

# **ANIMAL HUSBANDRY INCLUDING MANAGEMENT**

## **1. DAIRY AND POULTRY SCIENCE :**

Importance of livestock in Agriculture Economy of Indian livestock population, problem of livestock Industry in India. Different breeds of livestock viz, Cattle, Buffalo, Sheep, Goat and Pigs both Indian and exotic.

Types of housing, space requirement of different categories of livestock importance of sanitation in Livestock farm.

Different types of animal farming : Mixed farming Integrated farming, Specialised dairy farming and their relative economic merits.

Importance of clean milk production : Definition of milk and colostrum, Factors effecting quality and quantity of milk. Legal standards of milk, Source of adulteration and its detection in milk, Pasteurization, sterilization, homogenisation and their importance, Different Milk products and other milk beverages.

Rearing of young stocks, importance of colostrum feeding in young ones, management of pregnant cows, she goats ewes, care and management of breeding heifers and young bulls.

Breeds of laying and broiler birds, Definition, High line, deep litter, cock hen, pullets. Incubation of eggs and care to be taken in incubation. Factors affecting hatchability of eggs. Incubation time for eggs, of poultry, duck and pigeo eggs. Different rations for birds of different categories.

Maintenance of various records.

## **2. ANIMAL GENETICS :**

Mendelian Laws of inheritance : Defince-Multiple alleles, crossing over, linkage, sex linked inheritance Mutation, complementary gene, chromosomal aberrations, Definition : Population, gene frequency, Hendy Weinberg Law, quantitative and qualitative traits, variation and its causes. Heritability and repeatability.

Genetic and environmental variation, Mating system-Inbreeding, line breeding, cross breeding. Out breeding, grading up, crosses between inbreed lines. Heterosis and hybrid vigour, utilization of heterosis for higher productivity. Breeding methods to improve indigenus livestock with exotic breeds.

## **3. ANIMAL NUTRITION:**

Classification of animal feeds. Concentrates, roughages and their uses and their inter-relation in animal feeding. Animal feeds their composition and nutritive values.

Computation of various rations. Thumb Rule of feeding livestock and poultry. Different types of fodders, both legume and non-legume. Cultivation and management of pasture and pasture land. Feeding livestock during lean perion and also during drought and flood.

## **VETERINARY SCIENCE :**

Definition : Infectious and contagious diseases. Parasitic, bacterial and viral diseases of cattle, buffalo, sheep, pig, goat and poultry. Contagious diseases of livestock and poultry and their prevention. Diseases of public health importance. Measures to be adopted during out break of a contagious, disease. Immunization and vacci-vaccination principles.

Occurrences symptoms, diagnosis and treatment of various disease of cattle : Pneumonia, Jaundice, Diarrhoease, Gastro enteritis, Peri cardities, Peritonitis, Fascioliasis, Trypanosomiasis, Pyroplasmosis. Anthrax, Haemorrhagic, Septicalmia, Block quanta, Tuberculosis, Hohne s disease, Typanitis, White scour etc. Occurrence, symptoms of viral disases like Rinderpest, Foot and Mouth diseases, Mucosal disease complex etc.

## **POULTRY DISEASES :**

Occurance, symptoms treatment and prevention of Coccidiosis, Ranikhet, Fowl Pox, Marek disease, Avian Leucosis compex, various parasitic diseases.

Diseases of swine : Specially Swine fever, hog cholera, piglet diarrhoea, deficiency diseases etc.

Sources of poisoning in animal and their symptoms and treatments.

Various drugs used for doping race horse and techniques for its detection.

Management of wild animals and animals in captivity for treatment, drugs used tranquilizing the ferocious animals.

Use of Artificial insemination for improvement of livestock, Advantage and disadvantages.

**Definition Infertile and Sterile, Courses of infertility and sterility in large animals, Detection of heat and insemination of animals.**