

**FURTHER DETAILS REGARDING MAIN TOPICS OF  
PROGRAMME NO.7/2013 (Item No.1)**

**FIELD OFFICER  
ANIMAL HUSBANDRY  
(CATEGORY NO. 551/2011)**

**Part I – Livestock Management (*Animal Husbandry*)**

• **Introduction to livestock farming**

Livestock farming, importance,, merits and demerits, population status of different species and common terms.

• **Handling of animals**

Body parts of cattle and fowl, restraining livestock, various methods of handling cattle, buffaloes and goats, restraining head, neck, forelimbs, hind limbs, whole body casting, methods of casting , common appliances used, rope, bull nose ring, bull holder, bull leader, mouth gags, halter, anti cowkicker, milkman's rope, trevis.

• **Breeds**

Definition of species, breed, strain and variety Exotic and Indian breeds, definition, differences, examples.

Exotic Breed origin , breed characteristics,(1) physical features of Jersey, HF, Brown Swiss (2) Indian breeds according to utility- milch, draught, dual

- (3) Distinguishing characters of Sindhi, Hariana, Kankrej, Kangayam, Halliker Surthi and Murrah Buffalo (4) Goat - Malabari, Alpine, Saanen (5) Sheep - Merino, Kashmiri (6) Pig - Yorkshire, Landrace.

• **Identification of animals**

Objectives, Methods

- 1) Branding
  - a) Hot iron branding
  - b) Chemical branding
  - c) Freeze branding
- 2) Tattooing
- 3) Ear tagging
- 4) Ear notching

Natural body markings, determination of age of cattle by dentition, general appearance and horn rings.

• **Housing of cattle**

Systems of rearing cattle - free range, loose house, conventional barns. Principles of housing, cow house system.

• **Normal values**

Pulse, Respiration and temperature, Gestation period, span of life , birth weight, Age at maturity, Age of breeding of animals and birds - cow, buffalo, Goat.

• **Organs of Body**

Elementary knowledge of Skeletal, Muscular, Nervous, Circulatory, Urinary, Respiratory, Digestive and Reproductive organs (with special emphasis on digestive and reproductive organs)

## **Care and management**

New born, heifers, cows, working animals

### **Health care**

Signs of health - classification of the disease (bacterial, viral, protozoa, metabolic'etc), Causative factors, Prevention and control of Anthrax, HS, Foot and mouth disease, Brucellosis, Mastitis, milk fever, Ketosis, Parasitic infestation, Ranikhet, Coccidiosis.

### **Principles of Feeding**

Feed nutrients - Water, Carbohydrates, Proteins, Fat, minerals, vitamins Ration -Balanced ration, Maintenance and production ration.

### **Feeding Materials**

Classification of feeds as roughages and concentrates. Roughages - Green fodder, Hay, straw, silage. Concentrates -Cakes, Grains, By products, Tapioca.

### **Systems of breeding**

Selection methods - inbreeding, out breeding for cattle, grading up, systems of breeding.

### **Manure**

Cattle and poultry manure, collection, storage and disposal, manurial value - biogas and slurry.

### **Rearing of Goats**

Basic knowledge about rearing goats.

### **Rearing of pigs**

Basic knowledge about rearing swine.

### **Rabbit rearing**

Basic knowledge of rearing rabbits.

## **Part II – Livestock Management (*Poultry Husbandry*)**

- 1 Poultry Industry - importance - Development Present status, future prospects.
- 2 Poultry and poultry products - Poultry meat and eggs- nutritive value - relevant importance in human diet.
- 3 Basic knowledge on general Anatomy and physiology of poultry with special reference to Digestive and reproductive system-feathers-structure, function and moulting
- 4 Common breeds of poultry-classes-Breeds- Varieties- Principles and practices of breeding-Selection system-qualitative and quantitative traits -Breeding for meat and layer types-commercial hybrids.
- 5 Systems of rearing poultry -Back yard - deep litter - Cage systems - Poultry house design and construction
- 6 Feeding poultry-general principles-semi intensive systems of feeding-feed additives.

- 7 Chicks -Housing and Housing requirements-care of young chicks -dubbing-debeaking sexing- Brooding and brooding equipments and feeding.
- 8 Growing stock-Housing requirements-feeding management.
- 9 Layersrhousing-summer management-culling-feeding-management-artificial light -feed efficiency- egg production standards - profitability.
- 10 Breeding stock-culling-feeding-transepts-pedigree details-mating system- management.
- 11 Broiler-Definition-Breeds-Housing-Requirements-Feeding-Production standards- Dressing-Processing and marketing-Economics-Commercial units.
- 12 Table eggs production-collection-Grading -storage-Marketing-production of clean eggs.
- 13 Eggs - Physical and chemical composition - Methods of preservation - Egg products-Egg powder and frozen egg products-whole eggs, yolk or albumen Egg quality parameters
- 14 Care and Management of hatching eggs-Selection of hatching eggs- incubation-Hatchery operation
- 15 Common diseases - Ranikhet diseases -Marek's disease-Fowl pox-coccidiosis - Pullorum disease- Parasites -External and Internal Causes-Main symptoms and control -Vaccination -Deworming
- 16 Duck-Common breeds -Brooding-rearing and management.
- 17 Turkey -Common breeds -Brooding -rearing and judgment.
- 18 Quail-Brooding-rearing and Management

### Part III -Questions based on Botany (VHSE Level)

### Part IV -Questions based on Zoology (VHSE Level)

### Part V – Facts about Kerala

Geographical Facts- Physical Features- Climate-Soils- Rivers- Famous Sites– Etc

#### Renaissance of Kerala

#### Important Events/ Movements/Leaders

Brahmananda Swami Sivayogi, Chattampi Swami, Sree Narayana Guru, Vagbhatananda, Thycaud Ayya, Ayya Vaikundar, Poikayil Yohannan (Kumara- Guru), Ayyankali, Pandit Karuppan, Mannathu Padmanabhan, V.T.Bhattathirippad, Dr. Palpu, Kumaranasan, Vakkom Moulavi, Blessed Kuriakose Elias Chavara, Etc

## Part VI – India – National Movements – Important Events & Leaders

Geography of India- Physical Features- Climate-Soils- Rivers- Famous Sites – Etc

Demography- Economic and Social Development-Poverty Alleviation- Economy and Planning-Etc

History of India- Period from 1857 to 1947- National Movement- Etc.

## Part VII – General Knowledge

## Part VIII – Current Affairs

Important World, National and Regional Events related to the Political and Scientific fields, Sports, Cinema and Literature etc.

**NOTE: - It may be noted that apart from the topics detailed above, questions from other topics prescribed for the educational qualification of the post may also appear in the question paper. There is no undertaking that all the topics above may be covered in the question paper.**