

# DEPARTMENT OF ANIMAL HUSBANDRY AND DAIRYING

## B.Sc.(Hons)Ag Syllabus

According to 6<sup>th</sup> Dean Committee

### AHD- 111 SEC I: Poultry Production Technology

Credit: 0+2

Breeding and genetics of poultry, Poultry nutrition and feed formulation, Hatchery management and incubation techniques, Poultry handling and welfare, Egg handling, Egg candling and Egg preservation, By-product utilization of Egg, Poultry slaughter practices and dressing percent, Poultry meat processing techniques (e.g., chilling, freezing, curing), Quality control and standards in poultry products, Packaging and storage of poultry products, Farm management and record keeping. Health management of poultry.

### AHD -121 Livestock and poultry Management

Credit: 2(1+1)

#### Theory

Role of livestock in the national economy. Reproduction in farm animals and poultry. Housing principles, space requirements for different species of livestock and poultry. Management of calves, growing heifers and milch animals. Management of sheep, goat and swine. Incubation, hatching and brooding. Management of growers and layers. Important Indian and exotic breeds of cattle, buffalo, sheep, goat, swine and poultry. Digestion in livestock and poultry. Classification of feedstuffs. Nutrients and their functions. Feed ingredients for ration for livestock and poultry. Feed supplements and feed additives. Feeding of livestock and poultry. Introduction of livestock and poultry diseases. Prevention (including vaccination schedule) and control of important diseases of livestock and poultry (H.S., Milk fever, Dystocia, Tympany, mastitis, & Retention of placenta disease of cow and buffalo and Ranikhet disease, Marek's disease, Coccidiosis, Pullorum disease).

#### Practical

External body parts of cattle, buffalo, sheep, goat, swine and poultry. Handling and restraining of livestock. Identification methods of farm animals and poultry. Visit to college dairy farm to study breeds of livestock and poultry and daily routine farm operations and farm records. Planning and layout of housing for different types of livestock. Computation of rations for livestock. Formulation of concentrate mixtures. Clean milk production, milking methods. Hatchery operations, incubation and hatching equipment. Management of chicks, growers and layers. Vaccination Schedule. Economics of livestock rearing.

*Handwritten signatures:*  
Arun Singh  
K. Singh  
Ghosh  
RBM

DEPARTMENT OF ANIMAL HUSBANDRY AND DAIRYING

UDAI PRATAP COLLEGE, VARANASI- 221002

Ph.D. Syllabus

PAPER-III

AHD- 601 (Advances in Animal Husbandry and Dairying)

(Credit- 04)

**Animal Science –**

Ruminant's vs non-ruminant nutrition. Animal feeding: Evaluation of feed, Computation of ration, non-conventional feeds, feed additives & probiotics, Feed analysis, artificial rumen experiment. Animal breeding: History of dairy cattle and buffalo breeding. Breeds of cattle, buffalo, sheep, goat and their Characterization. Inheritance of important economic traits. Up gradation, cross-breeding etc. Artificial insemination & embryo transfer technology. Advance studies on L.P.M. Mixed farming: Modern concept. Care and management of calf, milch cow, pregnant cow, bull and small ruminants. Planning & budgeting of livestock farm. Indigenous technologies with a view to low-cost livestock production. Immunization: Modern concept & control of important diseases in livestock. Livestock farming & environment. Important aspects in poultry production.

**Dairy Science -**

Market milk industry in India and abroad. Chemical composition, physico-chemical properties of milk. Clean and safe milk production, Collection and transportation of milk; preservation at farm, refrigeration. Pasteurization, thermisation, sterilization of milk. Milk quality test. PFA/ FSSAI standards for market milk. Technology to manufacturing of cream, butter, dahi, ghee, khoa, ice-cream, paneer and chhenna.

**Suggested Reading:**

1. Banerjee GC, A textbook of animal Husbandry, Oxford & IBH Publishing Co. Pvt. Ltd
2. Prasad Jagdeesh, Neeraj, Animal Husbandry and Dairy Science, Kalyani Publication
3. Sastry NSR & Thomas CK, Dairy Bovine Production, Kalyani Publication
4. Reddy D.V., Principles of Animal Nutrition and Feed Technology, Oxford & IBH Publishing Co Pvt.Ltd.
5. Tomar S.S., Text Book of Animal Breeding, Kalyani Publication
6. ICAR- Handbook of Animal Hussbandry
7. Sukumar De, Outline of Dairy Technology, Oxford University Press

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