

II Semester

Course 4:

DAIRY CATTLE NUTRITION

Hours/Week: 3

Credits -3

Unit-1: Classification of Feeds and Fodders. Importance of proteins, fats and carbohydrates in livestock feeding – Importance of vitamins and minerals in cattle feeding

Unit-2: Conservation of Fodder–Hay and Silage –Fodder security measures during summer and drought seasons.

Unit- 3: Feeding standards; Balanced rations for Dairy cattle; Feeding practices of Dairy cattle) Soiling (ii) Ensiling, (iii) Pasturing, (iv) Hay feeding, (v) General feeding practices with regard to management – Azolla feeding - Hydroponic fodder production.

Unit-4: Types of Fodder varieties-legumes and non-legumes, seasonal and perennial fodder crops. Cultivation practices of fodder crops-Para grass, Hybrid Napier, Berseem. Cow pea, Jowar – fodder trees – Silvi pasture system – Horti pasture system.

Unit-5: Utilization of agricultural and industrial by-products for livestock feeding. Enrichment of poor quality roughages – Urea treatment of paddy straw – Total mix ration (TMR).

II Semester

Course 4:

DAIRY CATTLE NUTRITION

Hours/Week: 2

Credits -1

1. Identification of feeds and fodders.

2. Computation of rations.

3. Hay making.

4. Silage making.

5. Estimation of dry matter of feed or fodder. 6. Cultivation of fodder crops.

Preparation of ration schedules for different categories of animals- calves, young.. heifers, pregnant, and lactating animals.



Reference books

1. Text Book of Animal Husbandry - G C Benarjee
2. Principles and practices of Dairy Farm –Jagdish Prasad
3. Animal Nutrition and feeding practices – Dr Surendra K .Ranjhan
4. Dairy Chemistry and Animal Nutrition – M M Roy.

A handwritten signature in black ink, appearing to read 'J. K. Ranjhan', is located in the middle right section of the page.

Model question paper- Semester: I
Subject: Dairy Science Major wef: 2025-26

Max. Time: 3 hrs.

Max. Marks: 75

Section: A

Answer any 5 of the following 10 questions. Each question carries 3 marks (2 questions should be given from each unit) 5Q X 3 M - 15 M

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

Section: B

Answer 5 of the following 10 questions following internal choice. Each question carries 12 marks (2 questions should be given from each unit) 5Q X 12 M - 60 M

11. Questions 11 & 12 from unit 1. One should be answered.
- 12.
13. Question 13 & 14 from unit 2. One should be answered
- 14.
15. Question 15 & 16 from unit 3. One should be answered
- 16.
17. Question 17 & 18 from unit 4. One should be answered
- 18.
19. Question 19 & 20 from unit 5. One should be answered
- 20.

