



Janata Shikshan Sanstha's
Kisan Veer Mahavidyalaya, Wai
Department of Chemistry



REPORT

Industrial Visit at Kisan Veer Satara Co-operative Sugar Factory

Date : 31/01/2024

An Industrial visit at Kisan Veer Satara Co-operative Sugar Factory, Bhuj and Soil Testing Laboratory was organized by Department of chemistry on Wednesday, 31/01/2024 for the students of B.Sc. III.

- 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 involves the detection of elements and nutrients present in the soil. She also suggest to use biofertilizers for farming.

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 2nd, 3rd & 4th 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 brisk then purity is 75-80%. Sucrose scan machine is used to check transparency of clear juice extracted from 4th 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 vacuum 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 molasses to form ethyl alcohol. Rectified spirit is (99.9% pure alcohol). The daily production of the factory is about 4000-5000 metric ton.

Total 53 students in which 37 were male students and 16 were female students along with 7 faculty members had visited the sugary industry.



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Head
Department Of Chemistry
Kisan Veer Mahavidyalaya, Wai

Department of Chemistry
Kisan Veer Mahavidyalaya, Wai

Date: 23/01/2024

NOTICE

All students of B.Sc. III are here by informed that a study tour at Sugar Factory and Alcohol unit (Kisan Veer Satara Sahakari Sakhar Karakhana, Ltd. Bhujinj) is organized by department of chemistry on Wednesday 31/01/2024 at 10:00 am. So all students should remain present for the same.



A handwritten signature in blue ink, appearing to read 'D. D. D.' with a horizontal line underneath.

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



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संस्थापक-अध्यक्ष
जनता शिक्षण संस्था, वाई

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डॉ. गुरुनाथ जी. फगरे
प्राचार्य

मोबा. नं. ९४२९९०७६३५ / ९४०४९४०३७९

संदर्भ क्र. : ५७१८/१०८३

श्री. शंकरराय दाजीबा गाढवे
उपाध्यक्ष

जनता शिक्षण संस्था, वाई

श्री. मदन प्रतापराव भोसले
अध्यक्ष

जनता शिक्षण संस्था, वाई

दिनांक : 24.01.2024

To,
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 Wednesday, 31.01.2024 at 10.30 am. Please grant the Permission.

Thanking you,



Yours faithfully,

Banani
Principal

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olc

BSL

23/1/2024



जनता शिक्षण संस्थेचे

किसन वीर महाविद्यालय, वाई

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

शिवाजी विद्यापीठ, कोल्हापूर संलग्नीत

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मोबा. नं. ९४२९९०७६३५ / ९४०४९४०३७९

श्री. शंकरराव दाजीबा गाडवे
उपाध्यक्ष

जनता शिक्षण संस्था, वाई

श्री. मदन प्रतापराव भोसले
अध्यक्ष

जनता शिक्षण संस्था, वाई

संदर्भ क्र. : 477A/1187

दिनांक : 13 FEB 2024
08/02/2024

To,

The Managing Director,

Kisan Veer Satara 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 53 students of our Kisan Veer Mahavidyalaya, Wai (Satara) with 7 staff visited your sugar factory on 31st January 2024.

During the visit concern employees of your sugar factory 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 co-operation extended during the visit. Expecting the same co-operation in future.

Thanking you,

Yours faithfully,

Principal

Kisan Veer Mahavidyalaya, Wai



Dr. G. N. J.

ole
BK

JANATA SHIKSHAN SANSTHA'S
KISAN VEER MAHAVIDYALAYA, WAI
DEPARTMENT OF CHEMISTRY
INDUSTRIAL VISIT

KISAN VEER SAHKARI SAKHAR KARKHANA Ltd., BHUINJ
ATTENDANCE
2023-2024

Date: 31/01/2024

Sr. No	Roll No.	Name of Participant	Class	Gender	Signature
1	20	Babar Sneha Sanjay.	B.Sc. III	Female	
2	22	Babar Sanjivani Hemantkumar	B.Sc. III	Female	
3	19	Nimbalkar Neha Jalinadar.	B.Sc. III	Female	
4	06	Shinde Sakshi Prakash.	B.Sc. III	Female	
5	57	Diksha Dattatray Gini	B.Sc. III	Female	
6	61	Jadhav snehal Mahendra	B.Sc. III	Female	
7	28	Jadhav Pratiksha Sadashiv	B.Sc. III	Female	
8	24	Yodav Sojal Pramod	B.Sc. III	Male	
9	26	Gurav Omkar Vijay	B.Sc. III	Male	
10	27	Bagade Deepak Dinkar	B.Sc. III	Male	
11	25	Mahangade Geunesh Dharmaji	B.Sc. III	Male	
12	31	Karande Aniket Ravindra	B.Sc. III	Male	
13	60	Adwal Prathartesh Sunil	B.Sc. III	Male	
14	102	Pratik Indrajit Bhaite	B.Sc. III	Male	
15	02	Gole Sanika Rajendra	B.Sc. III	Female	
16	04	Nikam Anisha Nivaj	B.Sc. III	-/-	
17	29	Pawas Supriya Arvind	B.Sc. III	-/-	
18	43	Shinde Nikita Pramod	B.Sc. III	-/-	
19	44	Kali Nikita Shaikant	B.Sc. III	-/-	
20	46	Jadhav Poonali Balkrishna	B.Sc. III	-/-	
21	50	Kadam Abhishek Sanjay	B.Sc. III	male	
22	51	Kumbhar Avishkar Harman	B.Sc. III	male	
23	05	Jagtap Sakshi Arvind	B.Sc. III	Female	
24	07	Jagtap Ruturaj Vijay	B.Sc. III	male	
25	134	Jadhav sabil sandeep	B.Sc. III	male	
26	09	Jedhe Sahil Bhannudes	B.Sc. III	male	



ATTENDANCE

Date: 31/01/2024

Sr. No	Roll No.	Name of Participant	Class	Gender	Signature
27	08	Jogteer Shubham Shaikant	B.Sc. III	male	
28	135	Jadhav Atharav Santosh	B.Sc. III	male	
29	42	Jaykar Satyam Satish	B.Sc. III	male	
30	47	Jaykar Ayush Kiran	B.Sc. III		
31	91	Torade Tejas Tanaji	B.Sc. III		
32	90	Raishikesh Sanjay Yadav	B.Sc. III		
33	37	Aatharv Ravindra Dhumal	B.Sc. III		
34	38	Hemant Shashikant Mandape	B.Sc. III	male	
35	133	Rajrohan Ramdas Shinde	B.Sc. III		
36	85	Sai Krishna Pisal	B.Sc. III		
37	39	Shaikant Nitin Gaikwad	B.Sc. III		
38	66	Nikhil Pandurang Bhosale	B.Sc. III		
39	70	Siddharth Pradip Sunawale	B.Sc. III		
40	52	Anis Salim Sayyad	B.Sc. III		
41	99	Pranav Ravindra Jadhav	B.Sc. III		
42	71	Sahil Kondiram Kadam	B.Sc. III		
43	72	Prasad Rajendra Bhosale	B.Sc. III		
44	58	Ahodge Revati Rajaram	B.Sc. III	Female	
45	03	Jadhav Pranav Santosh	B.Sc. III	male	
46	45	Ingale Vinit Jitenrao	B.Sc. III		
47	10	Vinay Ravindra Bhosale	B.Sc. III		
48	79	Shreyas Anil Jadhav	B.Sc. III		
49	81	Kedar Umesh Jadhav	B.Sc. III	male	
50	80	Prathmesh Navnath Jadhav	B.Sc. III		
51	41	Chavhan Sai Vijay	B.Sc. III		
52	21	Pisal Dhairyaail Sanjay	B.Sc. III	male	
53	03	Bhosale Trupti Krushnath	B.Sc. III	Female	
54			B.Sc. III		
55		Male - 37	B.Sc. III		
56		Female - 16	B.Sc. III		

Faculty - 07
Total - 66



Visit to Sugar Industry



