



**Shri Shivaji Education Society's
Board for Higher Education Vidyanagar Karad.**



YASHWANTRAO CHAVAN COLLEGE OF SCIENCE, KARAD

DEPARTMENT OF CHEMISTRY

SHORT TERM COURSE

APPLIED DAIRY CHEMISTRY (CCD-07)

2021-22

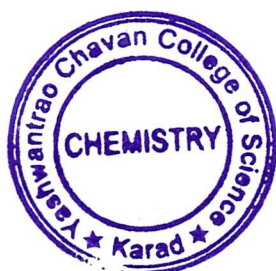
Index

Total Students: 20

Class: B. Sc. III

Duration: 3 Months

| Sr. No. | Documents |
|----------------|-------------------------|
| 1 | Notice |
| 2 | Student Enrolment |
| 3 | Timetable |
| 4 | QP Theory and Practical |
| 5 | Mark List |
| 6 | CO Attainment |
| 7 | Attendance |
| 8 | Certificate |




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Yashwantrao Chavan College of
Science, Karad

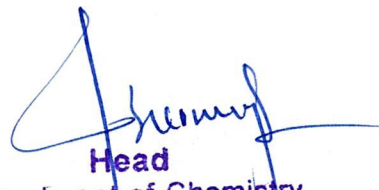
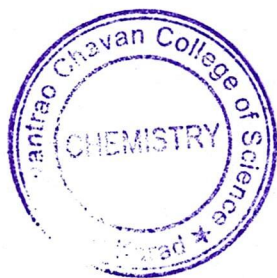
YASHWANTRAO CHAVAN COLLEGE OF SCIENCE, KARAD

Department of Chemistry

Notice

Date: 08/11/2021

All the Students of the B. Sc. III are hereby informed that the Department of Chemistry is going to run a short-term course entitled as “**Applied Dairy Chemistry**” Interested Candidates enrol their names to Mr. S. D. Karande (course Co-ordinator) on or before 30th November 2021.



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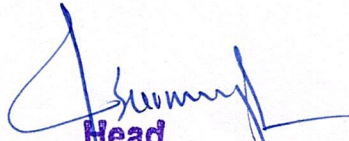
Department of Chemistry

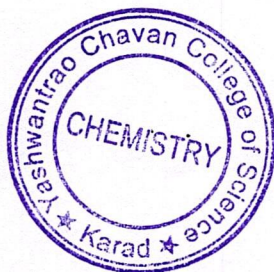
Certificate course in "Applied Dairy Chemistry"

Year 2021-22

- | | |
|---------------------------|-------------------------|
| 1. Class | : B.Sc. III |
| 2. Duration of the course | : 3 months |
| 3. Capacity | : 20 |
| 4. No. Students Enrolled | : 20 |
| 5. Theory Examination | : Last week of February |
| 6. Practical Examination | : First Week of March |


Course Co-ordinator


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Department of Chemistry

Short Term Course

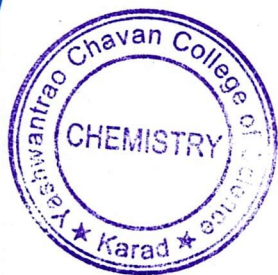
“Applied Dairy Chemistry”

Year 2021-22

Name of the Enrolled Students

| Roll No. | Name of Student | Signature |
|----------|--------------------------|----------------------|
| 3101 | Abhang Omkar Sambhaji | <u>Abhang</u> |
| 3102 | Adake Omkar Tanaji | <u>P. N. Bhosale</u> |
| 3103 | Asket Sujit Shankar | <u>Bhaskar</u> |
| 3104 | Babar Rushikesh Rajendra | <u>R.R. Babar</u> |
| 3105 | Bagul Vijaya Bibichand | <u>B. V. Bagul</u> |
| 3106 | Bandal Pavan Uddhav | <u>B. P. Uddhav</u> |
| 3107 | Bandgar Dashrath Govind | <u>B. D. G.</u> |
| 3108 | Barge Tejas Dattatraya | <u>B. T. D.</u> |
| 3109 | Bhalekar Swati Sunil | <u>Swati</u> |
| 3110 | Bhoj Jasaraj Vinayak | <u>Bhoj</u> |
| 3111 | Bhore Jyoti Atmaram | <u>J. B. Hore</u> |
| 3112 | Bhosale Nitiraj Vasant | <u>N. B. Vasant</u> |
| 3113 | Bhosale Prajwal Deepak | <u>P. D. Bhosale</u> |
| 3114 | Bhosale Pranali Rajendra | <u>P. B. Bhosale</u> |
| 3115 | Bobade Sahil Sunil | <u>B. S. S.</u> |
| 3116 | Bonore Satyajeet Gajanan | <u>Bonore</u> |
| 3117 | Chaudhari Viraj Ravindra | <u>V. Chaudhari</u> |
| 3118 | Chavan Abhimanyu Hanmant | <u>A. Chavan</u> |
| 3119 | Chavan Aishwarya Prakash | <u>A. Chavan</u> |
| 3120 | Chavan Akash Anil | <u>A. Chavan</u> |

Signature



Signature
Head

Department of Chemistry
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Science, Karad

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Department of Chemistry

Short Term Course

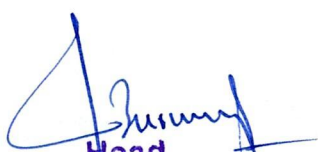
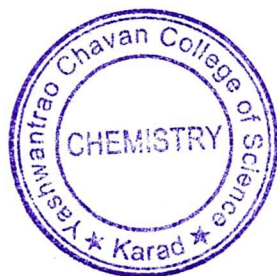
“Applied Dairy Chemistry”

Year 2021-22

Theory Time Table

Dec. 2021 to Jan. 2022

| Lect. time | Friday | Saturday |
|--------------|--------|----------|
| 9.40 – 10.30 | SDK | SDK |



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Department of Chemistry

Short Term Course

“Applied Dairy Chemistry”

Year 2021-22

Question Paper

Marks: 30

Q.1) Multiple Choice Questions:

(Marks: 1*10=10)

- i) Ash is distinctly.....
- a) Acidic b) Amphoteric c) Neutral d) Basic
- ii) Freshly drawn milk is.....to litmus.
- a) Acidic b) Neutral c) Basic d) Amphoteric
- iii)is highly sensitive to oxidative changes.
- a) Lecithin b) Oxytocin c) Curcumin d) All of these
- iv)acts as source of energy.
- a) Milk fat b) Milk water
- c) None of these d) All of these
- v) Vitamins are essential for:.....
- a) Colour b) Fat c) Rich mechanism d) Growth & health
- vi)may cause remarkable change in the colour of milk.
- a) Vitamin b) Enzyme c) Bacteria d) Lipids
- vii) Standards of Pasteurization includes.....
- a) Bacterial destruction b) Homogenization
- c) Cream line reduction d) all of these
- vi) The process of making a stable emulsion of milk fat and milk serum by mechanical treatment is termed as.....
- a) Pasteurization b) Homogenization
- c) Pigmentation d) Emulsion

ix) The important factor to control micro-organism is.....

- a) Acidity b) Light c) Temperature d) Concentration

x) Features of storage tanks are.....

- a) easy to clean b) easy to sanitize
c) have proper agitating facility d) All of these

Q.2) State True or False:

(Marks: 5*1=5)

- a) In HTST process milk is heated to 72°C for 15 seconds.
b) Level filling is quicker and more common.
c) Natural or apparent acidity is caused by pigments.
d) Brown bottle packaging is best.
e) Flavour of milk is composed of smell and taste.

Q.3) Explain in detail:

(Marks:3*5=15)

- a) Compare glass bottle and paper packing of milk.
b) Explain standardization of milk.
c) Write a note on destruction of micro-organism in milk.
d) Define market milk. State constituents of milk. Explain factors affecting composition of milk.

Yashwantrao Chavan College of Science, Karad

Department of Chemistry

Short Term Course

“Preparation of Household Chemicals”

Year 2021-22

Practical Exam

Marks: 40

Instructions:

1. You are advised to express the results in tabular form
2. Draw neat labelled/circular diagrams wherever necessary
3. Take the signature of the examiner on experimental results

SECTION– A

[30 Marks]

Q.1. Determination of percentage of calcium in the given sample of milk.

Q.2. Determination of percentage of calcium in the given sample of milk powder.

Q.3. Determination of titrable acidity in the given sample of Milk using supplied Sodium hydroxide.

SECTION – B

Oral

[10 Marks]

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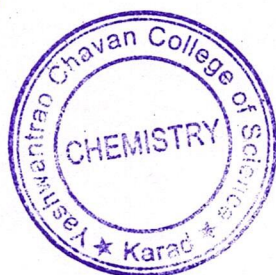
Department of Chemistry

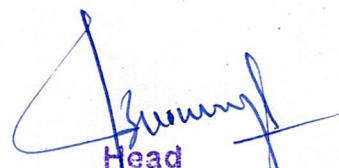
Short term Course - Applied Dairy Chemistry (2021-22)

Mark list

| Roll. No. | Name of Student | Mid-course exam (Out of 30) | Final Exam (Out of 30) | Practical Exam (Out of 40) | Total (Out of 100) |
|-----------|--------------------------|-----------------------------|------------------------|----------------------------|--------------------|
| 3101 | Abhang Omkar Sambhaji | 19 | 22 | 40 | 81 |
| 3102 | Adake Omkar Tanaji | 18 | 18 | 40 | 76 |
| 3103 | Asket Sujit Shankar | 19 | 19 | 40 | 78 |
| 3104 | Babar Rushikesh Rajendra | 20 | 25 | 40 | 85 |
| 3105 | Bagul Vijaya Bibichand | 22 | 24 | 40 | 86 |
| 3106 | Bandal Pavan Uddhav | 24 | 26 | 40 | 90 |
| 3107 | Bandgar Dashrath Govind | 25 | 27 | 40 | 92 |
| 3108 | Barge Tejas Dattatraya | 26 | 21 | 40 | 87 |
| 3109 | Bhalekar Swati Sunil | 24 | 22 | 40 | 86 |
| 3110 | Bhoj Jasaraj Vinayak | 19 | 22 | 40 | 81 |
| 3111 | Bhore Jyoti Atmaram | 18 | 18 | 40 | 76 |
| 3112 | Bhosale Nitiraj Vasant | 19 | 19 | 40 | 78 |
| 3113 | Bhosale Prajwal Deepak | 20 | 25 | 40 | 85 |
| 3114 | Bhosale Pranali Rajendra | 22 | 24 | 40 | 86 |
| 3115 | Bobade Sahil Sunil | 24 | 26 | 40 | 90 |
| 3116 | Bonore Satyajeet Gajanan | 25 | 27 | 40 | 92 |
| 3117 | Chaudhari Viraj Ravindra | 26 | 21 | 40 | 87 |
| 3118 | Chavan Abhimanyu Hanmant | 24 | 22 | 40 | 86 |
| 3119 | Chavan Aishwarya Prakash | 25 | 27 | 40 | 92 |
| 3120 | Chavan Akash Anil | 19 | 28 | 40 | 87 |







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Department of Chemistry

Short term Course - Applied Dairy Chemistry (2021-22)

CO attainment

| Average Attainment | Target Attainment level | Remark |
|--------------------|-------------------------|-----------------|
| 2.8 | Level 5 | Target achieved |

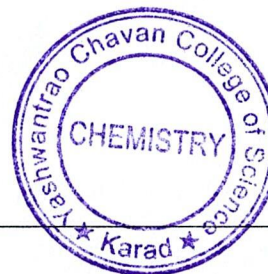
| Course code | Course Title | % of students above 60 % of Final exam marks | Level of attainment Final exam | 80% of attainment Level in Final exam (I) | % of students above 80 % of mid-course exam marks | Level of attainment | 20% of attainment Level in mid-course exam (II) | Attainment of course(I+II) |
|-------------|--------------------------|--|--------------------------------|---|---|---------------------|---|----------------------------|
| Short term | Chemical risk management | 90.00 | 3 | 2.4 | 76.00 | 2 | 0.4 | 2.8 |

By using below attainment levels 1,2,3 for the Percent of students in B

| For internal exam | |
|-------------------|--|
| Level 1 | Less than 60% of students scoring more than average marks |
| Level 2 | 60% - 80% of students scoring more than average marks |
| Level 3 | more than equal to 80% of students scoring more than average marks |

| Programme outcome level | Target Attainment |
|-------------------------|-------------------|
| Level 1 | 0.5-1.0 |
| Level 2 | 1.0-1.5 |
| Level 3 | 1.5-2.0 |
| Level 4 | 2.0-2.5 |
| Level 5 | 2.5-3.0 |

[Signature]



[Signature]
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YASHWANTRAO CHAVAV COLLEGE OF SCIENCE, KARAD

Department of Chemistry

Short Term Course - "Applied Dairy Chemistry"

Year 2021-22

Attendance Dec-2021

[illegible]

YASHWANTRAO CHAVAV COLLEGE OF SCIENCE, KARAD

Department of Chemistry

Short Term Course - "Applied Dairy Chemistry"

Year 2021-22

Attendance Jan-2022

[illegible]

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Department of Chemistry

Short Term Course - "Applied Dairy Chemistry"

Year 2021-22

Attendance Feb-2022

[illegible]

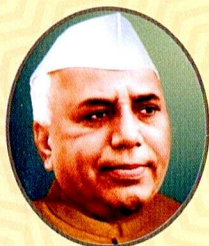
Estd.:

1958

|| Be one with the downtrodden and the underprivileged ||

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Yashwantrao Chavan College of Science, Karad




- Vidyanagar, Karad - 415 124. •
- Reaccredited B++ Level by NAAC, Bangalore. • An ISO 9001 : 2015 Certified College




Short Term Course CERTIFICATE of COMPLETION

This is to certify that Mr./Miss. Abhang omkar Sambhaji
of Class B.Sc. III has Completed Short Term Course (3 Months) in Applied Dairy chemistry
chemistry conducted by the department of
during the academic year 2021 - 2022


Course Co-ordinator


Head of the Department


IQAC Co-ordinator


Principal

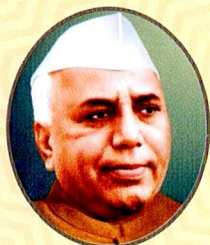
Estd.:

1958

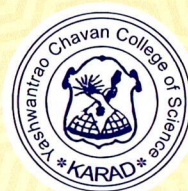
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Short Term Course CERTIFICATE of Completion


This is to certify that Mr./Miss. Bhalekar Swati Sunil

of Class B.Sc. III has Completed Short Term Course (3 Months) in

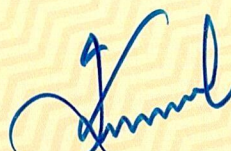
Applied Dairy Chemistry conducted by the department of

Chemistry during the academic year 2021 - 2022


Course Co-ordinator


Head of the Department


IQAC Co-ordinator


Principal

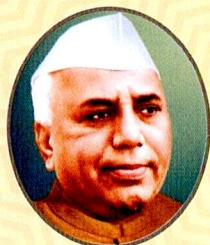
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Short Term Course CERTIFICATE of COMPLETION

This is to certify that Mr./Miss: Chavan Abhimanyu Hanmant
of Class B.Sc. III has Completed Short Term Course (3 Months) in _____
Applied Dairy Chemistry conducted by the department of
chemistry during the academic year 2021 - 2022

Course Co-ordinator

Head of the Department

IQAC Co-ordinator

Principal

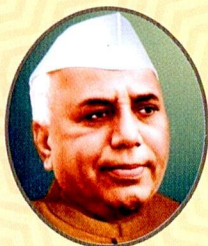
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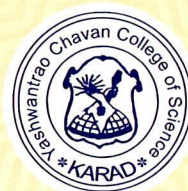
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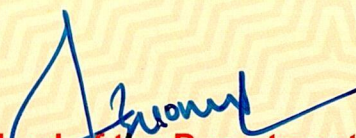
This is to certify that Mr./Miss. Chavan Akash Anil

of Class B.Sc. III has Completed Short Term Course (3 Months) in


Applied Dairy Chemistry conducted by the department of

Chemistry during the academic year 2021 - 2022


Course Co-ordinator


Head of the Department


IQAC Co-ordinator

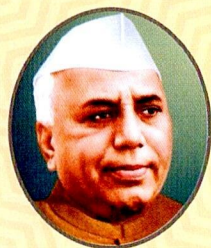

Principal

Estd.:

1958

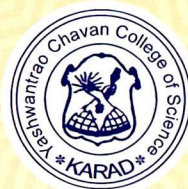
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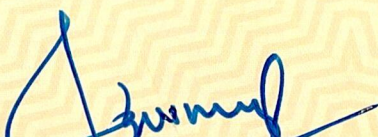


Short Term Course CERTIFICATE of COMPLETION


This is to certify that Mr./Miss. Bonore Satyajeet Gajanan

of Class B.Sc. III has Completed Short Term Course (3 Months) in Applied Dairy chemistry conducted by the department of chemistry during the academic year 2021 - 2022


Course Co-ordinator


Head of the Department


IQAC Co-ordinator


Principal