*By me*





जनता शिक्षण संस्थेचे

# किसन वीर महाविद्यालय, वाई

ता. वाई, जि. सातारा, महाराष्ट्र पिन - ४१२ ८०३  
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UDISE No. : 27311111516  
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नं. ९४२९९०७६३५ / ९४०४९४०३७९

श्री. शंकरराव दाजीबा गाडवे

उपाध्यक्ष

जनता शिक्षण संस्था, वाई

श्री. मदन प्रतापराव भोसले

अध्यक्ष

जनता शिक्षण संस्था, वाई

संदर्भ क्र. :

109/ 1360

दिनांक :

15.02.2023

To,  
The Managing Director,  
Kisan Veer Sahakari Sakhar Karkhana Ltd,  
Bhuinj Tal.- Wai, Dist.- Satara.

Sub: - Vote of Thanks .....

Respected Sir,

In continuation of our efforts to impart all possible knowledge to our students, students from B.Sc. III 72 students of our Kisan Veer Mahavidyalaya, Wai (Satara) with 7 staff visited your company on 11<sup>th</sup> February 2023.

During the visit, concerned employees of your company provided all the information about the plant operation, quality control, process of manufacturing the product to the students.

We are very much thankful to you for cooperation extended during the visit. Expecting the same cooperation in future.

Thanking You,

Yours faithfully,



*[Signature]*  
Principal

*[Handwritten notes]*  
15/2/23

*[Handwritten initials]*

**JANATA SHIKSHAN SANSTHA'S**  
**KISAN VEER MAHAVIDYALAYA, WAI**  
**DEPARTMENT OF CHEMISTRY**  
**STUDY TOUR AT SUGAR FACTORY AND ALCOHOL UNIT**

**B.Sc. III**

**2022-2023**

Attendance		Date: 11.02.2023			
Sr. No.	Roll No.	Name of Participant	Class	Gender	Signature
1	22	Dhawal Sumit Mahesh	B.Sc. III	male	
2	246	Jagtap Abhesh, Ajit	B.Sc. III		
3	25	Yadav Sanket	B.Sc. III		
4	145	Dhawal pranil Prasad	B.Sc. III		
5	4	Pisal Yash Jitenrao	B.Sc. III		
6	5	pawar Tejal Bharudis	B.Sc. III		
7	48	Jaindale Prajwal V.	B.Sc. III		
8	118	Salunkhe Sourbh	B.Sc. III		
9	119	Vinay shevale	B.Sc. III		
10	112	Bhosale Anshu	B.Sc. III		
11	215	Jajgade Nishant. P	B.Sc. III		
12	150	Dhawal sanket	B.Sc. III		
13	74	Kumbhar Mayur	B.Sc. III	male	
14	195	pawar Vishal	B.Sc. III		
15	198	Bhosale Anuraj	B.Sc. III		
16	162	Jagtap Shubham D.	B.Sc. III		
17	23	Solankar Aditya M.	B.Sc. III	male	
18	35	Waghmare Vishal P	B.Sc. III		
19	139	Papure Yash Vijay	B.Sc. III		
20	03	Dhawal Akash S.	B.Sc. III		
21	24	Dhawal Abhishek N.	B.Sc. III		
22	34	Puri Sohan V.	B.Sc. III	male	
23	107	Shinde Shirdas	B.Sc. III	male	
24	148	Jagtap Prathamesh	B.Sc. III		
25	104	Mhangale Pratik	B.Sc. III		
26	158	Shinde Aditya	B.Sc. III		
27	154	Rakade Sangram	B.Sc. III		
28	63	Wagh Omkar Shivaji	B.Sc. III		
29	21	Shilhare Pratik	B.Sc. III		
30	112	Bhosale Anshu	B.Sc. III		
31	178	Tarade Pranjal	B.Sc. III		
32	179	Tarade Girish	B.Sc. III		
33	27	Gimrekar Anay	B.Sc. III		
34	13	Abhishek Saurav	B.Sc. III		
35	151	Atkar Saurabh	B.Sc. III		
36	104	Pratik Mhangale	B.Sc. III		
37		Wagh Omkar Ajit	B.Sc. III		



Sr. No.	Roll No.	Name of Participant	Class	Gender	Signature
38	157	chikane Siddhi Ramesh	B.Sc. III	Female	
39	156	chikane Riddhi Ramesh	B.Sc. III	Female	
40	210	Jadhav Nikita Sambhaji	B.Sc. III	Female	
41	217	Bhasale sidhbanti Dattataj	B.Sc. III	Female	
42	160	Tharave Prajakta Satish	B.Sc. III	Female	
43	70	Gadhare Shivanjali Rajendra	B.Sc. III	Female	
44	73	Ranjane Shratika Subhash	B.Sc. III	Female	
45	10	Yadav Rutuja Shrawan	B.Sc. III	Female	
46	105	Bhandirge Dhanashree R	B.Sc. III	Female	
47	109	Korpe Jagruti Satjwar	B.Sc. III	Female	
48	21	shinde Dipti Digambar	B.Sc. III	Female	
49	18	Shivhare Sonam Sambhaji	B.Sc. III	Female	
50	108	Nikam Kajal Vikas	B.Sc. III	Female	
51	19	Gole Nikita Dattataj	B.Sc. III	Female	
52	185	kazi Ayan Latif	B.Sc. III	Male	
53	30	Kamble Shubham	B.Sc. III	Male	
54	142	Mohite Aniket Sambhaji	B.Sc. III	Male	
55	143	Lembhate Rajat Jayawant	B.Sc. III	Male	
56	144	Ghoshade Shaikant Shantaram	B.Sc. III	Male	
57	184	Jagtap Sumit Pravin	B.Sc. III	Male	
58	175	Mehangade Rushikesh	B.Sc. III	Male	
59	176	Erande Pooja Anil	B.Sc. III	Female	
60	114	Shingute Nulki Ramesh	B.Sc. III	Female	
61	07	Pisal Prachi Uttamrao	B.Sc. III	- 11 -	
62	08	Bhosale Smita Anil	B.Sc. III	- 11 -	
63	136	Jadhav Vaishnavi Abhij	B.Sc. III	- 11 -	
64	117	Gaikwad Nikita Sanjay	B.Sc. III	- 11 -	
65	149	Shinde Rutuja G	B.Sc. III	- 11 -	
66	68	Mandhase Shweta Shantaram	B.Sc. III	- 11 -	
67	20	Mandhase Shubhi Ramesh	B.Sc. III	Female	
68	117	Shilase Aaditya Vijay	B.Sc. III	Male	
69	120	mandhase shubham D	B.Sc. III	Male	
70	67	shelar Prathmesh D	B.Sc. III	Male	
71	202	Rutik Deepk Abhikar	B.Sc. III	Male	
72	90	Kiran Shantaram Bhande	B.Sc. III	Male	
73			B.Sc. III		
74			B.Sc. III		
75			B.Sc. III		
76		Male = 49	B.Sc. III		
77		Female = 23	B.Sc. III		
78		Faculty = 7	B.Sc. III		
79		Total = 79	B.Sc. III		
80			B.Sc. III		
81			B.Sc. III		



## VISIT AT SUGAR INDUSTRY







किसनवीर सातारा सहकारी साखर कारखाना लि., भुईंज.  
किसनवीरनगर, ता. वाई, जि. सातारा.

गेटपास

No. 2663

दि. 11-2-23

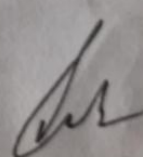
साठी

नांव किसनवीर कॉलेज वाई

एकूण संख्या 72 + 8

कामाचे स्वरूप :- कारखाना पहाणे / कामगारांस भेटण्यासाठी

कारखान्यात जाण्याची वेळ - 11/00

  
सुरक्षा अधिकारी

धना : सुरक्षिततेची सर्व जबाबदारी कारखाना पहाणाऱ्यावर राहिल.