

# Dairy Science

## (Short Term Course)

Co-ordinate by:	Department of chemistry
Class:	M. Sc. II Analytical Chemistry
Batch Capacity:	25
No. of students Admitted:	25
Duration of the course:	3 months
Fee of course:	500/-
Lecture and practical started:	November , December and January
Tentative date of examination:	1 <sup>st</sup> Week of February
Tentative date of Result:	2 <sup>nd</sup> Week of February
Syllabus:	4 credits (20 Theory, 40Practicals)
Co-ordinator:	Mr. A.S.Gandule



  
Head  
Department of Chemistry  
S.S.G.M.College, Kupergaon

Rtyat Shikshan Sanstha's

**S.S.G.M. College, Kopargaon, Dist- Ahmednagar**

**Department of Chemistry**

**2021-2022**

**Short Term Course in Dairy Science**

### **Board of Studies (BOS)**

Department of Chemistry have decided to start Short term course in Dairy Science . For framing the Syllabus of said course, committee was constituted as follow.


#### **Board of Studies Member (BOS)**

- |                           |   |
|---------------------------|---|
| 1. Prin. Dr. Thopte S. R. | : Chairman                                |
| 2. Mr. Deshmukh A.K.      | : HOD of Chemistry                        |
| 3. Prof. Jadhav Ajit      | : Placement Officer                       |
| 4. Dr. Malpure N. V.      | : IQAC- Coordinator                       |
| 5. Dr. Konda Rakesh       | : Professional Expert                     |
| 6. Mr. MAITRIYA A D.      | : Director of Shodh Advantech, Aurangabad |

#### **Aims and Objectives of the course:**

- 1) To provide an adequate knowledge of the principles of processes involved in Dairy Science.
- 2) Instrumentation and applications of common analytical techniques
- 3) Knowledge perspective course
- 4) Application based curriculum
- 5) Understand the operational framework for best practices in Company .



  
**HEAD**  
**Deptt. Of Chemistry**  
**S. S. G. M. College, Kopargaon.**

Rayat Shikshan Sanstha's  
Shri Sadguru Gangageer Maharaj Science, Gautam Arts and  
Sanjivani Commerce College, Kopargaon  
Department of chemistry

Class – M.Sc. II Analytical chemistry

Date – 26/10/2021

2021-22

**Short Term Course in Dairy Science**

**Notice to Students**

All students of M.Sc. II Analytical chemistry are informed that Department of chemistry is conducting the Short Term Course entitled "Dairy science". All the interested students should submit their names to Prof. A. S. Gandule on or before 31-10-2021.

  
Co-ordinator,



  
Head  
Department of Chemistry  
S.S.G.M. College, Kopargaon

Rayat Shikshan Sanstha's  
Shri Sadguru Gangageer Maharaj Science, Gautam Arts and  
Sanjivani Commerce College, Kopargaon  
Department of chemistry

Class – M.Sc. II Analytical chemistry

Date – 27/10/2021

2021-22

Short Term Course in Dairy chemical science

Meeting Notice

Department of Chemistry conducts a Short Term Course in Dairy Science for M.Sc. Analytical chemistry students, the syllabus and working hours will be discussed and a complete programme have to prepared. Following members are requested to attend the meeting on 28/10/21 for the implementation of this academic year 2021-2022. The meeting will be held in Department of Chemistry.

  
Course Co-ordinator,



  
Head  
Department of Chemistry  
S.S.G.M. College, Kopargaon

Committee Members:

- 1) Prof P.D. kashid
- 2) Prof A.K. Deshmukh
- 3) Prof A. A. Lohakane
- 4) Prof C.S. Chaudhari
- 5) Prof D.J. Gadekar
- 6) Prof D. S. Gorde

Rayat Shikshan Sanstha's  
Shri Sadguru Gangageer Maharaj Science, Gautam Arts and  
Sanjivani Commerce College, Kopergaon  
Department of Chemistry  
Class: M.Sc. II Analytical Chemistry  
Date: 28 /10/2021

Short Term Course - Dairy Science.

Minutes of Meeting

The meeting of the Short Term Course Committee has been conducted on 28 /10/2021 at Department of Chemistry. In the meeting the following resolutions and decisions were made:

1. It was decided to finalize the syllabus of Short Term Course - Dairy Chemical Science.
2. For conducting the course the complete program of Theory and Practical's was designed.
3. As per the requirements of completion of the syllabus of the Short Term Course the working hours were decided.

  
Course Co-ordinator



  
Head  
Department of Chemistry  
S.S.G.M. College, Kopergaon





Rayat Shikshan Sanstha's  
Shri Sadguru Gangageer Maharaj Science, Gautam Arts & Sanjivani Commerce  
College Kopargaon-423601  
Dist-Ahmednagar, State: Maharashtra (India)  
Internal Quality Assurance Cell (IQAC)

### Syllabus Approval Letter

2021-2022

The IQAC committee has approved the submitted syllabus of short term /Certificate course planned to be conducted by the Department of Chemistry .

Sr.NO	Name of Course	Type of Course
01	Short term course in Dairy Science	Short term course

HOD OF Chemistry Department may Proceed accordingly .

Date :- 26/10/2021

Place :- Kopargaon

  
IQAC Coordinator  
IQAC-Coordinator  
S.S.G.M.College,Kopargaon



  
Head  
HEAD  
Department of Chemistry  
S. S. G M. College, Kopargaon

RAYAT SHIKSHAN SANSTHA'S  
**S.S.G.M.COLLEGE, COLLEGE, KOPARGAON**  
**DIST. - AHMEDNAGAR, 423601 (M.S.)**  
**CERTIFICATE COURSE IN DAIRY SCIENCE**  
 Academic Year

**Certificate course in Dairy Science**

**4 Credits**

**Syllabus**

**A. Theory**

1. Composition of milk
2. Nutritive value of milk
3. Physico-chemical properties of milk
4. Milk products
5. Preservatives in milk and milk products
6. Adulterants in milk and legal standards
7. Study of Govt. milk scheme and role of co-operative industries
8. Economics of milk production



**Total 2 Credits**

**B. Practical**

**Total 2 Credits**

1. Study of platform test
  - 1) Sediment test 2) Alcohol test 3) Clot on boiling (COB) test 4) Organoleptic and Temperature
2. Determination of specific gravity of milk from different source by using –
  - 1) Specific gravity bottle 2) Lactometer
3. Determination of fat content in sample of buffalo and cow milk by Gerber method
4. Determination of pH, acidity, total solids and lactose of buffalo and cow milk by Gerber method
5. Determination of casein in milk by pyne's formal titration method and calculation of the % of protein in milk
6. Detection of preservative in milk 1) Boric acid 2) Formaldehyde
7. Detection of adulterants like water, extraction of fat in milk sample 1) Neutralizers 2) Formalin 3) Sugar 4) Starch 5) Glucose 6) Urea 7) ammonium sulphate 8) salt 9) pulverized soap 10) detergents 11) water 12) skim milk powder 13) vegetable fat 14) benzoic and salicylic acid 15) borax and boric acid
8. Determination of chlorine content of the milk volumetrically
9. Study Tour to dairy industry

**References**

- 1) Outline of Dairy Technology- Oxford University press By- Sukumar De. (Edition-1983)
- 2) Dairy Chemistry and Animal Nutrition- M.M. Rai, Kalyani, Publishers, New Delhi 3<sup>rd</sup> Edition, 1980
- 3) Fundamentals of Dairy Chemistry- B.H. Webb, A.H. Hohnson, J.A. Alford, CBB, Publishers and Distributors.
- 4) Milk and Milk Products- C.H. Eckles, H. Macy, Tata McGraw Hill Publishing Company Ltd.

RAYAT SHIKSHAN SANSTHA'S  
S.S.G.M.COLLEGE, COLLEGE, KOPARGAON  
DIST. - AHMEDNAGAR, 423601 (M.S.)

CERTIFICATE COURSE IN DAIRY SCIENCE



**Aim of Course:-**

The aim of the course is to understand the processing of milk and its properties, their quality testing and also storage sanitation and effluent treatment. The course provides individuals with key knowledge of packaging, labeling and food safety. This course requires applying knowledge of science, technology and engineering to the processing and production of milk. The course has been designed for professionals, students aspiring to work in the field of dairy, all involved in implementing and maintaining product quality systems, quality control and quality assurance personnel, new product development personnel.

**Skills and opportunities:-**

Faculty of Food Safety and Quality, course is a professional course targeted to cater the food industry, as there is a demand for trained food professionals. The information, guidance, practical training and completion certificate will provide the participant with not one but many opportunities in the industry. This would come true in form of job roles and positions like that of auditors, quality assurance executives, quality control executives quality managers, position in NPD team, food consultants, food journalism and many more.





Rayat Shikshan Sanstha's  
SSGM College, Kopargaon  
Short term Course – Dairy Science  
Class: M.Sc. II- Analytical Chemistry (2021-2022)  
List of Enrolled Students

Sr. No	Name of Students	Sign
1	Dadiyal Simranjitkaur Ranjitsingh	<u>Dadiyal</u>
2	Shinde Snehal Nanasaheb	<u>Snehal</u>
3	Thombare Aishwarya Ravindra	<u>Thombare</u>
4	More Priyanka Raghunath	<u>More</u>
5	Rahane Shital Ramesh	<u>Rahane</u>
6	Ghotekar Priyanka Sunil	<u>Ghotekar</u>
7	Bogir Pratiksha Vishnu	<u>Bogir</u>
8	Aher Sakshi Balasaheb	<u>Aher</u>
9	Diwate Ankita Prakash	<u>Ankita</u>
10	Deokar Mayuri Balasaheb	<u>Deokar</u>
11	Navale Rupali Ramesh	<u>Navale</u>
12	Rohmare Shweta Vijay	<u>Shweta</u>
13	Yeshi Anuja Pramod	<u>Anuja</u>
14	Gaikwad Vidya Dilip	<u>Gaikwad</u>
15	Suralkar Pratiksha Bhimraj	<u>Suralkar</u>
16	Shinde Varsha Gorakshanath	<u>Shinde</u>
17	Pingat Priyanka Magan	<u>Pingat</u>
18	Sapte Vaishali Sakharam	<u>Sapte</u>
19	Bhagwat Ganesh Sunil	<u>Bhagwat</u>
20	Nagare Abhijeet Ramesh	<u>Abhijeet</u>
21	Raktate Deepak Karbhari	<u>Raktate DK</u>
22	Khillare Rushikesh Sampat	<u>Khillare</u>
23	Thorat Vivik Dilip	<u>Thorat</u>
24	Ghegadmal Sagar Balasaheb	<u>Ghegadmal</u>
25	Sapike Vivek Vilas	<u>Sapike</u>



Rayat Shikshan Sanstha's  
S.S.G.M. College, Kopargaon  
Dist: Ahmednagar.  
2021-2022



Short term Course- Admission form

Name	More Priyanka Raghunath
Class	M.sc II (Analytical Chemistry)
Address	At-Bhacatpue Tal-sinnar Dist-Nashik
Mobile No	9834500536

To,  
The Principle,  
SSGM College, Kopargaon, Dist: Ahmednagar.  
Sub: Request to an admission in the following shortterm course  
Dairy Chemical Science


Respected sir,  
I, the undersigned have been admitted in T.Y.B.Sc./M.Sc II (Analytical)  
Chemistry class in our college, I wish to complete above short term course run  
by our college. Kindly do me a favour by granting admission

Yours Faithfully

Sign: More

Name: More Priyanka Raghunath

Recommended for an admission in the short term course.

  
Chairman  
Short term course

  
Course Co-ordinator

  
Head of department  
Dept. of Chemistry  
S. S. G. M. College, Kopargaon







Rayat Shikshan Sanstha's  
S.S.G.M. College, Kopargaon  
Dist: Ahmednagar.  
2021-2022



Short term Course- Admission form

Name	Thorat vivek dilip
Class	Msc II Analytical chemistry
Address	At kopewadi, tal. kopergaon. dist. Ahmednagar
Mobile No	9730835837

To,

The Principle,

SSGM College, Kopargaon, Dist: Ahmednagar.

Sub: Request to an admission in the following shortterm course  
Dairy Chemical Science

Respected sir,


I, the undersigned have been admitted in T.Y.B.Sc./M.Sc II (Analytical) Chemistry class in our college, I wish to complete above short term course run by our college. Kindly do me a favour by granting admission

Yours Faithfully

Sign: Thorat

Name: Thorat vivek dilip

Recommended for an admission in the short term course.

  
Chairman  
Short term course

  
Course Co-ordinator

  
HEAD  
Deptt. Of Chemistry  
S. S. G. M. College, Kopargaon



Rayat Shikshan Sanstha's

-SSGM College, Kopargaon

**Short Term Course- A Certificate Course in Dairy Chemical Science**

**Class- M.Sc.II Analytical Chemistry**

**Time Table -2021-22**

**November-December 2021**

<b>Monday (theory)</b>	<b>Tuesday (theory)</b>	<b>Wednesday (theory)</b>
22/11/21 (PDK)	23/11/21 (PDK)	24/11/21 (PDK)
29/11/21 (ASG)	30/11/21 (ASG)	01/12/21 (ASG)
06/12/21 (DSG)	07/12/21 (DSG)	08/12/21 (DSG)
13/12/21 (AMN)	14/12/21 (PDK)	15/12/21 (ASG)
20/12/21 (PDK)	21/12/21 (PDK)	22/12/21 (PDK)
29/12/21 (ASG)		

**January 2022**

<b>Monday (theory)</b>	<b>Tuesday (theory)</b>	<b>Wednesday (theory)</b>
03/01/22 (AMN)	04/01/22 (AMN)	05/01/22 (AMN)

**February 2022**

<b>Monday (Practical)</b>	<b>Tuesday (practical)</b>	<b>Wednesday (practical)</b>
	01/02/22 (AKD)	02/02/22 (ASG)
03/02/22 (AKD)	04/02/22 (PDK)	05/02/22 (AKD)
07/02/22 (ASG)	08/02/22 (PDK)	09/02/22 (DSG)
10/02/22 (ASG)	11/02/22 (PDK)	12/02/22 (DSG)





Rayat Shikshan Sanstha's  
SSGM College, Kopergaon  
Short term Course: Dairy Science  
Class: M.Sc. II- Analytical Chemistry (2021-2022)  
Theory Attendance



Sr No	Name of Students	Date: 22/11/21	23/11/21	24/11/21	29/11/21	30/11/21
		1	2	3	4	5
1	Dadiyal Simranjitkaur R.	<u>Simran</u>	<u>Simran</u>	<u>Simran</u>	<u>Simran</u>	<u>Simran</u>
2	Shinde Snehal Nanasaheb	<u>Snehal</u>	<u>Snehal</u>	<u>Snehal</u>	<u>Snehal</u>	<u>Snehal</u>
3	Thombare Aishwarya Ravindra	<u>Thombare</u>	<u>Thombare</u>	<u>Thombare</u>	<u>Thombare</u>	<u>Thombare</u>
4	More Priyanka Raghunath	<u>More</u>	<u>More</u>	<u>More</u>	<u>More</u>	<u>More</u>
5	Rahane Shital Ramesh	<u>Rahane</u>	<u>Rahane</u>	<u>Rahane</u>	<u>Rahane</u>	<u>Rahane</u>
6	Ghotekar Priyanka Sunil	<u>Phore</u>	<u>Phore</u>	<u>Phore</u>	<u>Phore</u>	<u>Phore</u>
7	Bogir Pratiksha Vishnu	<u>Bogir</u>	<u>Bogir</u>	<u>Bogir</u>	<u>Bogir</u>	<u>Bogir</u>
8	Aher Sakshi Balasaheb	<u>Aher</u>	<u>Aher</u>	<u>Aher</u>	<u>Aher</u>	<u>Aher</u>
9	Diwate Ankita Prakash	<u>apd</u>	<u>apd</u>	<u>apd</u>	<u>apd</u>	<u>apd</u>
10	Deokar Mayuri Balasaheb	<u>MBD</u>	<u>MBD</u>	—	<u>MBD</u>	<u>MBD</u>
11	Navale Rupali Ramesh	<u>Rupali</u>	<u>Rupali</u>	<u>Rupali</u>	<u>Rupali</u>	<u>Rupali</u>
12	Rohmare Shweta Vijay	<u>Shweta</u>	<u>Shweta</u>	<u>Shweta</u>	<u>Shweta</u>	<u>Shweta</u>
13	Yeshi Anuja Pramod	<u>Anuja</u>	<u>Anuja</u>	<u>Anuja</u>	<u>Anuja</u>	<u>Anuja</u>
14	Gaikwad Vidya Dilip	<u>Gaikwad</u>	<u>Gaikwad</u>	<u>Gaikwad</u>	<u>Gaikwad</u>	<u>Gaikwad</u>
15	Suralkar Pratiksha Bhimraj	<u>Suralkar</u>	<u>Suralkar</u>	<u>Suralkar</u>	<u>Suralkar</u>	<u>Suralkar</u>
16	Shinde Varsha Gorakshanath	<u>Shinde</u>	<u>Shinde</u>	<u>Shinde</u>	<u>Shinde</u>	<u>Shinde</u>
17	Pingat Priyanka Magan	<u>Pingat</u>	<u>Pingat</u>	<u>Pingat</u>	<u>Pingat</u>	<u>Pingat</u>
18	Sapte Vaishali Sakharam	<u>Kapte</u>	<u>Kapte</u>	<u>Kapte</u>	<u>Kapte</u>	<u>Kapte</u>
19	Bhagwat Ganesh Sunil	<u>Bhagwat</u>	<u>Bhagwat</u>	<u>Bhagwat</u>	<u>Bhagwat</u>	<u>Bhagwat</u>
20	Nagare Abhijeet Ramesh	<u>Nagare</u>	<u>Nagare</u>	<u>Nagare</u>	<u>Nagare</u>	<u>Nagare</u>
21	Raktate Deepak Karbhari	<u>Raktate</u>	<u>Raktate</u>	<u>Raktate</u>	<u>Raktate</u>	<u>Raktate</u>
22	Khillare Rushikesh Sampat	<u>Khillare</u>	<u>Khillare</u>	<u>Khillare</u>	<u>Khillare</u>	<u>Khillare</u>
23	Thorat Vivik Dilip	<u>Thorat</u>	<u>Thorat</u>	<u>Thorat</u>	<u>Thorat</u>	<u>Thorat</u>
24	Ghegadmal Sagar Balasaheb	<u>Ghegadmal</u>	<u>Ghegadmal</u>	<u>Ghegadmal</u>	<u>Ghegadmal</u>	<u>Ghegadmal</u>
25	Sapike Vivek	<u>Sapike</u>	<u>Sapike</u>	<u>Sapike</u>	<u>Sapike</u>	<u>Sapike</u>



Rayat Shikshan Sanstha's  
SSGM College, Kopergaon  
Short term Course: Dairy Science  
Class: M.Sc. II- Analytical Chemistry (2021-2022)  
Theory Attendance



Sr No	Name of Students	Date:	1/12/21	6/12/21	7/12/21	8/12/21	18/12/21
			1	2	3	4	5
1	Dadiyal Simranjitkaur R.		<u>Dadiyal</u>	<u>Dadiyal</u>	<u>Dadiyal</u>	<u>Dadiyal</u>	<u>Dadiyal</u>
2	Shinde Snehal Nanasaheb		<u>Grehel</u>	<u>Grehel</u>	<u>Grehel</u>	<u>Grehel</u>	<u>Grehel</u>
3	Thombare Aishwarya Ravindra		<u>Thombare</u>	<u>Thombare</u>	<u>Thombare</u>	<u>Thombare</u>	<u>Thombare</u>
4	More Priyanka Raghunath		<u>More</u>	<u>More</u>	<u>More</u>	<u>More</u>	<u>More</u>
5	Rahane Shital Ramesh		<u>Rahane</u>	<u>Rahane</u>	<u>Rahane</u>	<u>Rahane</u>	<u>Rahane</u>
6	Ghotekar Priyanka Sunil		<u>Phote</u>	<u>Phote</u>	<u>Phote</u>	<u>Phote</u>	<u>Phote</u>
7	Bogir Pratiksha Vishnu		<u>Bogir</u>	<u>Bogir</u>	<u>Bogir</u>	<u>Bogir</u>	<u>Bogir</u>
8	Aher Sakshi Balasaheb		<u>Aher</u>	<u>Aher</u>	<u>Aher</u>	<u>Aher</u>	<u>Aher</u>
9	Diwate Ankita Prakash		<u>-</u>	<u>apd</u>	<u>apd</u>	<u>-</u>	<u>apd</u>
10	Deokar Mayuri Balasaheb		<u>MBD</u>	<u>-</u>	<u>MBD</u>	<u>MBD</u>	<u>-</u>
11	Navale Rupali Ramesh		<u>Rupali</u>	<u>Rupali</u>	<u>Rupali</u>	<u>Rupali</u>	<u>Rupali</u>
12	Rohmare Shweta Vijay		<u>Shweta</u>	<u>Shweta</u>	<u>Shweta</u>	<u>Shweta</u>	<u>Shweta</u>
13	Yeshi Anuja Pramod		<u>Anuja</u>	<u>Anuja</u>	<u>Anuja</u>	<u>Anuja</u>	<u>Anuja</u>
14	Gaikwad Vidya Dilip		<u>Gaikwad</u>	<u>Gaikwad</u>	<u>Gaikwad</u>	<u>Gaikwad</u>	<u>Gaikwad</u>
15	Suralkar Pratiksha Bhimraj		<u>Suralkar</u>	<u>Suralkar</u>	<u>Suralkar</u>	<u>Suralkar</u>	<u>Suralkar</u>
16	Shinde Varsha Gorakshanath		<u>Shinde</u>	<u>Shinde</u>	<u>Shinde</u>	<u>Shinde</u>	<u>Shinde</u>
17	Pingat Priyanka Magan		<u>Pingat</u>	<u>Pingat</u>	<u>Pingat</u>	<u>Pingat</u>	<u>Pingat</u>
18	Sapte Vaishali Sakharan		<u>Sapte</u>	<u>Sapte</u>	<u>Sapte</u>	<u>Sapte</u>	<u>Sapte</u>
19	Bhagwat Ganesh Sunil		<u>Bhagwat</u>	<u>Bhagwat</u>	<u>Bhagwat</u>	<u>Bhagwat</u>	<u>Bhagwat</u>
20	Nagare Abhijeet Ramesh		<u>Abhijeet</u>	<u>Abhijeet</u>	<u>Abhijeet</u>	<u>Abhijeet</u>	<u>Abhijeet</u>
21	Raktate Deepak Karbhari		<u>Raktate</u>	<u>Raktate</u>	<u>Raktate</u>	<u>Raktate</u>	<u>Raktate</u>
22	Khillare Rushikesh Sampat		<u>Khillare</u>	<u>Khillare</u>	<u>Khillare</u>	<u>Khillare</u>	<u>Khillare</u>
23	Thorat Vivik Dilip		<u>Thorat</u>	<u>Thorat</u>	<u>Thorat</u>	<u>Thorat</u>	<u>Thorat</u>
24	Ghegadmal Sagar Balasaheb		<u>Ghegadmal</u>	<u>Ghegadmal</u>	<u>Ghegadmal</u>	<u>Ghegadmal</u>	<u>Ghegadmal</u>
25	Sapike Vivek		<u>Sapike</u>	<u>Sapike</u>	<u>Sapike</u>	<u>Sapike</u>	<u>Sapike</u>



Rayat Shikshan Sanstha's  
SSGM College, Kopargaon  
Short term Course: Dairy Science  
Class: M.Sc. II- Analytical Chemistry (2021-2022)  
**Theory Attendance**



Sr No	Name of Students	Date:					
		14/12/21	15/12/21	20/12/21	21/12/21	22/12/21	
		1	2	3	4	5	
1	Dadiyal Simranjitkaur R.	<u>Dadiyal</u>	<u>Dadiyal</u>	<u>Dadiyal</u>	<u>Dadiyal</u>	<u>Dadiyal</u>	
2	Shinde Snehal Nanasaheb	<u>Snehal</u>	<u>Snehal</u>	<u>Snehal</u>	<u>Snehal</u>	<u>Snehal</u>	
3	Thombare Aishwarya Ravindra	<u>Thombare</u>	<u>Thombare</u>	<u>Thombare</u>	<u>Thombare</u>	<u>Thombare</u>	
4	More Priyanka Raghunath	<u>More</u>	<u>More</u>	<u>More</u>	<u>More</u>	<u>More</u>	
5	Rahane Shital Ramesh	<u>Rahane</u>	<u>Rahane</u>	<u>Rahane</u>	<u>Rahane</u>	<u>Rahane</u>	
6	Ghotekar Priyanka Sunil	<u>Ghotekar</u>	<u>Ghotekar</u>	<u>Ghotekar</u>	<u>Ghotekar</u>	<u>Ghotekar</u>	
7	Bogir Pratiksha Vishnu	<u>Bogir</u>	<u>Bogir</u>	<u>Bogir</u>	<u>Bogir</u>	<u>Bogir</u>	
8	Aher Sakshi Balasaheb	<u>Aher</u>	<u>Aher</u>	<u>Aher</u>	<u>Aher</u>	<u>Aher</u>	
9	Diwate Ankita Prakash	<u>Diwate</u>	<u>Diwate</u>	-	<u>Diwate</u>	<u>Diwate</u>	
10	Deokar Mayuri Balasaheb	<u>Deokar</u>	<u>Deokar</u>	<u>Deokar</u>	-	<u>Deokar</u>	
11	Navale Rupali Ramesh	<u>Navale</u>	<u>Navale</u>	<u>Navale</u>	<u>Navale</u>	<u>Navale</u>	
12	Rohmare Shweta Vijay	<u>Rohmare</u>	<u>Rohmare</u>	<u>Rohmare</u>	<u>Rohmare</u>	<u>Rohmare</u>	
13	Yeshi Anuja Pramod	<u>Yeshi</u>	<u>Yeshi</u>	<u>Yeshi</u>	<u>Yeshi</u>	<u>Yeshi</u>	
14	Gaikwad Vidya Dilip	<u>Gaikwad</u>	<u>Gaikwad</u>	<u>Gaikwad</u>	<u>Gaikwad</u>	<u>Gaikwad</u>	
15	Suralkar Pratiksha Bhimraj	<u>Suralkar</u>	<u>Suralkar</u>	<u>Suralkar</u>	<u>Suralkar</u>	<u>Suralkar</u>	
16	Shinde Varsha Gorakshanath	<u>Shinde</u>	<u>Shinde</u>	<u>Shinde</u>	<u>Shinde</u>	<u>Shinde</u>	
17	Pingat Priyanka Magan	<u>Pingat</u>	<u>Pingat</u>	<u>Pingat</u>	<u>Pingat</u>	<u>Pingat</u>	
18	Sapte Vaishali Sakharan	<u>Sapte</u>	<u>Sapte</u>	<u>Sapte</u>	<u>Sapte</u>	<u>Sapte</u>	
19	Bhagwat Ganesh Sunil	<u>Bhagwat</u>	<u>Bhagwat</u>	<u>Bhagwat</u>	<u>Bhagwat</u>	<u>Bhagwat</u>	
20	Nagare Abhijeet Ramesh	<u>Nagare</u>	<u>Nagare</u>	<u>Nagare</u>	<u>Nagare</u>	<u>Nagare</u>	
21	Raktate Deepak Karbhari	<u>Raktate</u>	<u>Raktate</u>	<u>Raktate</u>	<u>Raktate</u>	<u>Raktate</u>	
22	Khillare Rushikesh Sampat	<u>Khillare</u>	<u>Khillare</u>	<u>Khillare</u>	<u>Khillare</u>	<u>Khillare</u>	
23	Thorat Vivik Dilip	<u>Thorat</u>	<u>Thorat</u>	<u>Thorat</u>	<u>Thorat</u>	<u>Thorat</u>	
24	Ghegadmal Sagar Balasaheb	<u>Ghegadmal</u>	<u>Ghegadmal</u>	<u>Ghegadmal</u>	<u>Ghegadmal</u>	<u>Ghegadmal</u>	
25	Sapike Vivek	<u>Sapike</u>	<u>Sapike</u>	<u>Sapike</u>	<u>Sapike</u>	<u>Sapike</u>	



Rayat Shikshan Sanstha's  
SSGM College, Kopergaon  
Short term Course: Dairy Science  
Class: M.Sc. II- Analytical Chemistry (2021-2022)  
Theory Attendance



Sr No	Name of Students	Date:				
		29/12/22	31/1/22	4/1/22	5/1/22	
		1	2	3	4	5
1	Dadiyal Simranjitkaur R.	<u>Sadiyal</u>	<u>Sadiyal</u>	<u>Sadiyal</u>	<u>Sadiyal</u>	<u>Sadiyal</u>
2	Shinde Snehal Nanasaheb	<u>Grehel</u>	<u>Grehel</u>	<u>Grehel</u>	<u>Grehel</u>	<u>Grehel</u>
3	Thombare Aishwarya Ravindra	<u>Thombare</u>	<u>Thombare</u>	<u>Thombare</u>	<u>Thombare</u>	<u>Thombare</u>
4	More Priyanka Raghunath	<u>More</u>	<u>More</u>	<u>More</u>	<u>More</u>	<u>More</u>
5	Rahane Shital Ramesh	<u>Rahane</u>	<u>Rahane</u>	<u>Rahane</u>	<u>Rahane</u>	<u>Rahane</u>
6	Ghotekar Priyanka Sunil	<u>Photekar</u>	<u>Photekar</u>	<u>Photekar</u>	<u>Photekar</u>	<u>Photekar</u>
7	Bogir Pratiksha Vishnu	<u>Bogir</u>	<u>Bogir</u>	<u>Bogir</u>	<u>Bogir</u>	<u>Bogir</u>
8	Aher Sakshi Balasaheb	<u>Aher</u>	<u>Aher</u>	<u>Aher</u>	<u>Aher</u>	<u>Aher</u>
9	Diwate Ankita Prakash	<u>apd</u>	<u>apd</u>	<u>apd</u>	<u>apd</u>	<u>apd</u>
10	Deokar Mayuri Balasaheb	-	<u>MBD</u>	<u>MBD</u>	<u>MBD</u>	<u>MBD</u>
11	Navale Rupali Ramesh	<u>Navale</u>	<u>Navale</u>	<u>Navale</u>	<u>Navale</u>	<u>Navale</u>
12	Rohmare Shweta Vijay	<u>Shweta</u>	<u>Shweta</u>	<u>Shweta</u>	<u>Shweta</u>	<u>Shweta</u>
13	Yeshi Anuja Pramod	<u>Anuja</u>	<u>Anuja</u>	<u>Anuja</u>	<u>Anuja</u>	<u>Anuja</u>
14	Gaikwad Vidya Dilip	<u>Gaikwad</u>	<u>Gaikwad</u>	<u>Gaikwad</u>	<u>Gaikwad</u>	<u>Gaikwad</u>
15	Suralkar Pratiksha Bhimraj	<u>Suralkar</u>	<u>Suralkar</u>	<u>Suralkar</u>	<u>Suralkar</u>	<u>Suralkar</u>
16	Shinde Varsha Gorakshanath	<u>Shinde</u>	<u>Shinde</u>	<u>Shinde</u>	<u>Shinde</u>	<u>Shinde</u>
17	Pingat Priyanka Magan	<u>Pingat</u>	<u>Pingat</u>	<u>Pingat</u>	<u>Pingat</u>	<u>Pingat</u>
18	Sapte Vaishali Sakharam	<u>Kapte</u>	<u>Kapte</u>	<u>Kapte</u>	<u>Kapte</u>	<u>Kapte</u>
19	Bhagwat Ganesh Sunil	<u>Bhagwat</u>	<u>Bhagwat</u>	<u>Bhagwat</u>	<u>Bhagwat</u>	<u>Bhagwat</u>
20	Nagare Abhijeet Ramesh	<u>Nagare</u>	<u>Nagare</u>	<u>Nagare</u>	<u>Nagare</u>	<u>Nagare</u>
21	Raktate Deepak Karbhari	<u>Raktate</u>	<u>Raktate</u>	<u>Raktate</u>	<u>Raktate</u>	<u>Raktate</u>
22	Khillare Rushikesh Sampat	<u>Khillare</u>	<u>Khillare</u>	<u>Khillare</u>	<u>Khillare</u>	<u>Khillare</u>
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24	Ghegadmal Sagar Balasaheb	<u>Ghegadmal</u>	<u>Ghegadmal</u>	<u>Ghegadmal</u>	<u>Ghegadmal</u>	<u>Ghegadmal</u>
25	Sapike Vivek	<u>Sapike</u>	<u>Sapike</u>	<u>Sapike</u>	<u>Sapike</u>	<u>Sapike</u>











Rtyat Shikshan Sanstha's

**S.S.G.M. College, Kopergaon, Dist- Ahmednagar**  
**Department of Chemistry**

**2021 - 22**

**Question Paper of Short Term Course in Dairy Science**

**Que. Multiple Choice questions.**

**Total Marks: 50**

**N.B. 1. All questions are compulsory**

**2. Each question carry two marks.**

1. By regulation, milk from cows treated with antibiotics usually must be withheld for \_\_\_ hours.

- a) 48 - 72
- b) 30 - 60
- c) 48 - 108
- d) 72 - 96

2. Rules developed by the \_\_\_ are designed to protect the health and welfare of consumers.

- a) United States Department of Agriculture (USDA)
- b) Protein and Lactose Organization (PLO)
- c) Future Farmers of America (FFA)
- d) Food and Drug Administration (FDA)

3. What is the principal carbohydrate in the milks of all mammals?

- a. Lactose
- b. Glucose
- c. Sucrose
- d. Fructose

4. Percentage of water in buffalo milk is:-

- a. 65-67 %
- b. 70-75 %
- c. 80-85 %
- d. 87-90 %

**Dairy Technology Mcq Questions**

5. Soft fats in milk fat are:-

- a. Lauric & Stearic
- b. Capric & Lauric
- c. Oleic & Butyric
- d. Oleic & Lauric

6. Principal protein in milk is:-

- a. Albumin
- b. Lactalbumin
- c. Casein
- d. Lactoglobulin

7. Percentage of mineral matter in milk is about :-

- a. 1 %
- b. 0.7 %
- c. 1.5 %
- d. 0.05 %

8. Example of soft cheese is:-

- a. Cheddar
- b. Swiss
- c. Brick
- d. Cottage



9. Under which of the following weather conditions would you expect to observe the greatest decrease in milk yield per cow?

- a) Cold and dry
- b) Hot and humid
- c) Cool and humid
- d) Warm and dry

10. Mixture of milk and cream containing not less than 10.5 percent milk fat, but less than 18 percent milk fat, is the definition of?

- a) Light whipping cream
- b) Light cream
- c) Half-and-half
- d) Heavy cream

Dairy Technology Mcq Questions

11. The feed additive isoacid gives a \_\_\_ pound daily milk response, with maximum response in early lactation.

- a) 2 to 4
- b) 4 to 6
- c) 6 to 8
- d) 8 to 10

Dairy Technology Mcq Questions

12. Lactose has water solubility of

- a. 100%
- b. 50%
- c. 18%
- d. 25%

13. Which enzyme is tested for cream pasteurization?

- a. Plasmin
- b. Phosphatas
- c. Catalase
- d. peroxidase

14. Milk is a good source of all water-soluble vitamins except for \_\_\_\_

- a) Cyanocobalmin
- b) Riboflavin
- c) Ascorbic Acid
- d) Thiamine

15. \_\_\_\_ is a milk process that makes milk more easily digested by those with a sensitive digestive system.

- a) Ionization
- b) Evaporation
- c) Pasteurization
- d) Homogenization

16. \_\_\_\_ amino acids are commonly found in milk proteins, including the essential amino acids.

- a) 7
- b) 12
- c) 14
- d) 19

17. Summer milk has been estimated to contain 1.6 times as much vitamin \_\_\_\_ as winter milk.

- a) A
- b) B
- c) C
- d) D

18. The milk becomes the property of the buyer once ?

- a) The transport truck reaches the plant
- b) It is loaded into the transport truck on the farm



- c) The transport truck leaves the farm
  - d) It is unloaded into the processor's bulk tanks
19. Cows with \_\_\_\_ have a higher incidence of mastitis because physical injury is more likely.
- a) Sickled hocks
  - b) Horns
  - c) Lower foot angles
  - d) Pendulous udders
20. Of the listed below products, which contains no dairy ingredients?
- a) Gelato
  - b) Sherbet
  - c) Custard
  - d) Sorbet
21. As it comes from a cow, the solids portion of milk contains approximately 3.7 percent fat and \_\_\_\_ percent solids-not-fat.
- a) 3%
  - b) 6%
  - c) 9%
  - d) 12%
22. Milk contains 87 % water and the rest is solids and fats. Which of the following is not included as milk solid?
- a) Protein
  - b) Water
  - c) Carbohydrate
  - d) Milk Fat
23. The part of the mammary gland where milk is produced is called:
- a) Capillary
  - b) Teat Cistern
  - c) Chine
  - d) Alveolus
24. The heritability of the traits for milk production is:
- a) 15%
  - b) 25%
  - c) 55%
  - d) 100%
25. The Primary Milk carbohydrate is:
- a) Leucine
  - b) Sucrose
  - c) Arginine
  - d) Lactose



Rayat Shikshan Sanstha's  
**SSGM College, Kopergaon**  
 Result of Short term Course – Dairy Science  
 Class: M.Sc. II- Analytical Chemistry (2021-2022)

Sr. No	Name of Students	Marks out of 50
1	Dadiyal Simranjitkaur Ranjitsingh	41
2	Shinde Snehal Nanasaheb	36
3	Thombare Aishwarya Ravindra	35
4	More Priyanka Raghunath	33
5	Rahane Shital Ramesh	38
6	Ghotekar Priyanka Sunil	37
7	Bogir Pratiksha Vishnu	32
8	Aher Sakshi Balasaheb	31
9	Diwate Ankita Prakash	33
10	Deokar Mayuri Balasaheb	35
11	Navale Rupali Ramesh	35
12	Rohmare Shweta Vijay	36
13	Yeshi Anuja Pramod	34
14	Gaikwad Vidya Dilip	39
15	Suralkar Pratiksha Bhimraj	37
16	Shinde Varsha Gorakshanath	37
17	Pingat Priyanka Magan	32
18	Sapte Vaishali Sakharam	32
19	Bhagwat Ganesh Sunil	33
20	Nagare Abhijeet Ramesh	31
21	Raktate Deepak Karbhari	32
22	Khillare Rushikesh Sampat	36
23	Thorat Vivik Dilip	34
24	Ghegadmal Sagar Balasaheb	36
25	Sapike Vivek	40

Rayat Shikshan Sanstha's  
S.S.G.M College Kopargaon  
Dist:-Ahmednagar

Certificate Course  
Feedback form( Year 2021-2022)  
How you like this activity ?  
(Please tick(✓) on the appropriate option)

Sr. No	Criteria's	Excellent	Very Good	Good	Average	Poor
1	Content of curriculum		✓			
2	Quality of Lectures		✓			
3	Quality of Practical's		✓			
4	Arrangement of Tour and hands on training collaboratively organized			✓		
5	Is the course is applicable for entrepreneurship development in your future life	✓				
6	Is the course is beneficial for students and parents as far as environment & crop production is concerned	✓				

Any Suggestions :-

Name of the Students :- Thorat vivek dilip

Class:- MSc II Analytical chemistry

Signature :- Thorat

Rayat Shikshan Sanstha's  
S.S.G.M College Kopargaon  
Dist:-Ahmednagar

Certificate Course  
Feedback form( Year 2021-2022)  
How you like this activity ?  
(Please tick(✓)on the appropriate option)

Sr. No	Criteria's	Excellent	Very Good	Good	Average	Poor
1	Content of curriculum					
2	Quality of Lectures		✓			
3	Quality of Practical's			✓		
4	Arrangement of Tour and hands on training collaboratively organized			✓		
5	Is the course is applicable for entrepreneurship development in your future life			✓		
6	Is the course is beneficial for students and parents as far as environment & crop production is concerned			✓		

Any Suggestions :-

Name of the Students :- Bogir Pratiksha Vishnu.

Class:- MSc (II) Analytical

Signature :- Bogir



Rayat Shikshan Sanstha's  
S.S.G.M College Kopargaon  
Dist:-Ahmednagar

Certificate Course  
Feedback form( Year 2021-2022)  
How you like this activity ?  
(Please tick(✓)on the appropriate option)

Sr. No	Criteria's	Excellent	Very Good	Good	Average	Poor
1	Content of curriculum		✓			
2	Quality of Lectures	✓				
3	Quality of Practical's	✓				
4	Arrangement of Tour and hands on training collaboratively organized			✓		
5	Is the course is applicable for entrepreneurship development in your future life	✓				
6	Is the course is beneficial for students and parents as far as environment & crop production is concerned		✓			

Any Suggestions :-

Name of the Students :-.....vivek Vilas Sapike.....

Class:- ....MSc- II (Analytical chem).....

Signature :-.....Bapire.....



Rayat Shikshan Sanstha's  
SHRI SADGURU GANGAGEER MAHARAJ SCIENCE, GAUTAM  
ARTS & SANJIVANI COMMERCE COLLEGE, KOPARGAON  
DIST. AHMEDNAGAR 423 601, MAHARASHTRA, INDIA  
AFFILIATED TO SAVITRIBAI PHULE PUNE UNIVERSITY, PUNE



### Certificate of appreciation

This is to certify that.....of Class  
..... has Successfully completed short term course in  
.....for academic  
year .....from.....and secured .....Grade.

Co-ordinator

Head of Department

Dr. R. R. Sanap  
I/C Principal






**Rayat Shikshan Sanstha's  
Shri Sadguru Gangageer Maharaj Science, Gautam Arts and  
Sanjivani Commerce College, Kopargaon**

## Report

The department of chemistry conducted a Short Term course entitled **Dairy Science**. A Total 25 students of M.Sc. II. Analytical Chemistry were admitted in the course. The duration of course was three months. The course was conducted satisfactorily by the Dept. of chemistry.



  
Head,  
Department of Chemistry,  
S.S.G.M. College, Kopargaon.  
**HEAD**  
**Deptt. Of Chemistry**  
S. S. G. M. College, Kopargaon