

Dairy Science

(Short Term Course)

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




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

Rtyat Shikshan Sanstha's

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

Department of Chemistry

2020-2021

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.S. | : Chairman |
| 2. Mr. Deshmukh A.K. | :HOD of Chemistry |
| 3. Prof. JadhavAjit | :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 – 26/11/2020

2020-21

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 30-11-2020.


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, Kopergaon
Department of chemistry

Class – M.Sc. II Analytical chemistry

Date – 30/11/2020

2020-21

Short Term Course in Dairy 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 01/12/20 for the implementation of this academic year 2020-2021. The meeting will be held in Department of Chemistry.


Course Co-ordinator,




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

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, Kopargaon
Department of Chemistry
Class: M.Sc. II Analytical Chemistry
Date: 30/11/2020

Short Term Course - Dairy Science.

Minutes of Meeting

The meeting of the Short Term Course Committee has been conducted on 30/11/2020 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 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
Head
Department of Chemistry
S.S.G.M. College, Kopargaon



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

2020-21

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 :- 10/08/2020

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 3rd 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,
Shri Sadguru Gangageer Maharaj Science, Gautam Arts and Sanjivani Commerce College,
Kopargaon, Dist.-Ahmednagar

Department of Chemistry
Short Term Course - Dairy Science
Year 2020-21

Sr. No.	Name of Students
1	Aher Shruti Rajendra
2	Aher Shubham Harichandra
3	Bankar Anuja Rajendra
4	Bhagwat Monali Tarachand
5	Chaudhari Sujata Annasaheb
6	Gade Suvarna Madhukar
7	Gadhe Pooja Vishwanath
8	Gaikwad Bhavana Sanjay
9	Gaikwad Pranali Bhagwan
10	Gaikwad Sunita Ankush
11	Ghule Pratiksha Dattatray
12	Gorde Dipali Anandrao
13	Navale Gayatri Arun
14	Sangale Nikita Punjaram
15	Sanvatsarkar Sneha Kailas
16	Shinde Priyanka Madhukar
17	Shinde Sukanya Babasaheb
18	Tambe Ketan
19	Thombare Sudarshan
20	Wani Monika
21	Turakane Monika




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



Rayat Shikshan Sanstha's
S.S.G.M. College, Kopargaon



Short term Course- Admission form

Name	Aher shruti Rajendra
Class	Msc - II (Analytical chemistry)
Address	Alp - Yeggaon Tal- Kopergaon.
Mobile No	9657317967

To,

The Principal

SSGM College, Kopargaon, Dist: Ahmednagar.



Sub: Request to admission in the following short term course

"...Dairy Chemical Science....."

Respected sir,


I, the undersigned have been admitted in 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: Shrutti

Name: Aher shruti Rajendra .

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

Short term Course- Admission form



Name	Bamkale Anuja Rajendra .
Class	MSc II Analytical chemistry .
Address	Alp Sangvi Bhusale . Tal - Kopergaon .
Mobile No	8805569624 .

To,

The Principal

SSGM College, Kopargaon, Dist: Ahmednagar.

Sub: Request to admission in the following short term course

"...Dairy Chemical Science....."

Respected sir,


I, the undersigned have been admitted in 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: Bamkale

Name: Bamkale Anuja Rajendra .

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, Kopergaon



Rayat Shikshan Sanstha's

SSGM College, Kopergaon

Short Term Course- A Certificate Course in Dairy Chemical Science

Class- M.Sc.II Analytical Chemistry

Time Table -2020-21

December 2020

Monday (theory)	Tuesday (theory)	Wednesday (theory)
02/12/20 (PDK)	03/12/20 (PDK)	04/12/20 (PDK)
09/12/20 (ASG)	10/12/20 (ASG)	11/12/20 (ASG)
16/12/20 (RKJ)	17/12/20 (RKJ)	18/12/20 (RKJ)
23/12/20 (AMN)	24/12/20 (PDK)	-

January 2021

Monday (theory)	Tuesday (theory)	Wednesday (theory)
06/01/2021 (PDK)	07/1/2021 (PDK)	08/01/2021 (PDK)
13/01/2021 (ASG)	14/01/2021 (ASG)	15/01/2021 (ASG)
27/01/2021 (AMN)	28/01/2021 (AMN)	29/01/2021 (AMN)

February 2021

Monday (Practical)	Tuesday (practical)	Wednesday (practical)
3/2/2021 (PDK)	4/2/2021(AKD)	5/2/2021 (AMN)
10/2/2021 (AKD)	11/2/2021 (PDK)	12/2/2021(AKD)
17/2/2021 (AMN)	18/2/2021 (AMN)	-



Rayat Shikshan Sanstha's

S.S.G.M. College, Kopergaon

Attendance of the students

Dairy : Dairy Science

Sr. No.	Name of the students	02/12/20	03/12/20	04/12/20	09/12/20	10/12/20
1.	Aher Shruti Rajendra	Shruti	Shruti	Shruti	Shruti	Shruti
2.	Aher Shubham Harichandra	Shubham	Shubham	Shubham	Shubham	Shubham
3.	Bankar Anuja Rajendra	Anuja	Anuja	Anuja	Anuja	Anuja
4.	Bhagwat Monali tarachand	—	—	—	—	—
5.	Chaudhari Sujata Annasaheb	Sujata	Sujata	Sujata	Sujata	Sujata
6.	Gade Suvarna Madhukar	Gade	Gade	Gade	Gade	Gade
7.	Gadhe Pooja Vishwanath	Pooja	Pooja	Pooja	Pooja	Pooja
8.	Gaikwad Bhavana Sanjay	Bhavana	Bhavana	Bhavana	Bhavana	Bhavana
9.	Gaikwad Pranali Bhagwan	Pranali	Pranali	Pranali	Pranali	Pranali
10.	Gaikwad Sunita Ankush	Sunita	Sunita	Sunita	Sunita	Sunita
11.	Ghule Pratiksha Dattatray	Pratiksha	Pratiksha	Pratiksha	Pratiksha	Pratiksha
12.	Gorde Dipali Anandrao	Dipali	Dipali	Dipali	Dipali	Dipali
13.	Navale Gayatri Arun	Gayatri	Gayatri	Gayatri	Gayatri	Gayatri
14.	Sangale Nikita Punjaram	Nikita	Nikita	Nikita	Nikita	Nikita
15.	Sanvatsarkar Sneha kailas	Sneha	Sneha	Sneha	Sneha	Sneha
16.	Shinde Priyanka Madhukar	Priyanka	Priyanka	Priyanka	Priyanka	Priyanka
17.	Tambe ketan	Ketan	Ketan	Ketan	Ketan	Ketan
18.	Thombare Sudarshan	Sudarshan	Sudarshan	Sudarshan	Sudarshan	Sudarshan
19.	Wani Monika	Monika	Monika	Monika	Monika	Monika
20.	Turkane Monika	Monika	Monika	Monika	Monika	Monika
21.	Shinde Sukanya	Shinde	Shinde	Shinde	Shinde	Shinde



Rayat Shikshan Sanstha's

S.S.G.M. College, Kopergaon

Attendance of the students

Dairy ~~Technical~~ Science

Sr. No.	Name of the students	11/12/20	16/12/20	17/12/20	18/12/20	23/12/20
1.	Aher Shruti Rajendra	shrubti	shrubti	shrubti	shrubti	shrubti
2.	Aher Shubham Harichandra	shubham	shubham	shubham	shubham	shubham
3.	Bankar Anuja Rajendra	Bankar	Bankar	Bankar	Bankar	Bankar
4.	Bhagwat Monali tarachand	—	—	—	—	—
5.	Chaudhari Sujata Annasaheb	Chaudhari	Chaudhari	Chaudhari	Chaudhari	Chaudhari
6.	Gade Suvarna Madhukar	Gade	Gade	Gade	Gade	Gade
7.	Gadhe Pooja Vishwanath	Gadhe	Gadhe	Gadhe	Gadhe	Gadhe
8.	Gaikwad Bhavana Sanjay	Gaikwad	Gaikwad	Gaikwad	Gaikwad	Gaikwad
9.	Gaikwad Pranali Bhagwan	Gaikwad	Gaikwad	Gaikwad	Gaikwad	Gaikwad
10.	Gaikwad Sunita Ankush	Gaikwad	Gaikwad	Gaikwad	Gaikwad	Gaikwad
11.	Ghule Pratiksha Dattatray	Ghule	Ghule	Ghule	Ghule	Ghule
12.	Gorde Dipali Anandrao	Gorde	—	Gorde	Gorde	—
13.	Navale Gayatri Arun	Navale	Navale	Navale	Navale	Navale
14.	Sangale Nikita Punjaram	Sangale	Sangale	Sangale	Sangale	Sangale
15.	Sanvatsarkar Sneha kailas	Sanvatsarkar	Sanvatsarkar	Sanvatsarkar	Sanvatsarkar	Sanvatsarkar
16.	Shinde Priyanka Madhukar	Shinde	Shinde	Shinde	Shinde	Shinde
17.	Tambe ketan	Tambe	Tambe	Tambe	Tambe	Tambe
18.	Thombare Sudarshan	Thombare	Thombare	Thombare	Thombare	Thombare
19.	Wani Monika	Wani	Wani	Wani	Wani	Wani
20.	Turkane Monika	Turkane	Turkane	Turkane	Turkane	Turkane
21.	Shinde Sukanya	shinde	shinde	—	shinde	shinde



Rayat Shikshan Sanstha's

S.S.G.M. College, Kopergaon

Attendance of the students

Dairy Science

Sr. No.	Name of the students	24/12/20	06/1/21	07/1/21	08/1/21	13/1/21
1.	Aher Shruti Rajendra	Shruti	Shruti	Shruti	Shruti	Shruti
2.	Aher Shubham Harichandra	Shubh	Shubh	Shubh	Shubh	Shubh
3.	Bankar Anuja Rajendra	Bankar	Bankar	Bankar	Bankar	Bankar
4.	Bhagwat Monali tarachand	-	-	-	-	-
5.	Chaudhari Sujata Annasaheb	Sujata	Sujata	Sujata	Sujata	Sujata
6.	Gade Suvarna Madhukar	Gade	Gade	Gade	Gade	Gade
7.	Gadhe Pooja Vishwanath	Poo	Poo	Poo	Poo	Poo
8.	Gaikwad Bhavana Sanjay	Gaikwad	Gaikwad	Gaikwad	Gaikwad	Gaikwad
9.	Gaikwad Pranali Bhagwan	Gaikwad	Gaikwad	Gaikwad	Gaikwad	Gaikwad
10.	Gaikwad Sunita Ankush	Gaikwad	Gaikwad	Gaikwad	Gaikwad	Gaikwad
11.	Ghule Pratiksha Dattatray	Ghule	Ghule	Ghule	Ghule	Ghule
12.	Gorde Dipali Anandrao	Dygrade	Dygrade	Dygrade	Dygrade	Dygrade
13.	Navale Gayatri Arun	Shinde	Shinde	Shinde	Shinde	Shinde
14.	Sangale Nikita Punjaram	Nikita	Nikita	Nikita	Nikita	Nikita
15.	Sanvatsarkar Sneha kailas	Sneha	Sneha	Sneha	Sneha	Sneha
16.	Shinde Priyanka Madhukar	Priyanka	Priyanka	Priyanka	Priyanka	Priyanka
17.	Tambe ketan	Tambe	Tambe	Tambe	Tambe	Tambe
18.	Thombare Sudarshan	Tambe	Tambe	Tambe	Tambe	Tambe
19.	Wani Monika	Mwani	Mwani	Mwani	Mwani	Mwani
20.	Turkane Monika	Mwani	Mwani	Mwani	Mwani	Mwani
21.	Shinde Ankanya	Shinde	Shinde	Shinde	Shinde	-



Rayat Shikshan Sanstha's

S.S.G.M. College, Kopergaon

Attendance of the students

Dairy ^{Sheet} of Science

Sr. No.	Name of the students	14/1/21	15/1/21	27/1/21	28/1/21	29/1/21
1.	Aher Shruti Rajendra	Shruti	Shruti	Shruti	Shruti	Shruti
2.	Aher Shubham Harichandra	Shubh	Shubh	Shubh	Shubh	Shubh
3.	Bankar Anuja Rajendra	Bankar	Bankar	Bankar	Bankar	Bankar
4.	Bhagwat Monali tarachand	—	—	—	—	—
5.	Chaudhari Sujata Annasaheb	Sujata	Sujata	Sujata	Sujata	Sujata
6.	Gade Suvarna Madhukar	Gade	Gade	Gade	Gade	Gade
7.	Gadhe Pooja Vishwanath	Poo	Poo	Poo	Poo	Poo
8.	Gaikwad Bhavana Sanjay	Bhavana	Bhavana	Bhavana	Bhavana	Bhavana
9.	Gaikwad Pranali Bhagwan	Pranali	Pranali	Pranali	Pranali	Pranali
10.	Gaikwad Sunita Ankush	Sunita	Sunita	Sunita	Sunita	Sunita
11.	Ghule Pratiksha Dattatray	Ghule	Ghule	Ghule	Ghule	Ghule
12.	Gorde Dipali Anandrao	—	Dgorde	Dgorde	Dgorde	Dgorde
13.	Navale Gayatri Arun	Shinde	Shinde	Shinde	Shinde	Shinde
14.	Sangale Nikita Punjaram	Nikita	Nikita	Nikita	Nikita	Nikita
15.	Sanvatsarkar Sneha kailas	Sneha	Sneha	Sneha	Sneha	Sneha
16.	Shinde Priyanka Madhukar	Priyanka	Priyanka	Priyanka	Priyanka	Priyanka
17.	Tambe ketan	—	Tambe	Tambe	Tambe	Tambe
18.	Thombare Sudarshan	Thombare	Thombare	—	Thombare	Thombare
19.	Wani Monika	Wani	Wani	Wani	Wani	Wani
20.	Turkane Monika	Monika	Monika	Monika	Monika	Monika
21.	Shinde Sukanya	Shinde	Shinde	Shinde	Shinde	Shinde



Riyat Shikshan Sanstha's

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

2020 - 21

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

Certificate Course

Feedback Form (Year 2019-20)

How you like this activity?

(Please tick (✓) on the appropriate option)

Criteria's	Excellent	Very Good	Good	Average	Poor
Content of the curriculum	✓				
Quality of Lectures	✓				
Quality of Practical's		✓			
Arrangement of Tour and hands on training collaboratively organized		✓			
Is the course is applicable for entrepreneurship development in your future life	✓				
Overall Evaluation of the Course		✓			
Is the course is beneficial for students & Parents as far as environment & Crop production is concerned	✓				
Any Suggestions:	—				

Name of the Students: Mr. Anur Shubham

Class: M.Sc. II.

Signature: Shubham



Rayat Shikshan Sanstha's
S.S.G.M.College, Kopergaon
Dist.-Ahmednagar

Certificate Course

Feedback Form (Year 2020-21)

How you like this activity?

(Please tick (✓) on the appropriate option)

Criteria's	Excellent	Very Good	Good	Average	Poor
Content of the curriculum		✓			
Quality of Lectures		✓			
Quality of Practical's		✓			
Arrangement of Tour and hands on training collaboratively organized			✓		
Is the course is applicable for entrepreneurship development in your future life		✓			
Overall Evaluation of the Course	✓				
Is the course is beneficial for students & Parents as far as environment & Crop production is concerned		✓			
Any Suggestions:					

Name of the Students: Bansal Anuja Rajendra

Class: M.Sc II Analytical chemistry.

Signature: Bansal



Rayat Shikshan Sanstha's
S.S.G.M. College, Kopergaon
Dist.-Ahmednagar

Certificate Course

Feedback Form (Year 2019-20)

How you like this activity?

(Please tick (✓) on the appropriate option)

Criteria's	Excellent	Very Good	Good	Average	Poor
Content of the curriculum		✓	✓		
Quality of Lectures		✓			
Quality of Practical's		✓			
Arrangement of Tour and hands on training collaboratively organized			✓		
Is the course is applicable for entrepreneurship development in your future life		✓			
Overall Evaluation of the Course	✓	✓			
Is the course is beneficial for students & Parents as far as environment & Crop production is concerned			✓		

Any Suggestions: _____

Name of the Students: Chaudhari Sujata Annasaheb
Class: MSC II. Analytical. Chemistry.
Signature: Sujata



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 M.Sc.-II (Analytical Chemistry) has Successfully completed short term course in "Dairy Science" for academic year 20 -20 secured.....Grade.

Co-ordinator

Head of Department

Principal

Rayat Shikshan Sanstha's
Shri Sadguru Gangageer Maharaj Science, Gautam Arts & Sanjivani Commerce
College, Kopargaon. Dist-Ahmednagar-423601.

Report

The department of chemistry conducted a Short Term Course entitled **Dairy Science**. Total 21 students of M. Sc. Analytical Chemistry were admitted in the course. The duration of course was three months. The course was conducted satisfactorily by the Department of chemistry.




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