

Syllabus For Poultry Farm Worker

Course Name	POULTRY FARM WORKER, V2
Course Code	STC - AGR/2021/0207, V2
Level	3
Occupation	POULTRY FARM WORKER (POFW)
Job Description	Scientific Poultry farming, Farm & disease Management of any private, public Poultry farms under the supervision of the Sr. Poultry Farm Manager or supervisor.
Course Duration	Total Duration 390 Hrs (T-90, P-180, OJT-60 and ES-60)
Trainees' Entry Qualification	Grade 10 OR Grade 8 with two year of (NTC/ NAC) after 8 th OR Grade 8 pass and pursuing continuous schooling in regular school with vocational subject OR 8th grade pass with 2 yrs relevant experience OR Previous relevant Qualification of NSQF Level 2 with one yr experience OR Previous relevant Qualification of NSQF Level 2.5 with 6 months experience
Trainers Qualification	M.V. Sc. (Animal Sc.)/B.V.Sc. & A.H./ B. Sc. Animal Sc. / Graduate with 10+2 in Science with 2 years of relevant work experience/ Regular Diploma more than 15 months in veterinary /Animal Husbandry / Poultry with 3 years of relevant work experience

Structure of Course:

Module No.	Outcome	Theory (Hrs)	Practical (Hrs)	Total (Hrs) [Multiple of 30]
1	Apply Safe Working Practices	20	40	60
2	Explain the basics of Scientific Poultry Farming, different Poultry breeds anatomical body parts, physiological and other production parameters, various systems of Poultry rearing practice with its merits and demerits in Poultry farming.	10	20	30
3	Illustrate balanced Poultry Feeding, feed ingredients, Nutrition requirement of different species and forms of Poultry feed, prepare low cost balanced feed for poultry, identify different anti-nutrients, and nonconventional feed components	10	20	30

	for profitable Poultry farming.			
4	Identify or demonstrate different types of Poultry housing pattern like-backyard, intensive, and semi-intensive various farm Equipment & Farm Management Practices	10	20	30
5	Demonstrate different Poultry Hatching, Brooding as- natural or artificial incubation & Chick rearing and Management Practices	10	20	30
6	Identify and manage various infectious and non-infectious diseases that occur in Poultry Farming and also demonstrate the different medication & vaccination process to poultry birds in the farm.	10	20	30
7	Explain & demonstrate different system of Broiler poultry farming, chick rearing, feeding watering, medication, vaccination and integration system in Broiler Poultry Farming.	10	20	30
8	Demonstrate the process of documentation, record keeping & Value chain management and trade policy in commercial Poultry Farming	10	20	30
9.	OJT		60	60
10.	Employability Skill- 60hrs	--	--	60
	TOTAL:	90	240	390

Employability Skill: 60Hrs (Provided by NCVET)

OJT: 60 hours (in multiple of 30)

SYLLABUS:

Module No. 1: Workplace Safety

Outcome: Apply Safe Working Practices

Theory Content:

Introduction to Occupational Safety and Health importance of safety and health at workplace. Basic Hazards, Chemical Hazards, Mechanical Hazards, Electrical Hazards, Thermal Hazards. Occupational health, Occupational hygienic, Occupational Diseases/Disorders & its prevention. Basic principles for protective equipment. Accident Prevention techniques—control of accidents and safety measures. Care of injured & Sick at the workplaces, First-Aid & Transportation of sick person. Benefits guaranteed under various acts- Factories Act, Apprenticeship Act, Employees State Insurance Act (ESI), Payment Wages Act, Employees Provident Fund (EPF) Act, The Workmen's compensation Act etc.

General farm hygiene, Sanitation procedures, quarantine, isolation, shed cleaning and disinfection procedures, Water sanitation, Disinfection, precaution and handling, Bio-safety and bio-security, Proactive measures to minimize entry of infection agents, farm premises, Structural and Operational Sanitation

measures in Poultry farm.

Practical Content:

Demonstrate general farm hygiene & Sanitation procedures, quarantine, isolation, shed cleaning and disinfection procedures, Water sanitation, Disinfection, precaution and handling, Enlist bio-safety & bio-security, Proactive measures to minimize entry of infection agents, Draw & depict Structural and Operational Sanitation measures in Poultry farm.

Module No. 2: Basics of commercial Poultry Farming.

Outcome: Explain the basics of Scientific Poultry Farming, different Poultry breeds anatomical body parts, physiological and other production parameters, various systems of Poultry rearing practice with its merits and demerits in Poultry farming.

Theory Content:

Introduction to different Poultry & fowl breeds, such as- RIR, White Leg horn, Black Minorca, Vanraja, Garmyapriya, Karaknath etc., Poultry population, System of Poultry rearing as-Free-range, semi intensive, intensive rearing, advantages & disadvantages, Structure of poultry breeder farm, hatcheries and commercial Poultry farms, future perspective & constraints of Indian poultry industry, General Anatomical external & internal body parts and Physiological parameters of Poultry.

Practical Content:

Identify different Poultry & fowl breeds; Demonstrate different System of Poultry rearing as-Free-range, semi intensive, intensive rearing; Elaborate various advantages and disadvantages of systems of Poultry rearing, Depict & prepare various model Structure of poultry breeder farm, hatcheries and commercial Poultry farms, Draw and elaborate external & internal body parts and Physiological parameters of Poultry.

Module No. 3: Scientific feeding & Nutrition Management in Poultry

Outcome: illustrate balanced Poultry Feeding, feed ingredients, Nutrition requirement of different species and forms of Poultry feed, prepare low cost balanced feed for poultry, identify different anti-nutrients, and nonconventional feed components for profitable Poultry farming.

Theory Content:

Major Feed ingredients as- Carbohydrate, Protein, Fat, Vitamin, Minerals etc. in Poultry feeding, Standard Nutrient requirements & feeding for various species of poultry, Importance of Macro & micro elements in poultry feeding, Nutritional and metabolic disorders in poultry, Forms of poultry feed as- Pellets, granules, crumble etc, Low cost balanced Feed Formulation with locally available ingredients for Poultry, commercial Poultry Rations as- Chick, Grower, finisher feed etc., commonly occurring anti nutrients in poultry feed ingredients, Different systems of feeding, restricted use of additives & non-additives as-Amino acid, antibiotics, hormones, enzyme, probiotics etc., Utilization of non-conventional feed stuff for poultry.

Practical Content:

Identify major Feed ingredients of Poultry; Demonstrate various feeding requirements in various species of poultry, Elaborate different forms of poultry feed, Prepare low cost balanced Rations with locally available ingredients & identification of commercial feed formulation in Poultry, Prepare a list of commonly occurring anti nutrients & toxicants in poultry feed ingredients, Depict various systems of feeding, Prepare a list of additives and non-additives along with non-conventional feed stuff used for commercial poultry farming.

Module No. 4: Poultry Housing, Equipment & farm Management

Outcome: Identify or demonstrate different types of Poultry housing pattern like- backyard, intensive, and

semi-intensive various farm Equipment & Farm Management Practices

Theory Content:

Selection of site and location of poultry farm, Types of Poultry houses such as- Free range, Intensive and semi-intensive type etc., Preparation of house to receive day old chicks, Ventilation system in poultry housing, System of Poultry rearing-Cage, deep litter and slat system, Poultry farm equipment–Brooding, feeding & watering equipment's, vaccinators, dubbing, debeaking & other equipment, Applications of automation in poultry industry. Automatic feeders and drinkers, Egg and manure collection system. Poultry Waste Management.

Practical Content:

Prepare schematic diagramme of site and location of poultry farm, Identify various types of Poultry houses & Ventilation system in poultry housing, Demonstrate system of Poultry rearing-Cage, deep litter and slat system, Poultry farm, feeding & watering equipment's, vaccinators, debeaking & other equipment, Applications of automatic feeders and drinkers, Egg and manure collection system.

Module No. 5: Poultry Brooding, Hatching & Chick Management

Outcome: demonstrate different Poultry Hatching, Brooding as- natural or artificial incubation & Chick rearing and Management Practices

Theory Content:

Principle of Poultry Brooding, Incubation and Hatchery Management, Breeder Management Practices, System of Raring of chicks in Broiler & Layer Poultry, Feed and Water management in Poultry, Broiler & Layer farm management, standard medication and vaccination schedule in Poultry farm Management

Practical Content:

Elaborate the principles and important factors in breeding, Incubation and Hatchery Management, Practices in Poultry farming; Identify various System of Raring in Broiler & Layer Poultry, Explain feed, Water and essential management practices required in Poultry, Hands on practical on various medication like-drenching, injection and other process and vaccination schedule and injection procedure as-intra-muscular, Intravenous and subcutaneous methods in Poultry farming.

Module No. 6: Scientific disease management, prevention & Vaccination in Poultry.

Outcome: Identify and manage various infectious and non-infectious diseases that occur in Poultry Farming and also demonstrate the different medication & vaccination process to poultry birds in the farm.

Theory Content:

Classification of several infectious Poultry diseases–Viral, Bacterial, Fungal, protozoa and Parasitic diseases. Nutritional deficiency diseases of poultry, Medication and Vaccination Schedule of Poultry, pre and post vaccination care, Post mortem procedure, Preventive Measures for Outbreak of Poultry disease, System of Integration in Poultry farm.

Practical Content:

Identification of various infectious diseases of Poultry i.e. Viral, Bacteria, Fungi, protozoa and Parasites. Describe various nutritional deficiency diseases of poultry, Demonstrate various medication and Vaccination process as-intra-muscular, Intravenous and subcutaneous methods in Poultry farming, Elaborate pre & post vaccination care, Perform post mortem procedure, Enlist different preventive Measures for Outbreak of disease in Poultry farm.

Module No. 7: Broiler Farm Management & Entrepreneurship development

Outcome: explain & demonstrate different system of Broiler poultry farming, chick rearing, feeding watering, medication, vaccination and integration system in Broiler Poultry Farming.

Theory Content:

Different Systems of Broiler Poultry chick rearing, Preparation of house for brooding of day old Broiler chicks, Selection of Poultry chicks, Candling process, lighting schedule, and other brooding management practices in Broiler Poultry, Scientific Feeding and Water management in chick, grower and finisher stage of Broiler Poultry, preparation of Broiler farm routine or schedule, Adoption of standard medication and vaccination schedule in Broiler Farming, System of Integration in Broiler Poultry and other allied farming system for better profitability.

Practical Content:

Demonstration of various Broiler chicks rearing system of Poultry, Enlistment of various materials necessary for preparation of house for brooding of day old chicks in Broiler farming, Elaborate feed and Water requirement in chicks, Grower & finisher stage of Broiler Poultry, Identification of genetically superior poultry chicks, Elaborate Candling process and lighting schedule in brooding management in Broiler Poultry, Perform routine medication & vaccination process in chicks and other stage in Broiler Poultry farming.

Module No. 8: Record Keeping, Marketing & Value chain Management in Poultry

Outcome: demonstrate the process of documentation, record keeping & Value chain management and trade policy in commercial Poultry Farming.

Theory Content:

Systematic record keeping in Poultry farm management, Poultry Value Chain management and interventions, Supply Chain Management, Processing & Products Technology in Poultry farming, Marketing strategy in commercial Poultry farming, Entrepreneurship and Financial Management of successful Poultry enterprise, Insurance & development aspects of poultry farm entrepreneurship in India

Practical Content:

How to document & keeps record in Poultry farm management, Elaborate Poultry Value Chain, interventions, Supply Chain Management, Enlist processing & Products Technology, Describe Financial Management of successful Poultry enterprise, Visit any successful Poultry entrepreneurship farm in the state of West Bengal.

Learning Outcome – Assessment Criteria

Module No.	Outcome	Assessment Criteria
1	Apply Safe Working Practices	<p>After completion of this module students will be able to:</p> <p>(1.1) Trainee will be able to explain general farm hygiene, Sanitation procedures, quarantine, isolation, shed cleaning and disinfection procedures in Poultry farming.</p> <p>(1.2) Trainee will be ask to elaborate various water sanitation, precaution and handling along with various structural and Operational Sanitation measures in</p>

Module No.	Outcome	Assessment Criteria
		<p>Poultry farm.</p> <p>(1.3) Trainee will ask to delineate the standard bio-safety and bio-security protocol and different proactive measures to minimize entry of infection agents in premises of poultry farms.</p> <p>(1.4) Trainee will be ask to explain several Occupational Safety and Health importance of safety and health at workplace.</p> <p>(1.5) Trainee will be able to enlist several Hazards, as-Chemical, Mechanical, Electrical and Thermal Hazards. Occupational health, Occupational hygienic, Occupational Diseases & its prevention in Poultry farming.</p> <p>(1.6) Trainee will be ask to depict Basic principles for protective equipment, different accident Prevention techniques–control of accidents and safety measures. Care of injured & Sick at workplace.</p> <p>(1.7) Trainee will be able to demonstrate various first-Aid & Transportation of sick person, benefits guaranteed under various acts- Factories Act, Apprenticeship Act, ESI Act, Payment Wages Act, EPF Act, Workmen’s compensation Act.</p>
2	<p>Explain the basics of Scientific Poultry Farming, different Poultry breeds anatomical body parts, physiological and other production parameters, various systems of Poultry rearing practice with its merits and demerits in Poultry farming.</p>	<p>After completion of this module students will be able to:</p> <p>(2.1)To ask the trainee to identify and elaborate different poultry breeds (like-RIR, White leg horn, Black Minorca, Vanraja, Gramyapriya, Kadaknath etc.) for selection of specific i.e. Broiler, Layer or dual purpose poultry farming .</p> <p>(2.2) Trainee will be ask to delineate the basic requirements like- space, materials, cost etc. to set up a commercial farm along with its pre-requisite recurring and non-recurring aspects of profitable poultry farming through assignment or presentation to the assessors.</p> <p>(2.3). To ask the trainee to elaborate different systematic Poultry rearing practices (like-Backyard, Intensive, semi-intensive system etc.) along with its merits & demerits in various poultry farming.</p> <p>(2.4) To assess the trainee on the basis of report/assignment submitted regarding various Poultry farming practices in the state along with their</p>

Module No.	Outcome	Assessment Criteria
		<p>future perspectives and constraints of poultry industry.</p> <p>(2.5)To ask the trainee to identify different anatomical body parts and physiological production parameters of Poultry for better systematic knowledge in Poultry farming.</p>
3	<p>Illustrate balanced Poultry Feeding, feed ingredients, Nutrition requirement of different species and forms of Poultry feed, prepare low cost balanced feed for poultry, identify different anti-nutrients, and nonconventional feed components for profitable Poultry farming.</p>	<p>After completion of this module students will be able to:</p> <p>(3.1)The trainee will be able to illustrate various feed ingredients (like- CHO, Proteins, Fats, Vitamins, Minerals & others) along with micro and macro nutrients (like-Ca, P, Mg, Fe, Zn, Co, N, K, etc.) of poultry feeding.</p> <p>(3.2) Trainee will be able to explain the nutrient requirements of Chick, starter, Grower, finisher etc. and feeding regime for various species of Poultry such as- Layer, Broiler, Dual breed etc.</p> <p>(3.3) The trainee will be able to elaborate various conventional (like- MOC cake, Rice grit, Gram husk, Rice husk etc.) & non-conventional (Karanja Cake, Neem Cake, Azolla etc.) feed ingredients of Poultry.</p> <p>(3.4)The trainee will be able to demonstrate different nutritional & metabolic disorders (Cannibalism, Paresis, Hypo-vitaminosis, and Paralysis etc.) in Poultry through pictorial presentation of poultry.</p> <p>(3.5) The trainee will be able to explain various forms of poultry feed (like-Pallet, Mash, grit etc.), feeding rate and methods for chick feeding & other category of poultry birds (like-Duck, Quail, Turkey etc.) through pictorial presentation of poultry.</p> <p>(3.6) Trainee will be able to depict various systems as- free range, cage feeding, feed additives (like- amino acid, antibiotics), enzymes, hormones like-zanthofil, antioxidants, and probiotics used in Poultry</p>
4	<p>Identify or demonstrate different types of Poultry housing pattern like- backyard,</p>	<p>After completion of this module students will be able to:</p> <p>(4.1) Trainee will be able to demonstrate different systems (like- free range, Intensive, semi-intensive etc.) of Poultry rearing system in field.</p> <p>(4.2.) Trainee will be able to explain different types of Poultry housing system (like-cage system, deep litter etc.) along with proper examples through pictorial identification.</p>

Module No.	Outcome	Assessment Criteria
	intensive, and semi-intensive various farm Equipment & Farm Management Practices	<p>(4.3) The trainee will be able to enlist various tools and equipment's along with its utility for profitable poultry farming system</p> <p>(4.4) The trainee will be able to elaborate selection of site and principles of poultry housing practices through schematic diagramme.</p> <p>(4.5) Trainee will be able to explain different scientific farm management practices (like- manual or semi-automatic) in Poultry farming system.</p>
5	Demonstrate different Poultry Hatching, Brooding as- natural or artificial incubation & Chick rearing and Management Practices	<p>After completion of this module students will be able to:</p> <p>(5.1) The trainee will be able to delineate the Principles of Poultry brooding (like- Natural of artificial incubation etc.), mating along with hatchability in commercial Poultry.</p> <p>(5.2) The Trainee will be able to identify various types of hatching and incubation system (Indigenous or artificial) in Broiler & layer Poultry farming system through pictures and explain them.</p> <p>(5.3) trainee will be able to explain different principles and factors of brooding management and hatchability factors (like- temperature, humidity, turning etc.) in Poultry Farming.</p> <p>(5.4) The trainee will be able to perform different system of chicks & Poultry rearing practices through lighting and temperature schedule in commercial farm</p> <p>(5.5) Trainee will be able to illustrate different waste management practices (like- vermicomposting of deep litter) from commercial Poultry farming.</p>
6	Identify and manage various infectious and non-infectious diseases that occur in Poultry Farming and also demonstrate the different medication & vaccination process to poultry birds in the farm.	<p>After completion of this module students will be able to:</p> <p>(6.1) Trainee will be able to identify different infectious diseases such as- virus, bacteria, fungus, protozoa, parasitic etc. that occur in poultry farming and name them through pictures or original sample.</p> <p>(6.2) The trainee will be able to explain general medication process and precautions (like-drenching, injection etc.) during Poultry Farming.</p> <p>(6.3) Trainee will be able to enlist the specific vaccination schedule for commercial layer and Broiler & other Poultry farming.</p>

Module No.	Outcome	Assessment Criteria
		<p>(6.4) The trainee will be able to demonstrate the different vaccination process as-IM, IV or SC injection to poultry bird in the farm.</p> <p>(6.5) The trainee will be able to explain various measures like-Sanitation and bio-security measures etc. to prevent disease outbreak in Poultry</p>
7	<p>Explain & demonstrate different system of Broiler poultry farming, chick rearing, feeding watering, medication, vaccination and integration system in Broiler Poultry Farming.</p>	<p>After completion of this module students will be able to:</p> <p>(7.1) Trainee will be able to explain different Systems of Broiler Poultry chick raring practice in cage or deep litter system in Poultry.</p> <p>(7.2) Trainee will be ask to elaborate process for brooding of day old chicks, Selection methods of Poultry chicks, Candling process, lighting schedule, and other brooding management practices in Broiler Poultry .</p> <p>(7.3.) Trainee will be ask to explain scientific Feeding and Water management in chick, grower and finisher stage of Broiler Poultry.</p> <p>(7.4) Trainee will be asking to prepare scientific Broiler farm routine or schedule in Poultry farming.</p> <p>(7.5) Trainee will be asking to elaborate standard medication and vaccination schedule in Broiler Farming.</p> <p>(7.6). Trainee will be able to demonstrate various system of Integration in Broiler Poultry and other allied farming system for better profitability.</p>
8	<p>demonstrate the process of documentation, record keeping & Value chain management and trade policy in commercial Poultry Farming</p>	<p>After completion of this module students will be able to:</p> <p>(8.1) Trainee will be able to explain systematic documentation & record keeping process in Poultry farming.</p> <p>(8.2) Trainee will be able to illustrate different value chain system and marketing process like-retail and whole sale process etc. in commercial poultry farming.</p> <p>(8.3)Trainee will be able to explain various supply chain Management., processing and product technology (like-fresh cut, processed product etc.) in Poultry farming.</p> <p>(8.4) Trainee will be able to explain his efficiency in</p>

Module No.	Outcome	Assessment Criteria
		entrepreneurship role and state the foreign trade policy on poultry.
9	OJT-60hrs	
10	Employability Skill-60hrs	

LIST OF TOOLS & EQUIPMENTS: MODEL COURSE ON POULTRY FARM WORKER

LIST OF GENERAL TOOLS & EQUIPMENTS: (For Batch of 30 Candidates)			
S No.	Name of the Tool & Equipment	Specification	Quantity
1.	Laptop & LCD Projector,	Standard & available size	01Set
2.	White board, Marker,	Minimum 5'X4'	01-02 each
3.	Record book, Balanced Feed Chart,	Standard & available size	02-03 each
4.	Public address system	Standard & available size	01 No

LIST OF FARM EQUIPMENTS REQUIRED FOR POULTRY DEMONSTRATION UNIT

S No.	Name of the Farm Equipment's	Specification	Quantity
1.	Poultry shed@ 1.5 Sqft / Poultry Birds	Space:1.5'X 250Nos.	375-400 Sqft.
2.	Poultry feeder, Drinker, water Heater	Standard & available size	01No /10-15 Birds
3.	Brooder, Brooder Guard & Hover	Standard & available size	01-02 Nos.
4.	Setter, Hatcher & Sprayer for capacity of 250-300 nos. of birds etc.	Standard & available size	01-02 Nos. each
5.	Chemicals like-Lime, alcohol based disinfectants, Sprinkler for spray etc.	Standard & available size	02-03 each
6.	Vaccines as- RD, GD, IBD, Fowl Pox etc. Vaccinator, & First aid kit etc.	Standard & available size	02-03 each
7.	Rake, Wt. Balance, Fan, Litter etc.	Standard & available size	01-02 each

N.B.: To conduct Practical for trainees on related trade/discipline, a live Poultry demonstration farm with minimum 250-300 numbers of poultry birds in a minimum required space of 400-500 Sqft area are prerequisite for hands-on skill development under training Program.

Marks Distribution

Outcome	Outcome Code	Total Th Marks	Total Pr Marks
Apply Safe Working Practices	AGR/0207/OC1	10	90
Explain the basics of Scientific Poultry Farming, different Poultry breeds anatomical body parts, physiological and other production parameters, various systems of Poultry rearing practice with its merits and demerits in Poultry farming.	AGR/0207/OC2	20	80
Illustrate balanced Poultry Feeding, feed ingredients, Nutrition requirement of different species and forms of Poultry feed, prepare low cost balanced feed for poultry, identify different anti-nutrients, and nonconventional feed components for profitable Poultry farming.	AGR/0207/OC3	20	80
Identify or demonstrate different types of Poultry housing pattern like- backyard, intensive, and semi-intensive various farm Equipment & Farm Management Practices	AGR/0207/OC4	20	80
demonstrate different Poultry Hatching, Brooding as- natural or artificial incubation & Chick rearing and Management Practices	AGR/0207/OC5	20	80
Identify and manage various infectious and non-infectious diseases that occur in Poultry Farming and also demonstrate the different medication & vaccination process to poultry birds in the farm.	AGR/0207/OC6	20	80
Explain & demonstrate different system of Broiler poultry farming, chick rearing, feeding watering, medication, vaccination and integration system in Broiler Poultry Farming.	AGR/0207/OC7	20	80
Demonstrate the process of documentation, record keeping & Value chain management and trade policy in commercial Poultry Farming	AGR/0207/OC8	20	80
Work in real job situation with special emphasis on basic safety and hazards in this domain(OJT)	AGR/0207/OC9	0	150
Employability Skills- 60 hrs.	DGT/VSQ/N0102	50	0