5. SEC - Poultry Farming

Course Outcome (COs)

CO1. To understand different breeds and techniques in poultry farming.

CO2. To acquire the skills of poultry management.

CO3. Students gain confidence to pursue entrepreneurship in farming and assess the economics of a farm.

4. SEC - Dairy Farming

CO1. Students gain knowledge of different breeds and their selection in dairy farming.

CO2. Acquire the skills of Dairy farm management

CO3. Acquire the skills of shed construction and maintenance

CO4. Students gain self-confidence to become dairy entrepreneurs.

B. Sc. PART – II SEMESTER – III (NEP 2.0)
SKILL ENHANCEMENT COURSE (SEC) – I (MAJOR SPECIFIC)
POULTRY FARMING
PRACTICAL: 60 Hrs. MARKS-50 (CREDITS: 02)

I. Morphology of Poultry Birds

II. Poultry Breeds

a. Indian
b. Exotic

III. Types of Poultry Breeds

a. Layers
b. Broiler
c. Dual Purpose Breeds

IV. Poultry Housing Systems

a. Extensive/Open Yard System
b. Semi-Intensive System
c. Intensive System
    1. Deep Litter System
    2. Cage System
    3. Slat System

V. Feeding and Nutrition

a. Nutritional requirements
b. Feeding ingredients for poultry birds

VI. Poultry Breed Management

a. Management of Hatchery and Chicks - Chick care and management
b. Management of Layer Birds -Housing, feeding and care
a. Management of Broiler Birds - Housing, feeding and care

VII. Poultry Farming Equipment

a. Types of Poultry Feeder and Waterer
b. Other essential poultry Equipment

VIII. Health Care in Poultry

a. Common Diseases
b. Vaccination
c. Cleaning and Disinfection

IX. Study of the followings

a. Nutritional Value of Poultry Meat and Eggs
b. By products of Poultry Farming
c. Economic Importance of Poultry Farming

Field visit and submission of report.

B. Sc. PART – II SEMESTER – IV (NEP 2.0)

SKILL ENHANCEMENT COURSE (SEC) IN ZOOLOGY

Introduction to Dairy Science and Management

PRACTICAL: 60 Hrs. MARKS-50 (CREDITS: 02)

I. Introduction to Common Dairy Animals

1. Study of dairy animals
2. Breeds and their characteristics of – Breeds of cow (Indigenous and Exotic) and Buffalo (Murrha)
3. Selection of the breeds for specific climates and purposes

II. Techniques of Dairy Management

4. Study of Housing and Maintenance
5. Feeding practices: Nutritional needs and formulation of feed
6. Milking techniques: Hand milking and machine milking
7. Record-keeping for milk yield, breeding, and health

III. Milk and Milk Products

8. Study of Composition and properties of milk
9. Study of Processing techniques: Pasteurization, homogenization, and sterilization
10. Study of Common milk products: Curd, Paneer , Butter ,Cheese ,Ice Cream , Yoghurt and Ghee
11. Testing of Fat in Milk.

IV. Diseases of Dairy Animals

12. Study of common diseases in dairy animals with reference to Bovine Mastitis, Foot-and-Mouth disease (FMD), Brucellosis, Bovine viral diarrhea (BVD).
13. Study of Recognizing signs of illness in dairy animals
14. Study of Basic Treatment and first-aid
15. Prevention and control measures of diseases : Vaccination, biosecurity, and hygiene

Visit to Dairy farm / industry and submission of report.

Suggested Readings:

1. Handbook of Animal Husbandry: Indian Council of Agricultural Research (ICAR)
2. Cattle and Buffalo Production Systems: J. W. Rendel

3. Livestock Production and Management: N. S. R. Sastry, C. K. Thomas, and R. A. Singh
4. Dairy Management: Principles and Practices: G. A. Khan
5. Feeds and Feeding Practices in Dairy Animals: Ranjan Kumar
6. Milking and Milk Handling: M. N. Mathur
7. Dairy Microbiology Handbook: Richard K. Robinson
8. Technology of Milk Processing and Dairy Products: N. P. Agrawal
9. Principles of Dairy Chemistry: Jenness R. and Patton S.
10. Dairy Processing Handbook: Tetra Pak International
11. A Textbook of the Diseases of Cattle, Sheep, Goats, Pigs, and Horses, Otto Radostits et al.
12. Manual of Veterinary Therapeutics: Douglass S. K.
13. Dairy Herd Health: Martin Green
14. Practical Guide to Cattle Diseases and Their Control: Clive Brown