Council of Higher Secondary Education, Odisha (Job Role: Small Poultry Farmer)

Class-XI Paper –I

SCHEME OF UNITS

| Part | Units | No of hours for Theory and Practical | No of marks for Theory and Practical=100 |
|--------|--|--|--|
| Part A | Employability skills | | |
| 1 | Communication Skills – III | 32 | 10 |
| 2 | Self-management Skills – III | 32 | |
| 3 | Information and Communication Technology Skills – III (Part-A) | 08 | |
| | Total | 72 | |
| Part B | Vocational Skills | | , |
| 4 | Accommodation for Poultry Birds | 60 | 40 |
| 5 | Handling Poultry Birds in Shed | 48 | |
| | Total | 108 | |
| Part C | Practical Work | | |
| | Practical Examination | 6 | 15 |
| | Written Test | 1 | 10 |
| | Viva Voce | 3 | 10 |
| | Total | 10 | 35 |
| Part D | Project Work/Field Visit/ OJT | | |
| | Practical File/Student Portfolio | 10 | 10 |
| | Viva Voce | 5 | 5 |
| _ | Total | 15 | 15 |
| | Grand Total | 205 | 100 |

Paper-II

| Part | Units | No of hours for Theory and Practical | |
|--------|--|--|-----|
| Part A | Employability skills | | |
| 1 | Information and Communication Technology Skills – III (Part-B) | 18 | 10 |
| 2 | Entrepreneurial Skills – III | 34 | |
| 3 | Green Skills – III | 20 | |
| | Total | 72 | |
| Part B | Vocational Skills | | |
| 4 | Handling Poultry Birds in Shed | 04 | 40 |
| 5 | Feeding Poultry Birds | 52 | |
| 6 | Maintaining Health and Hygiene at Poultry Farm | 52 | |
| | Total | 108 | |
| Part C | Practical Work | | |
| | Practical Examination | 6 | 15 |
| | Written Test | 1 | 10 |
| | Viva Voce | 3 | 10 |
| | Total | 10 | 35 |
| Part D | Project Work/Field Visit/ OJT | | |
| | Practical File/Student Portfolio | 10 | 10 |
| | Viva Voce | 5 | 5 |
| | Total | 15 | 15 |
| | Grand Total | 205 | 100 |

Part B- Vocational Skills

Unit-1. Accommodation for Poultry Birds

| Learning Outcome | Theory | Practical | Duration (57 brs) |
|--|---|--|----------------------|
| 1. Describe the opportunities in the poultry industry and the roles and functions of a Small Poultry Farmer 2. Describe the layout of a poultry farm and the characteristics of a good poultry housing system | 1. History of Poultry farming 2. Opportunity & scope in Poultry farming Roles and function of a poultry farmer 3. Breeds of Poultry reared in India for meat and egg purpose 1. Types of poultry housing systems – Free range or extensive system, Semi-intensive system, Intensive system (deep litter, cage, slatted floor) 2. Characteristics of a good poultry housing system – Types of floor, litter materials used, lighting management, Ventilation, orientation of shed, electrification of shed and premises, cleaning and disinfection, disposal of waste, construction of approach road 3 Feeding, watering facilities, equipments used for feeding and watering for different age groups of birds, 4. Construction of Poultry house, location, space requirements, orientation floor, wall, wire mesh, roof and overhang, foot bath, anti-rodent facility, 5. Design and layout of a small poultry farm 6. Supply of chicks, feed, medicines and equipments used for poultry farming | 1.Identification of opportunities in poultry industry 2. Enlist the roles and functions of a small poultry farmer 3. Photograph of different breeds of poultry Visit to poultry farm for studying the characteristics of a good poultry farm, including the following: Dimension of sheds, Number of birds and work out space per bird, Materials used for construction of poultry sheds. Facilities provided for rearing of birds, Tools and equipment used at poultry farm | 07 |
| | 7. Light management for | | |

| | different age group of birds | | |
|---|--|--|----|
| 3. Describe the practices adopted for maintaining cleanliness and hygiene in poultry shed | 1.Routine cleaning and sanitization 2. Fumigation of equipments and egg 3. Disinfection of the brooders and other poultry houses and equipment, 4. Importance of temperature and ventilation for health and hygiene 5.Use of the personal protective equipment/ items while handling poultry birds. | 1. Enlist common disinfectants, water sanitizer and chemicals used for sanitation and fumigation. 2. Use of Personal Protective Equipment (PPE) 3. Study of procedure for cleaning and sanitizing poultry farm. | 21 |
| 4. Explain the procedure for disposal of poultry waste | 1.Safety and cleanliness of the birds and sheds 2. working methods to promote health of the birds. 3. Methods of poultry waste disposal in different housing systems (deep litter, cage) 4. Sanitation and hygiene of poultry house, equipment, vehicles and visitors for disease prevention and spread. 5. Monitoring of the poultry birds for optimum growth and livability. | 1. Visit of Poultry farms to enlist important micro-environmental factors and methodology used to construct such houses to meet requirements · 2. Identify and enlist potential hazards and factors responsible for these hazards. 3. Describe the waste disposal methods used in the farm | 15 |

Unit-2. Handling Poultry Birds in Shed (A)

| Learning Outcome | Theory | Practical | Duration |
|-----------------------|--------------------------|---------------------------|----------|
| | (21 hrs) | (30 hrs) | (51 hrs) |
| 1.Describe the | 1.Preparation of poultry | Handling of birds | 26 |
| handling and | shed before and after | for different purposes | |
| monitoring of poultry | arrival of chicks | viz., wing banding, | |
| birds in shed | 2. Handling and good | de-breaking, | |
| | management practices | debugging, | |
| | for birds to minimize | vaccination, sexing, | |
| | stress and for improved | shifting, transportation, | |

| | health and hygiene | etc. | |
|---|---|--|----|
| 2. Describe the procedures of biosecurity for maintaining and health and hygiene of poultry birds | 1.Meaning of biosafety and biosecurity 2. Types of biosecurity 3. Prevention and spread of diseases in poultry farm 4. Effect of diseases and pests on poultry production | Steps to prevent disease outbreak Study of litter management practices | 25 |
| | | | 51 |

Class-XI

Paper -II

Unit-2. Handling Poultry Birds in Shed (B)

| Learning Outcome | Theory (3 hrs) | Practical (6 hrs) | Duration (9 hrs) |
|--|---|---|---------------------|
| 3 Management of birds in extreme climate | 1.Special housing management and care of birds during extreme summer stress 2. Feeding time, water requirement and feeding electrolytes 3.Remedial measures to protect the birds from stress and diseases | 1.Visit the farm while extreme temperature to differentiate behavior of birds during normal and stress conditions. 2.Physiological behavior of feeding, panting etc | 09 |
| | | | 09 |

Unit-3. Feeding Poultry Birds

| Learning Outcome | Theory (30hrs) | Practical (22 hrs) | Duration (50hrs) |
|---|--|---|---------------------|
| 1.Describe the forms of feed, supplements and additives used for feeding poultry birds | 1.Role of nutrients, feed ingredients, feed supplements and feed additives in poultry ration 2.Forms of feed – mash, | 1.Visit to a poultry feed mill to identify the feed ingredients, storage of feed ingredients and preparation of compounded feeds. | 15 |

| | pellet, crumbles 3Feed ingredients used for poultry – carbohydrates, fats, proteins, vitamins, minerals, etc. 4Basic nutritional requirements, feeding and drinking behaviour of birds | 2. Enlist different energy and protein rich feed ingredients | |
|---|--|---|----|
| 2.Describe the procedure for procurement and quality assurance for poultry feed | 1.Ingredients used for poultry feed preparation 2. Procurement and storage of feed ingredient and feed. 3. Adulterants and anti nutritional factors in feed ingredients 4. Quality control of feed ingredients like physical and chemical 5.Quality control for process of feed preparation 5. Preparation of feed inventory and checking of stock level on a regular basis. 6. Consequences of improper storage of feed | 1.Visit to feed mill to study the ingredients used for feed production, vitamins and mineral supplements, machinery, 2.Procedure of feed production and quality assurance at least some physical parameters | 10 |
| 3. Describe the various types of ration and their formulation for feeding poultry birds | 1.Types of poultry ration for different purposes 2. Broiler ration – Prestarter, Starter, finisher 3. Layer ration- Chick, grower, layer 4. Breeder- Starter, Grower, breeder 5. Computation of ration for different age and growth stage of poultry birds. 3. Methods for feed processing and compounding. | Study of ingredients, types of poultry ration and steps in computation of ration | 15 |
| 4.Feed and water supply management | 1.Minimum feeding space requirements 2. Minimum water space requirements 3. Placement of | Visit to poultry farm to study the feeding and watering equipment, spacing of equipment and procedure | 10 |

Unit-4. Maintaining Health and Hygiene at Poultry Farm

| Learning Outcome | Theory (19 hrs) | Practical (30 hrs) | Duration (49 hrs) |
|---|---|---|----------------------|
| 1.Describe the common poultry diseases and their management | 1.What is disease and difference between healthy and sick poultry birds 3.Factors influencing occurrence and spread of diseases 4. Principles of health management – prevention of disease, early recognition or detection of disease, and early treatment of disease. 5. Common poultry diseases – Ranikhet Disease (RD), Marek's Disease, (MD) Avian Influenza (Bird Flu)Infectious Bursal Disease (IBD), Fowl Pox, Infectious Bronchitis, Fowl cholera, Coccidiosis, Aflatoxicosis, Brooder pneumonia, Parasitic infestation etc. 6. Bio-security measures at poultry farms. | Visit to a poultry farm, note down the possible sources of contamination and enlist various bio-security measures adopted at the farm. | 26 |
| 2.Describe the various types of vaccines and vaccination schedule for poultry birds | 1.Types of vaccines - live, attenuated and killed 2. Handling and storage of vaccines on the poultry farm 3. Care during vaccination 4. Vaccination schedule for poultry broilers and layers 4. Vaccination procedures – Route of administration, (intramuscular/subcutaneous/ocular/oral) Vaccination through drinking water, etc. | 1.Visit to a poultry farm to study the vaccination schedule followed at the farm for different diseases. 2. Storage of vaccines, medicines and precautions during their handling and administration. 3. Check for presence of | 13 |

| | | external parasites in the birds and remedial measures taken at the farm | |
|--|---|--|----|
| 3.Describe the factors affecting nutrient requirements and nutrition deficiency in poultry birds | 1. Factors affecting nutrient requirements in poultry birds – genetics, age, sex, production status, reproductive state, temperature, etc. 2. Nutrient requirements for broilers and layers 3. Nutritional deficiency and metabolic diseases and prevention | Prepare the chart of nutrition deficiency and metabolic diseases | 10 |
| | | | 49 |

Reference Books:

- 1. Facilitator Guide- Small Poultry farmer by ASCI (Agriculture Skill Council of India)
- 2. Poultry production –By R.A Singh, Kalyani Publisher