



## SRI VENKATESWARA UNIVERSITY, TIRUPATHI

**4 -Year UG Honours in B.vocational (Dairy and Animal Husbandry) Major in Consonance with Curriculum Frame work w.e.f AY 2026-27**

### COURSE STRUCTURE (for Semester III)

| Year | Semester | Course | Title of the course                            | No.o<br>f<br>hrs/<br>week | No.of<br>credits |
|------|----------|--------|------------------------------------------------|---------------------------|------------------|
| II   | III      | 5      | Milk and milk products Technology (theory)     | 3                         | 3                |
|      |          |        | Milk and milk products Technology (practical)  | 2                         | 1                |
|      |          | 6      | Basic of animal nutrition(theory)              | 3                         | 3                |
|      |          |        | Basic of animal nutrition (practical)          | 2                         | 1                |
|      |          | 7      | Fodder production and conservation(theory)     | 3                         | 3                |
|      |          |        | Fodder production and conservation (practical) | 2                         | 1                |

*G. Srinivas*

Department of Zoology  
Govt. Degree & P.G. College of Women

Chittoor District - 517 044

**SEMESTER-III**  
**COURSE 5: MILK AND MILK PRODUCTS TECHNOLOGY**

Theory

credits -3

3hrs/week

**LEARNING OUTCOMES**

After completion of course, student is able to

1. Maintaining hygiene, performing quality tests, operating processing equipment
2. Producing a variety of dairy products like butter, ghee, cheese, and ice creams.
3. Students will also learn to apply food safety standard such as GMP and HACCP.
4. Manage raw materials, package products, and handle dairy waste.

**UNIT – I**

9hrs

Milk industry in India, milk processing unit and its management Composition & Nutritive value of milk Factors effecting composition of milk Physic – chemical properties of milk

**UNIT-II**

9hrs

Collection, chilling of milk

Standardization of milk –pasteurization, homogenization, bactofigation, dehydration of milk

**UNIT– III**

9hrs

Introduction to functional milk products .

Preparation of cream, butter, paneer or chenna, Ghee, Khoa, Lassi, dahi, ice-cream, mozzarella cheese and dairy by products. Common defects of milk products and their remedial measures .

**UNIT – IV**

9hrs

Packaging, transportation, storage and distribution of milk and milk products . Good manufacturing practices and implementation of HACCP in milk plant. Organic milk products

**UNIT– V**

9hrs

Food safety standards authority of india for milk and milk products(FSSAI).

  
Department of Zoology  
Govt. Degree & P.G. College of Women  
Srikalahasthi - 517 544

### **SEMESTER-III**

#### **Course 5: MILK AND MILK PRODUCTS TECHNOLOGY**

| <u>Practical</u> | <u>credits-1</u> | <u>2hrs/week</u> |
|------------------|------------------|------------------|
|------------------|------------------|------------------|

1. Visit to modern milk processing and milk products manufacturing plants .
2. Sampling of milk . Estimation of fat, solid not fat (SNF) and total solids .Platform tests .
3. Cream separation .
4. Detection of adulteration of milk .
5. Determination of efficiency of pasteurization .
6. Preparation of milk products like ghee, paneer or chine ,khoa ,ice-cream or sulfa , milk beverages .

#### **Reference books :**

- 1 . Text book on Milk & Milk products Ran veer R C, Kamble, D K, Pa'anga
- 2 . MILK AND MILK PROCESSING Herrington B.L.
- 3 . Milk and Milk Products H. Varna Alan
- 4 . Principle of Dairy Processing .Warner James N

## MODEL QUESTION PAPER

Course: B. Voc Dairy & Animal Husbandry

### MILK AND MILK PRODUCTS TECHNOLOGY

Time: 3 hours

Marks: 75

#### SECTION – A

Answer any five of the following questions each question carries equal marks 5x3=15

1. Composition and nutritive value of milk
2. What are the key factors affecting the composition of milk
3. Chilling milk
4. What is standardization in milk processing and why is it important
5. Paneer preparation and its common uses
6. What are the common defects in milk products and how can they be remedied
7. What are the key considerations for the packaging of milk products
8. HACCP in milk processing plants
9. What are organic milk products and how do they differ from conventional products
10. Food safety standards for milk products

#### SECTION-B

Answer all questions each question carries equal marks 5x12=60

11. a) Discuss the milk industry in India and the management of milk processing units  
(OR)  
b) Explain the physicochemical properties of milk
12. a) Describe the processes of pasteurization and homogenization in milk processing  
(OR)  
b) What is the significance of dehydration in milk processing
13. a) Write a detailed note on the preparation of cream butter and ghee  
(OR)  
b) Discuss the functional milk products available in the market and their benefits
14. a) Describe the steps involved in the transportation and distribution of milk products  
(OR)  
b) What are the best practices for storage of milk and milk products
15. a) Explain the importance of good manufacturing practices in milk processing  
(OR)  
b) What are the key food safety standards for milk as per regulatory bodies?

**4- Year UG Honours, Major**  
**Syllabus**  
**(2026-27)**  
**Semester-III**

**Model Question Paper**

**Time : 3hrs**

**Marks:75**

**Part-A**

**Answer any Five Questions. Each Question carries 3 Marks.**

**5x3=15**

- 1.
- 2.
- 3.
- 4.
- 5.
- 6.
- 7.
- 8.
- 9.
- 10.

**Answer the following questions. Each question carries 12 Marks**

**5x12=60**

11. a) Unit-I  
(Or)  
b) Unit-I

12. a) Unit-II  
(Or)  
b) Unit-II

13. a) Unit-III  
(Or)  
b) Unit-III

14. a) Unit-IV  
(Or)  
b) Unit-IV

15. a) Unit-V  
(Or)  
b) Unit-V