

Certificate Course of Livestock Management and Dairy Production

Code - SCC-06

Course Design: Credits-24

Maximum Marks: 100

Total Hours: 100

Theory Marks: 40

Lectures: 36 hrs.

Practical Marks: 60

Tutorials: 00 hrs.

Remedial: 04 hrs.

Field Work/Practicum: 60 hrs.

For Each Unit available total Hours: 25, out of which, for lectures: 9 hrs. Tutorial: 00 hrs., Field work: 15 hrs., Remedial: 01 hrs.

Learning Outcomes of the course: After completion the course students will be able to-

- To enhance the knowledge and understanding of the animal behaviour and applied effectively in practice.
- To develop the skills artificial Insemination techniques in cattle.
- To understand inbreeding and crossbreeding effects related to production and conservation of species
- To understand and appreciate the complexities in sourcing raw milk from a multitude of sources, various decisions, checks and balances the process involves.

Unit-I

- Livestock farming
- Reproduction cycle
- Basic anatomy of the female reproductive system in cattle.
- Basic technique of artificial insemination.
- Process of handling and thawing frozen semen.
- Basics of the estrous cycle and synchronization.
- Heat detection systems.
- Reproductive cell

- Insemination equipment and technology
- Management of unproductive animals

Practicum:

- Artificial Insemination Techniques
- Artificial Insemination Process and application

Unit-II : Breeding

- Fertilization
- Gestation
- Heredity
- Breeds
- Types of breeding
- Breeding policy
- Animal identification
- Data recording
- Performance monitoring
- Reproductive disorders

Practicum:

- Breeding Processing
- Performance monitoring chart & observation
- Data record management

Unit-III : Dairy Farming

- Feed and fodder management
- Difference indigenous and exotic breeds
- High milk yielding varieties
- Selection of cattle
- Differentiate Healthy and sick animals
- Accommodation needs of livestock
- Healthy animal parameters
- Waste handling

Practicum:

- Animal Feeding
- Processing for selecting healthy cattle

Unit-IV: Product management

- Suitable Environments
- Essential Supplements
- Milking activities & Procedures
- Preservation and Products
- Mastitis Disease and precautions
- Milking machine
- Animal health management
- Dairy farming
- Hydroponics
- Designing and planning a commercial dairy farm
- Use of software for accurate analysis

Practicum:

- Dairy Products Processing
- Preservation and Marketing of dairy products
- Use of appropriate Software for analysis

References:

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