

Poultry Management

The collage features eight circular images:

- Top left: A woman in a white lab coat collecting eggs from a large wooden egg tray.
- Top center: A man in a blue shirt tending to chickens in a multi-tiered cage system.
- Top right: A man in a blue shirt standing in a large brooder house filled with many young chicks.
- Center: A fluffy yellow chick sitting on a large orange egg.
- Bottom left: A large brooder house filled with many young chicks.
- Bottom center: A close-up of a yellow chick on a nest of straw with several red chili peppers.
- Bottom right: A hand holding a small yellow chick with a white electronic device attached to its leg.
- Bottom far right: Two people, a woman and a man, standing behind a wire fence, looking at chickens in an enclosure.

 The background of the collage includes a large orange egg and a white egg carton.



**National Vocational &
Technical
Training Commission**

INTRODUCTION.....	3
DEFINITION/ DESCRIPTION OF THE TRAINING PROGRAMME FOR POULTRY SUPERVISOR	
PURPOSE OF THE TRAINING PROGRAMME	3
COMPETENCIES TO BE GAINED AFTER COMPLETION OF COURSE	4
TRAINEE ENTRY LEVEL	4
MINIMUM QUALIFICATION OF TRAINER.....	4
RECOMMENDED TRAINER: TRAINEE RATIO	4
MEDIUM OF INSTRUCTION I.E. LANGUAGE OF INSTRUCTION	4
DURATION OF THE COURSE (TOTAL TIME, THEORY & PRACTICAL TIME)	5
SEQUENCE OF THE MODULES	6
SUMMARY – OVERVIEW OF THE CURRICULUM	7
MODULES	10
LEVELS	
<i>Module 1 : Manage and Safety at Siet.....</i>	<i>10</i>
<i>Module 2 : Perform Small Scale Poultry Management.....</i>	<i>15</i>
<i>Module 3 : Perform Moulting of Birds.....</i>	<i>21</i>
<i>Module 4 : Manage Farm and Hatchery Practices.....</i>	<i>26</i>
<i>Module 5 : Perform Procurement.....</i>	<i>35</i>
<i>Module 6 : Manage and Supervise the Job Activities.....</i>	<i>37</i>
<i>Module 7 : Develop Entrepreneurial Skills</i>	<i>41</i>
<i>Module 8 : Practice Professionalism.....</i>	<i>44</i>
GENERAL ASSESSMENT GUIDANCE FOR “POULTRY SUPERVISOR”	46
ASSESSMENT STRATEGY FOR “POULTRY SUPERVISOR”	47
COMPLETE LIST OF TOOLS AND EQUIPMENT.....	49
LIST OF CONSUMABLE SUPPLIES.....	51
CREDIT VALUES	52
MEMBERS OF THE CURRICULUM DEVELOPMENT COMMITTEE.....	53
MEMBERS OF THE CURRICULUM REVIEW COMMITTEE	54

Introduction

In Pakistan, poultry industry plays very essential role to minimize the malnutrition, reduce poverty and promote cost effective growth. It is one of the largest industries in Pakistan with more than 1.190 billion rupees investment. Poultry industry is continuously reducing the gap between demand and supply of meat in Pakistan. Poultry meat is the cheapest protein source available. Poultry industry is providing employment to more than 1.5 million people of Pakistan.

As per Economic Survey of Pakistan, per capita consumption of meat is only 8.82 kilo grams and 96.7 eggs annually. But in developed countries per capita meat consumption is 40 kilograms and 300 eggs per year. According to World Health Organization, daily requirement of animal protein for person is 27 grams and we are consuming only 17 grams daily. Therefore, we are already consuming less animal protein as per standards.

Poultry Management includes all the practices and principles including in the rearing of broiler for meat purpose and rearing of birds (Layer & Breeder) for egg purpose. With passage of time, poultry industry converted their traditional ways of production into fully automated and mechanized systems. Fully automated system required skilled manpower to operate all the systems efficiently which is being the major challenge for poultry industry in Pakistan. Meanwhile current growth pace of poultry industry highly demands skilled labour.

The competency based national vocational qualifications have been developed by NAVTTC to train the unskilled human resource on the technical and entrepreneurial skills to be employed / self-employed and inevitably set sustainable impact on their lives by increase in their livelihood income.

Training Course is based on competency standards which are defined by the industry and the traditional role of a trainer changes and shifts towards the facilitation of training. A trainer encourages and assists trainees to learn for themselves. Trainees are likely to work in groups (pairs) and all doing something different. Some are doing practical tasks in the farm, some writing, some not even in the classroom or farm but in another part of the building using specialist equipment, working on computers doing research on the Internet or the library. As trainees learn at different pace they might well be at different stages in their learning, thus learning must be tailored to suit individual needs. The following facilitation methods (teaching strategies) are generally employed

Definition/ Description of the training programme for Poultry Supervisor

Purpose of the training programme

The Poultry management programme is to engage young people with a programme of development that will provide them with the knowledge, skills and understanding to start this career in Pakistan. The specific objectives of developing these qualifications are as under:

- Improve the professional competence of the trainees
- Provide opportunities for recognition of skills attained through non-formal or informal pathways
- Improve the quality and effectiveness of training and assessment for Poultry industry

Competencies to be gained after completion of course

- Manage and Safety at Site
- Perform Small Scale Poultry Management
- Perform Moulting of Birds
- Manage Farm and Hatchery Practices
- Perform Procurement
- Manage and Supervise the Job Activities
- Develop Entrepreneurial Skills
- Practice Professionalism

Trainee entry level

The entry requirement for this qualification would be Middle.

Minimum qualification of trainer

Teaching staff qualification should be BS.(Hons.) in Poultry Science/DVM with experience of 1-2 years in relevant field

Recommended trainer: trainee ratio

The recommended maximum trainer: trainee ratio for this programme is 1 trainer for 25 trainees.

Medium of instruction i.e., language of instruction

Instruction will be Urdu and English.

Duration of the course (Total time, Theory & Practical time)

This curriculum comprises 8 modules. The recommended delivery time is 1200hours.

Delivery of the course could therefore be full time, 5 days a week, for 12 months.

Training providers are at liberty to develop other models of delivery, including part-time and evening delivery.

The full structure of the course is as follow:

Module Level-5	Theory¹ Days/hours	Workplace² Days/hours	Total hours	Credit Hours
Module 1 Manage Safety at Site	24	36	60	6
Module 2 Perform Small Scale Poultry Management	144	216	360	36
Module 3 Perform Moulting of Birds	36	54	90	9
Module 4 Manage Farm and Hatchery Practices	96	144	240	24
Module 5 Perform Procurement	12	18	30	3
Module 6 Manage and Supervise the Job Activities	32	48	80	8
Module 7 Develop Entrepreneurial Skills	16	24	40	4
Module 8 Practice Professionalism	120	180	300	30
Total			1200	120

¹ Learning Module hours in training provider premises

² Training workshop, laboratory and on-the-job workplace

Sequence of the modules

Each module covers a range of learning components. These are intended to provide detailed guidance to teachers (for example the Learning Elements component) and give them additional support for preparing their lessons (for example the Materials Required component). The detail provided by each module will contribute to a standardized approach to teaching, ensuring that training providers in different parts of the country have clear information on what should be taught. Each module also incorporates the industrial needs of Pakistan.

The distribution table is shown below:

Level-5

Module:1 Manage Safety at Site	Module:4 Manage Farm and Hatchery Practices	Module:6 Manage and Supervise the Job Activities
Module:2 Perform Small Scale Poultry Management	Module:5 Perform Procurement	Module:7 Develop Entrepreneurial Skills
Module:3 Perform Moulting of Birds	Module:8 Practice Professionalism	

Summary – overview of the curriculum

Module Title and Aim	Learning Units	Theory Days/hours	Workplace Days/hours	Timeframe of modules
Module 1: Manage Safety at Site Aim: The aim of this module to develop advanced knowledge, skills and understanding to Manage Safety at Site	LU1. Implement safe working practices at site LU2. Maintain safe work environment LU3. Report and investigate the accident at site LU4. Follow vehicle safety at workplace	24	36	60
Module 2: Perform Small Scale Poultry Management Aim: The aim of this module to perform rearing of meat type birds, egg type birds and incubation.	LU1. Perform rearing of meat type birds LU2. Perform rearing of egg type birds LU3. Perform incubation	144	216	360
Module 3: Perform Moulting of Birds Aim: The aim of this module to perform selection of birds, qualitative and quantitative feed restriction methods in post molting care practices.	LU1. Perform selection of birds LU2. Perform quantitative feed restriction method LU3. Perform qualitative feed restriction method LU4. Perform Post Moulting care practices	36	54	90
Module 4: Manage Farm and Hatchery Practices Aim: The aim of this module to perform general flock management, vaccination, sexing of chicks and grading of hatched chicks.	LU1. Perform general flock management LU2. Perform vaccination LU3. Perform sexing of chicks LU4. Perform grading of hatched chicks LU5. Prepare solutions	96	144	240

Module Title and Aim	Learning Units	Theory Days/hours	Workplace Days/hours	Timeframe of modules
Module 5: Perform Procurement Aim: The aim of this module to perform estimation of resources and execution of procurement.	LU1. Perform estimation of resources LU2. Execute procurement	12	18	30
Module 6: Manage and Supervise the Job Activities Aim: The aim of this module to develop a plan and supervise on site operation/activities and doing the on-site of inspection to prepare a report.	LU1. Plan for on-site operations LU2. Supervise work activities to achieve desired results LU3. Perform on- site inspection LU4. Prepare the inspection report.	32	48	80
Module 7: Develop Entrepreneurial Skills Aim: The aim of this module to develop a business plan, collect information regarding funding resources, develop a marketing plan and develop basic business communication skills.	LU1. Develop a business plan LU2. Collect information regarding funding sources LU3. Develop a marketing plan LU4. Develop basic business communication skills	16	24	40

Module Title and Aim	Learning Units	Theory Days/hours	Workplace Days/hours	Timeframe of modules
Module 8: Practice Professionalism Aim: The aim of this module to develop advanced knowledge, skills and understanding to Practice Professionalism	LU1. Develop Portfolio for industry LU2. Perform Internship	120	180	300

Modules

LEVEL 5

Module 1: Manage Safety at Site

Objective of the module: After this competency standard candidate will be able to manage safety at site.

Duration:	60 Hours	Theory:	24 hours	Practical:	36 hours
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Learning Unit	Learning Outcomes	Learning Elements	Duration	Materials Required	LearningPlace
LU1. Implement safe working practices at site	Trainee will be able to: <ol style="list-style-type: none"> 1. Carry out tool box talks which require discussion on critical safety matters and hazardous site conditions pertaining to particular work etc. 2. Practice of Personal Protective Equipment (PPE) 3. Implement health and safety practices and ensure it is followed by subordinates 	<ul style="list-style-type: none"> • Knowledge of unsafe act and unsafe conditions. • Physical hazards at work site and its controlling measures. • Standard procedures of handling, storing and stacking of hazardous materials. <p><u>Practical Activity</u></p> <ul style="list-style-type: none"> • Perform practice of Personal Protective Equipment (PPE) • Perform handling, storing and stacking of hazardous materials. 	Total: 15 hrs Theory: 6 hrs Practical: 9 hrs	<div>Consumable</div> <ul style="list-style-type: none"> • Internet Connection • Operating System (Windows, Linux) • White board marker • Duster <div>Non-Consumable</div> <ul style="list-style-type: none"> • White Board • Multimedia 	Computer Lab

	<p>4. Implement safe handling and stacking methods at workplace / store</p> <p>5. Perform appropriate posting of safety signs and boards at designated places)</p> <p>6. Barricade all unprotected openings at the workplace</p> <p>7. Implement and check near miss reporting</p> <p>8. Provide safe access at work place for movement of workers & materials.</p> <p>9. Conduct emergency response drill for enhancing importance of safety among the workers as per the policy of organization</p>			<ul style="list-style-type: none"> • Computer System • Bootable OS Flash drive/CD 	
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LU2. Maintain safe work environment	Trainee will be able to: <ol style="list-style-type: none"> 1. Use defined safe work practices and personal protective equipment to ensure personal safety at the workplace 2. Collect and/or dispose of all waste in accordance with environmental requirements and workplace procedures 3. Check condition and serviceability of equipment before storage. 	<ul style="list-style-type: none"> • How to dispose of hazardous waste safely • Standard procedures of handling, storing and stacking of hazardous materials. <p><u>Practical Activity</u></p> <ul style="list-style-type: none"> • Perform collection and disposal of all waste as per requirements of environment and workplace. 	Total: 15 hrs Theory: 6 hrs Practical: 9 hrs	<div>Consumable</div> <ul style="list-style-type: none"> • Internet Connection • Operating System (Windows, Linux) • White board marker • Duster <div>Non-Consumable</div> <ul style="list-style-type: none"> • White Board • Multimedia • Computer System 	Computer Lab
LU3. Report and Investigate the accident at site	Trainee will be able to: <ol style="list-style-type: none"> 1. Identify any injured employee and check severity of the injury 2. Provide first aid 	<ul style="list-style-type: none"> • What is injury • Degree of injuries • Accident investigating procedures and format of accident report 	Theory :6 hrs Practical: 9 hrs	<div>Consumable</div> <ul style="list-style-type: none"> • Internet Connection • Operating System 	Computer lab

	<p>treatment if required</p> <ol style="list-style-type: none"> Interview injured person and other involved personnel in the accident Collect all information related to the incident/accident at workplace Analyse the facts and figures by observing the accident scene Review your recording Perform risk assessment and hazard identification at the workplace Develop the incident report along with corrective measures to avoid future accidents 	<ul style="list-style-type: none"> Knowledge of first aid kit. Risk assessment <p><u>Practical Activity</u></p> <ul style="list-style-type: none"> Performance of history taking from injured person. Perform first aid treatment 	Total: 15 hours	<p>(Windows, Linux)</p> <ul style="list-style-type: none"> White board marker Duster <p>Non-Consumable</p> <ul style="list-style-type: none"> White Board Multimedia Computer System 	
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LU4. Follow vehicle safety at workplace	Trainee will be able to: <ol style="list-style-type: none"> 1. Follow the speed limit as per the company policy while driving vehicle at site 2. Use high visibility safety vest 3. Keep flag man while driving/reversing vehicle in operational areas 4. Follow standard procedure related to vehicle safety at workplace 	<ul style="list-style-type: none"> • Information of speed limit • Demonstrate vehicle driving safety as per policy of the organization • Information of visibility safety vest and flag man <p><u>Practical Activity</u></p> <ul style="list-style-type: none"> • Perform vehicle safety at work place 	Theory: 6 hrs Practical: 9 hrs Total: 15 hours	<div>Consumable</div> <ul style="list-style-type: none"> • Internet Connection • Operating System (Windows, Linux) • White board marker • Duster <div>Non-Consumable</div> <ul style="list-style-type: none"> • White Board • Multimedia • Computer System 	Computer lab
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Module 2 : Perform Small Scale Poultry Management

Objective of the module: This module covers the knowledge and skills required to perform small scale poultry management.

Duration:	360 Hours	Theory:	144 hours	Practical:	216 hours
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Learning Unit	Learning Outcomes	Learning Elements	Duration	Materials Required	Learning Place
LU1. Perform rearing of meat type birds	Trainee will be able to: <ol style="list-style-type: none"> 1. Perform Biosecurity practices 2. Prepare shed as per requirement 3. Select birds as per requirement 4. Perform brooding practices 5. Perform weighing of birds 6. Perform feed and water management 7. Perform light management 8. Perform ventilation management 9. Perform medication as per requirement 10. Perform vaccination as per schedule 	<ul style="list-style-type: none"> • Define brooding • Knowledge of shed preparation • Understanding of poultry diseases • Knowledge of meat type breeds • Importance of vaccination • Explain light management • Describe Biosecurity practices <p><u>Practical Activity</u></p> <ul style="list-style-type: none"> • Perform Biosecurity practices • Perform shed preparation, brooding practices • Perform all managerial practices during rearing 	Total: 120 hrs Theory: 48 hrs Practical: 72 hrs	Consumable <ul style="list-style-type: none"> • Note book • Pencil • Eraser • Sharper • Internet Connection • White board marker • Duster • Internet Connection • Sanitizer • PPEs • Disinfectants 	Class room/Farm

				<ul style="list-style-type: none"> • Cleaning chemicals • Nail cutter • Vaccine • Medicine <div>Non-Consumable</div> <ul style="list-style-type: none"> • Computer System • Printer • Scanner • White Board • Multimedia • Cleaning equipment • Brooder • Feeder • Drinker • Vaccine gun • Manuals 	
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LU2. Perform rearing of egg type birds	Trainee will be able to: <ol style="list-style-type: none"> 1. Perform Biosecurity practices 2. Prepare shed as per requirement 3. Select birds as per requirement 4. Perform brooding practices 5. Perform weighing and grading of birds 6. Maintain uniformity 7. Perform feed and water management 8. Perform light management 9. Perform ventilation management 10. Perform medication as per requirement 11. Perform vaccination as per schedule 12. Perform nest management 13. Collect and handle eggs 14. Perform grading of eggs 	<ul style="list-style-type: none"> • Knowledge of egg type breeds • Describe eggs grading and handling • Importance of ventilation • Explain the principles and practices involved in laying of birds • Knowledge of nest management • Importance of vaccination • Grading of birds • Importance of uniformity <p><u>Practical Activity</u></p> <ul style="list-style-type: none"> • Perform biosecurity practices • Perform shed preparation, brooding practices • Perform all managerial practices during rearing 	Total: 120 hrs Theory: 48 hrs Practical: 72 hrs	Consumable <ul style="list-style-type: none"> • Note book • Pencil • Eraser • Sharper • Internet Connection • White board marker • Duster • Internet Connection • Sanitizer • PPEs • Disinfectants • Cleaning chemicals • Nail cutter • Vaccine • Medicine • Wire mesh 	Class room/Farm
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				<ul style="list-style-type: none"> • Brooding paper • Polythene sheet <div>Non-Consumable</div> <ul style="list-style-type: none"> • Computer System • Printer • Scanner • Calculator • White Board • Multimedia • Cleaning equipment • Brooder • Feeder • Drinker • Vaccine gun • Manuals • Nests • Egg trays 	
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				<ul style="list-style-type: none"> • Egg storage cabinet • Sensors 	
LU3. Perform incubation	Trainee will be able to: <ol style="list-style-type: none"> 1. Select and arrange tools and equipment 2. Perform selection of eggs 3. Perform disinfection and sanitization practices 4. Perform fumigation of incubator 5. Perform placement of eggs according to standard method 6. Maintain incubation environment according to requirement 7. Collect chicks 8. Evaluate chick quality 	<ul style="list-style-type: none"> • Define incubation period • Explain the incubation requirements of different breeds • Describe placement of eggs • Understanding of disinfection and sanitization practices • Knowledge of egg selection • Knowledge of chick quality • Knowledge of fumigation • Knowledge of Latest Poultry Act • Knowledge of market linkage <p><u>Practical Activity</u></p> <ul style="list-style-type: none"> • Perform disinfection, sanitization, and fumigation practices • Perform egg placement and manage incubation conditions • Evaluate chick quality and perform vaccination 	Theory :48 hrs Practical :72 hrs Total :120 hrs	Consumable <ul style="list-style-type: none"> • Note book • Pencil • Eraser • Sharper • Internet Connection • White board marker • Duster • Internet Connection • Sanitizer • PPEs • Disinfectants • Sanitizer • Fumigants 	Class room/Farm

	<p>9. Perform chick vaccination</p> <p>10. Removal of un-hatched eggs</p>			<p>Non-Consumable</p> <ul style="list-style-type: none"> • Computer System • Printer • Scanner • Calculator • White Board • Multimedia • Cleaning equipment • Vaccine gun • Manuals • Fumigator chamber • Incubator 	
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Module 3 : Perform Moulting of Birds

Objective of the module: This module covers the knowledge and skills required to perform moulting of birds.

Duration:	90Hours	Theory:	36hours	Practical:	54hours
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Learning Unit	Learning Outcomes	Learning Elements	Duration	Materials Required	Learning Place
LU1. Perform selection of birds	Trainee will be able to: <ol style="list-style-type: none"> 1. Arrange tools and equipment as per requirement 2. Calibrate weighing scale 3. Check bird health 4. Perform weighing of birds 5. Perform categorization of birds according to body weight 	<ul style="list-style-type: none"> • Importance of moulting • Types of Moulting • understanding of moulting techniques • Knowledge of moulting requirements • Body weight categories of birds • Birds' selection criteria for moulting Practical Activity <ul style="list-style-type: none"> • Perform Calibration of weighing balance • Perform Weighing of birds • Perform Segregation of birds according to body weights 	Total: 24hrs Theory: 9 hrs Practical: 15hrs	Consumable <ul style="list-style-type: none"> • Note book • Pencil • Eraser • Sharper • Internet Connection • White board marker • Duster • Internet Connection • Sanitizer • PPEs 	Class room/Farm

				Non-Consumable <ul style="list-style-type: none"> • Computer System • Printer • Scanner • Calculator • White Board • Multimedia • Weighing balance • Shifting cage • Wire mesh 	
LU2. Perform quantitative feed restriction method	Trainee will be able to: <ol style="list-style-type: none"> 1. Perform feed restriction according to requirement 2. Perform feeding according to requirement 3. Maintain light as per requirement 	<ul style="list-style-type: none"> • Describe quantitative feed restriction method • Importance of quantitative feed restriction method • understanding of feed selection 	Total: 21hrs Theory: 9hrs Practical:	Consumable <ul style="list-style-type: none"> • Note book • Pencil • Eraser • Sharper • Internet Connection 	Class room/Farm

	<p>4. Perform weighing on daily basis</p>	<ul style="list-style-type: none"> • Knowledge of feeding and light maintenance requirements <p><u>Practical Activity</u></p> <ul style="list-style-type: none"> • Perform feeding according to requirements • Maintain light according to requirements • Perform weighing of birds 	12hrs	<ul style="list-style-type: none"> • White board marker • Duster • Internet Connection • Sanitizer • PPEs • Bulb <p>Non-Consumable</p> <ul style="list-style-type: none"> • Computer System • Printer • Scanner • Calculator • White Board • Multimedia • Manuals • Feeder • Drinker • Lux meter 	
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				<ul style="list-style-type: none"> • Weighing balance 	
LU3. Perform qualitative feed restriction method	Trainee will be able to: <ol style="list-style-type: none"> 1. Select feed as per requirement 2. Perform feeding according to requirement 3. Maintain light as per requirement 4. Perform weighing on daily basis 	<ul style="list-style-type: none"> • Describe qualitative feed restriction method • Importance of qualitative feed restriction method • understanding of feed selection • Knowledge of feeding and light maintenance according to requirement <p><u>Practical Activity</u></p> <ul style="list-style-type: none"> • Perform feeding according to requirements • Maintain light according to requirements • Perform weighing of birds 	Total: 24hrs Theory: 9 hrs Practical: 15hrs	<div>Consumable</div> <ul style="list-style-type: none"> • Note book • Pencil • Eraser • Sharper • Internet Connection • White board marker • Duster • Internet Connection • Sanitizer • PPEs • Bulb <div>Non-Consumable</div> <ul style="list-style-type: none"> • Computer System 	Class room/Farm

				<ul style="list-style-type: none"> • Printer • Scanner • Calculator • White Board • Multimedia • Manuals • Feeder • Drinker • Lux meter • Weighing balance 	
LU4. Perform Post Moulting care practices	Trainee will be able to: <ol style="list-style-type: none"> 1. Perform light stimulation as per requirement 2. Perform feeding as per requirement 3. Check health status recovery of bird as per instruction 4. Perform vaccination as per schedule 	<ul style="list-style-type: none"> • Knowledge of post moulting care practices • Importance of light stimulation after moulting • Feeding requirements after moulting <p><u>Practical Activity</u></p> <ul style="list-style-type: none"> • Perform light management • Perform feed practices • Perform vaccination 	Total: 21hrs Theory: 9hrs Practical: 12hrs	Consumable <ul style="list-style-type: none"> • Note book • Pencil • Eraser • Sharper • Internet Connection • White board marker • Duster 	Class room/Farm

				<ul style="list-style-type: none"> • Internet Connection • Sanitizer • PPEs • Bulb • Vaccine <div>Non-Consumable</div> <ul style="list-style-type: none"> • Computer System • Printer • Scanner • Calculator • White Board • Multimedia • Manuals • Lux meter • Weighing balance • Vaccine gun 	
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Module 4: Manage Farm and Hatchery Practices

Objective of the module: This module covers the knowledge and skills required to manage farm and hatchery practices.

Duration: 240Hours

Theory: 96Hours

Practice: 144 Hours

Learning Unit	Learning Outcomes	Learning Elements	Duration	Materials Required	Learning Place
LU1. Perform general flock management	Trainee will be able to: <ol style="list-style-type: none"> 1. Wear PPEs 2. Execute rodent control program 3. Perform Debeaking according to method 4. Perform dubbing as per requirement 5. Perform toe clipping as per requirement 6. Perform grading of birds 7. Maintain flock uniformity 8. Perform male mixing as per requirement 9. Perform spiking 	<ul style="list-style-type: none"> • Define PPEs • Describe rodent control program • Define dubbing • Define spiking • Importance of toe clipping • Knowledge of male selection • Importance of male mixing • Describe the importance of uniformity • Knowledge of grading • Explain de-beaking according to method <p><u>Practical Activity</u></p> <ul style="list-style-type: none"> • Perform De-beaking practices • Perform dubbing practices 	<p>Total: 49hrs</p> <p>Theory: 19hrs</p> <p>Practical: 30hrs</p>	<p>Consumable</p> <ul style="list-style-type: none"> • Note book • Pencil • Eraser • Sharper • Internet Connection • White board marker • Duster • Internet Connection • Sanitizer • PPEs • Bulb 	Class room/Farm

		<ul style="list-style-type: none"> • Perform toe clipping practices • Perform grading of birds • Maintain flock uniformity • Perform male mixing as per requirement • Perform spiking practices 		Non-Consumable <ul style="list-style-type: none"> • Computer System • Printer • Scanner • Calculator • White Board • Multimedia • Manuals • Rodent trap • Rodent control medicine • De beaker • Scissor • Cutter • Weighing balance • Calculator 	
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LU2. Perform vaccination	Trainee will be able to: <ol style="list-style-type: none"> 1. Wear PPEs 2. Perform vaccine administration protocols 3. Perform subcutaneous vaccination 4. Perform intramuscular vaccination 5. Perform ocular-nasal vaccination 6. Perform wing web vaccination 7. Perform oral vaccination 	<ul style="list-style-type: none"> • Knowledge of vaccine administration protocols • Differentiate between subcutaneous and intramuscular vaccination • Understanding of ocular-nasal vaccination • Knowledge of wing web vaccination • Understanding of oral vaccination <p><u>Practical Activity</u></p> <ul style="list-style-type: none"> • Perform vaccination practices as per requirement 	<p>Total:</p> <p>49hrs</p> <p>Theory:</p> <p>19hrs</p> <p>Practical:</p> <p>30hrs</p>	<p>Consumable</p> <ul style="list-style-type: none"> • Note book • Pencil • Eraser • Sharper • Internet Connection • White board marker • Duster • Internet Connection • Sanitizer • PPEs • Bulb <p>Non-Consumable</p> <ul style="list-style-type: none"> • Computer System • Printer • Scanner 	<p>Class room/Farm/Hatchery</p>
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				<ul style="list-style-type: none"> • Calculator • White Board • Multimedia • Manuals • Feeder • Drinker • Lux meter • Weighing balance 	
LU3. Perform sexing of chicks	Trainee will be able to: <ol style="list-style-type: none"> 1.Wear PPEs 2.Arrange tools 3.Perform soft handling of chicks 4. Perform vent sexing method 5. Perform feather sexing method 6. Separate male and female chick 7. Maintain environmental condition at site 	<ul style="list-style-type: none"> • Understanding of sexing of chicks • Define vent sexing method • Define feather sexing method • Knowledge of chicks handling • Understanding of environmental condition <p><u>Practical Activity</u></p> <ul style="list-style-type: none"> • Perform sexing of chicks as per requirements 	Theory= 19 hrs Practical 27 hrs Total= 46 hrs	Consumable <ul style="list-style-type: none"> • Note book • Pencil • Eraser • Sharper • Internet Connection • White board marker • Duster • Internet Connection • Sanitizer 	Class room/ Hatchery

				<ul style="list-style-type: none"> • PPEs <div>Non-Consumable</div> <ul style="list-style-type: none"> • Computer System • Printer • Scanner • Calculator • White Board • Multimedia • Manuals 	
LU4. Perform grading of hatched chicks	Trainee will be able to: <ol style="list-style-type: none"> 1. Wear PPEs 2. Arrange tools 3. Perform soft handling of chicks 4. Calibrate weighing scale 5. Perform weighing 6. Separate chicks according to body weight and quality 	<ul style="list-style-type: none"> • Knowledge of chicks grading • Knowledge of chicks handling • Knowledge of Calibrate weighing scale • Evaluation of chick quality <p><u>Practical Activity</u></p> <ul style="list-style-type: none"> • Perform weighing of chicks • Perform handling of chicks 	Theory= 19 hrs Practical =30 hrs Total= 49 hrs	<div>Consumable</div> <ul style="list-style-type: none"> • Note book • Pencil • Eraser • Sharper • Internet Connection • White board marker • Duster 	Class room/ Hatchery

				<ul style="list-style-type: none"> • Internet Connection • Sanitizer • PPEs <div>Non-Consumable</div> <ul style="list-style-type: none"> • Computer System • Printer • Scanner • Calculator • White Board • Multimedia • Manuals • Weighing balance 	
LU5. Prepare solutions	Trainee will be able to: 1. Wear PPEs 2. Arrange tools and materials	<ul style="list-style-type: none"> • Types of disinfectants • Knowledge of solution preparation • Calculation of required chemical quantity 	Theory= 20 hrs Practical 27 hrs	<div>Consumable</div> <ul style="list-style-type: none"> • Note book • Pencil • Eraser • Sharper 	Class room/Farm/Hatchery

	<p>3. Calculate required quantity of chemicals as per manual</p> <p>4. Mix solution</p> <p>5. Handle prepared solutions</p>	<p><u>Practical Activity</u></p> <ul style="list-style-type: none"> Calculate quantity and Prepare solutions as per requirements 	<p>Total= 47 hrs</p>	<ul style="list-style-type: none"> Internet Connection White board marker Duster Internet Connection Sanitizer PPEs Required chemicals <p>Non-Consumable</p> <ul style="list-style-type: none"> Computer System Printer Scanner Calculator White Board Multimedia Manuals Buckets 	
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				<ul style="list-style-type: none"> • Stirrer • Beaker • Pipette • Weighing balance • Sprayer 	
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Module 5: Perform Procurement

Objective of the module: This competency unit covers the skills and required knowledge to perform procurement.

Duration: 30hours **Theory:** 12hours **Practical:** 18hours

Learning Unit	Learning Outcomes	Learning Elements	Duration	Materials Required	Learning Place
LU1: Perform estimation of resources	The trainee will be able to: <ol style="list-style-type: none"> 1. Calculate the quantity of birds to be reared 2. Calculate feed requirement 3. Estimate man power 4. Estimate resources required 	<ul style="list-style-type: none"> • Knowledge about space requirement of birds • Knowledge about estimation of resources • Importance of resource estimation <p><u>Practical Activity:</u></p> <ul style="list-style-type: none"> • Perform calculation of birds to be reared • Perform calculation of feed requirements • Estimation of man power • Estimation of resources required 	<p>Total: 15hrs</p> <p>Theory: 6hrs</p> <p>Practical: 9hrs</p>	<p>Consumable</p> <ul style="list-style-type: none"> • Internet Connection • White board marker • Duster • Internet Connection • Note book • Pencil • Eraser • Sharpener <p>Non-Consumable</p> <ul style="list-style-type: none"> • Computer System • Printer • Scanner • White Board • Multimedia • Calculator 	Class room/Farm/Hatchery

LU2. Execute procurement	Trainee will be able to: 1. Collect information regarding suppliers 2. Perform purchase process 3. Maintain record of all procurement	<ul style="list-style-type: none"> • Knowledge of procurement process • Explain purchasing process • Importance of maintaining record <u>Practical Activity: -</u> <ul style="list-style-type: none"> • Collection of information of suppliers • Performance of purchase process • Perform record maintenance of all procurement 	Total 15hrs Theory: 6 hrs Practical: 9hrs	Consumable <ul style="list-style-type: none"> • White board marker • Duster • Internet Connection • Note book • Pencil • Eraser • Sharpener Non-Consumable <ul style="list-style-type: none"> • Computer System • Printer • White Board • Multimedia 	Class room/Farm/Hatchery

Module 6: Manage and Supervise the Job Activities

Objective of the module: After this competency standard candidate will be able to manage and supervise the job activities.

Duration: 80 hours **Theory:** 32 hours **Practical:** 48 hours

Learning Unit	Learning Outcomes	Learning Elements	Duration	Materials Required	Learning Place
LU1: Plan for on-site operations	<p>The trainee will be able to:</p> <ol style="list-style-type: none"> 1. Consult with the manager to obtain required information 2. Implement SOPs in accordance with the identified requirements. 3. Prepare the process flow diagram in order to achieve Quality outcome. 4. Break down work of activities into small achievable components and efficient sequences 5. Recognize site hazards and the personal protective equipment (PPE) and 	<ul style="list-style-type: none"> • Explain principles of planning and project management • Explain roles and responsibilities for different levels of site supervision. • Explain planning method for on-site operations • Knowledge about process flow diagram • Understanding of health and safety standards • Understanding of house keeping <p><u>Practical Activity:</u></p> <p>Practice to prepare activities plan for a specific crushing job order including break down of</p>	<p>Total: 15hrs</p> <p>Theory: 6hrs</p> <p>Practical: 9 hrs</p>	<p>Consumable</p> <ul style="list-style-type: none"> • Notebooks • Pencils • White board marker <p>Non Consumable</p> <ul style="list-style-type: none"> • White board • Multimedia • Internet • Computer system 	Class Room / Site

	<p>safety procedures specified for job</p> <p>6. Organize site induction for support personnel as required</p> <p>7. Plan housekeeping activities prior to and post completion of work</p>	<p>activities, recognize site hazards, prepare the demand of required equipment's and man power.</p>			
<p>LU2: Supervise work activities to achieve desired results</p>	<p>Trainee will be able to:</p> <ol style="list-style-type: none"> 1. List and arrange required resources prior to commencement of work 2. Recognize the areas of work which could result in a delay of work, wastage of material or damage to tools. 3. Allocate responsibility to required team members to avoid conflicts 4. Review work plan in response to new information, urgent 	<ul style="list-style-type: none"> • Understanding about causes of delay in work, wastage of material or damage to tools. • Explain documentation and record system of the inspection body <p><u>Practical Activity:</u></p> <p>Practice to manage task allocation to team member for the specific crushing job order, trace out the weak area of work and review the work plan.</p>	<p>Total: 15 hrs</p> <p>Theory: 6 hrs</p> <p>Practical: 9hrs</p>	<p>Consumable</p> <ul style="list-style-type: none"> • Notebooks • Pencils • White board marker <p>Non Consumable</p> <ul style="list-style-type: none"> • White board • Multimedia • Internet • Computer system 	<p>Class Room/ Site</p>

	<p>requests, changed situations or instructions from concern personnel</p> <p>5. Cooperate with team members to achieve common goals</p>				
<p>LU3.Perform on- site inspection</p>	<p>Trainee will be able to:</p> <ol style="list-style-type: none"> 1. Conduct inspection of processes & materials according to inspection plan 2. Identify defects and deficiencies in product & processes 3. Record defects and deficiencies with evidence in product & processes (if required) 4. Perform test as per standard procedure for determining the physical properties of materials and product. 5. Collect the samples of materials & products for lab testing as per standards 6. Complete the sampling document as per requirement 	<ul style="list-style-type: none"> • Describe the information relevant to inspection activities and document preparation for recoding inspection results. • Differentiate various types of deficiencies in inspection activities • Describe site problems and recommended corrective actions • Describe the procedure to perform on- site inspection <p><u>Practical Activity:</u></p> <ul style="list-style-type: none"> • Conduct inspection of crushing plant with emphasizes on deficiencies and defects in process & production including collection of samples of 	<p>Total :25 hrs</p> <p>Theory: 10 hrs</p> <p>Practical: 15 hrs</p>	<p>Consumable</p> <ul style="list-style-type: none"> • Notebooks • Pencils • White board marker <p>Non-Consumable</p> <ul style="list-style-type: none"> • White board • Multimedia • Internet • Computer system 	<p>Class Room/ Site</p>

	<p>7. Check the actions taken for rectification of snag list</p> <p>8. Record the non-compliance and expected breaches of contract as per SOPs.</p>	material & product and collect pictorial evidence etc.			
<p>LU4.</p> <p>Prepare the inspection report.</p>	<p>Trainee will be able to:</p> <ol style="list-style-type: none"> 1. Collect and review the information relevant to inspection activities for recoding inspection results 2. Verify the integrity of information supplied by other party as a part of the inspection process 3. Record inspection observations and findings 4. Recommend the necessary corrective actions for tackling the identified problems 	<ul style="list-style-type: none"> • Explain the procedure to prepare the inspection report. • Understanding about third/other party inspection process • Explain reporting standards <p><u>Practical Activity:</u></p> <p>Prepare the inspection report with respect to standards</p>	<p>Total: 25 hrs</p> <p>Theory: 10 hrs</p> <p>Practical: 15 hrs</p>	<p>Consumable</p> <ul style="list-style-type: none"> • Notebooks • Pencils • Whit board marker <p>Non-Consumable</p> <ul style="list-style-type: none"> • White board • Multimedia • Internet • Computer system 	Class Room

Module 7: Develop Entrepreneurial Skills

Objective of the module: This unit describes the skills and knowledge required to develop a business plan, marketing plan and develop basic business communication skills.

Duration: 40hours **Theory:** 16hours **Practical:** 24hours

Learning Unit	Learning Outcomes	Learning Elements	Duration	Materials Required	Learning Place
LU1: Develop a business plan	<p>The trainee will be able to:</p> <ol style="list-style-type: none"> 1. Conduct market survey to collect information 2. Select the best option in terms of cost, service, quality, sales, profit margin, overall expenses 3. Compile the information collected through the market survey, in the business plan format 	<ul style="list-style-type: none"> Describe market survey and types of information collected such as <ul style="list-style-type: none"> Customer /demand <ul style="list-style-type: none"> ✓ Tools, equipment, machinery and furniture with rates ✓ Raw material ✓ Supplier ✓ Credit / funding sources ✓ Marketing strategy ✓ Market trends ✓ Overall expenses ✓ Profit margin ∴ Explain market survey tools such as questionnaire, interview, observation etc Explain elements of business plan State the procedure to fill the business plan format 	<p>Total 15hrs</p> <p>Theory: 6 hrs</p> <p>Practical: 12 hrs</p>	<p>Consumable</p> <ul style="list-style-type: none"> Notebooks Pencils Erasers Sharpener White board marker <p>Non Consumable</p> <ul style="list-style-type: none"> White board Multimedia 	<ul style="list-style-type: none"> Class Room <p>Simulated environment</p>

		<u>Practical Activity:</u> <ul style="list-style-type: none"> Conduct market survey and formulate business plan in terms of feasibility, investment potential, risk, and completeness. 			
LU2. Collect information regarding funding sources	Trainee will be able to: <ol style="list-style-type: none"> Identify the available funding sources based on their terms and conditions, maximum loan limit, payback time, interest rate Choose the best available option according to investment requirement Prepare documents according to the loan agreement requirement Include the information of funding sources in the business plan 	<ul style="list-style-type: none"> Explain different funding sources Describe the documents required to get loan to start a new business <u>Practical Activity:</u> <ul style="list-style-type: none"> Prepare the documents for financial feasibility for external investment / loan for the business plan. Prepare loan documents. 	Total 15 hrs Theory: 4 hrs Practical: 6 hrs	Consumable <ul style="list-style-type: none"> Notebooks Pencils Erasers Sharpeners White board marker Non-Consumable <ul style="list-style-type: none"> White board Multimedia 	<ul style="list-style-type: none"> Class Room Simulated environment
LU3. Develop a marketing plan	Trainee will be able to:	<ul style="list-style-type: none"> Prepare the product promotion strategy 	Total 5hrs	Consumable <ul style="list-style-type: none"> Notebooks 	<ul style="list-style-type: none"> Class Room

	<p>1. Collect information required to devise marketing plan</p> <p>2. Prepare marketing plan for new business and ROI (Return on investment)</p>	<ul style="list-style-type: none"> State elements of business plan Describe 7 Ps of marketing Prepare human resource strategy plan. <p>Practical Activity:</p> <ul style="list-style-type: none"> Devise marketing strategy for product promotion 	<p>Theory: 2 hrs</p> <p>Practical: 3 hrs</p>	<ul style="list-style-type: none"> Pencils Erasers Sharpeners White board marker <p>Non-Consumable</p> <ul style="list-style-type: none"> White board Multimedia 	<ul style="list-style-type: none"> Simulated environment
<p>LU4. Develop basic business communication skills</p>	<p>Trainee will be able to:</p> <ol style="list-style-type: none"> Communicate with internal customers and external customers Use different modes of communication to communicate internally and externally e.g.: presentation, speaking, writing, listening, visual representation, reading etc. Use specific business terms used in the market 	<ul style="list-style-type: none"> Describe 7Cs of business communication Explain different modes of communication and their application in the industry Describe business terms used in the industry Describe organization's procedures and policy related to information and communication systems, protocol and procedures <p>Practical Activity:</p> <ul style="list-style-type: none"> Practice to prepare a report about shortage of labour Practice to play a role to communicate with customer about the product. 	<p>Total 5 hrs</p> <p>Theory: 2 hrs</p> <p>Practical: 3 hrs</p>	<p>Consumable</p> <ul style="list-style-type: none"> Notebooks Pencils Erasers Sharpeners White board marker <p>Non-Consumable</p> <ul style="list-style-type: none"> White board Multimedia 	<ul style="list-style-type: none"> Class Room Simulated environment

Module 8: Practice Professionalism

Objective of the module: This competency standard deal with learning the competencies needed to develop portfolio for industry. You can perform internship. Your underpinning knowledge will be sufficient to provide you the basis for your work.

Duration: 300 hours **Theory:** 120 hours **Practical:** 180 hours

Learning Unit	Learning Outcomes	Learning Elements	Duration	Materials Required	Learning Place
LU1. Develop Portfolio for industry	Trainee will be able to: <ol style="list-style-type: none"> 1. Select previous assignments for portfolio 2. Work on previous selected assignments for portfolio 3. Compile variety of assignments for portfolio 4. Make Professional Portfolio for industry 5. Develop Digital Portfolio for industry 	<ul style="list-style-type: none"> Describe different styles/format of portfolio Explain the importance of portfolio <u>Practical Activity:</u> <ul style="list-style-type: none"> Compile important assignments Prepare folder for assignments manually Prepare portfolio digitally 	Total 50 hrs Theory: 35 hrs Practical: 15 hrs	Consumable <ul style="list-style-type: none"> Notebooks Pencils Erasers Sharpeners Non-Consumable <ul style="list-style-type: none"> White board Multimedia 	<ul style="list-style-type: none"> Class Room Simulated environment

LU2. Perform Internship	Trainee will be able to: <ol style="list-style-type: none"> 1. Prepare for internship <ul style="list-style-type: none"> • Personal Presentation • Portfolio Presentation 2. Interview preparation 3. Demonstrate Ethics for Internship 4. Identify Industry for internship 5. Perform Internship in Industry <ul style="list-style-type: none"> • Fill the Performa of Internship • Report the performance of internship 	<ul style="list-style-type: none"> • Explain importance of personal grooming for professional life • Describe the importance of internship • Explain ethics for work/internship <p><u>Practical Activity:</u></p> <ul style="list-style-type: none"> • Practice of presentation • Prepare CV for internship • Prepare report on performance of internship • Perform internship 	Total 250hrs Theory: 85 hrs Practical: 165 hrs	<p>Consumable</p> <ul style="list-style-type: none"> • Notebooks • Pencils • Erasers • Sharpeners <p>Non-Consumable</p> <ul style="list-style-type: none"> • White board • Multimedia 	<ul style="list-style-type: none"> • Class Room <p>Farm/Hatchery</p>
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General assessment guidance for “*Supervisor*”

Good practice in Pakistan makes use of sessional and final assessments, the basis of which is described below. Good practice by vocational training providers in Pakistan is to use a combination of these sessional and final assessments, combined to produce the final qualification result.

Sessional assessment is going on all the time. Its purpose is to provide feedback on what students are learning:

- To the student: to identify achievement and areas for further work
- To the teacher: to evaluate the effectiveness of teaching to date, and to focus future plans.

Assessors need to devise sessional assessments for both theoretical and practical work. Guidance is provided in the assessment strategy

Final assessment is the assessment, usually on completion of a course or module, which says whether or not the student has "passed". It is – or should be – undertaken with reference to all the objectives or outcomes of the course, and is usually fairly formal. Considerations of security – ensuring that the student who gets the credit is the person who did the work – assume considerable importance in final assessment.

Methods of assessment

For lessons with a high quantity of theory, written or oral tests related to learning outcomes and/ or learning content can be conducted. For workplace lessons, assessment can focus on the quality of planning the related process, the quality of executing the process, the quality of the product and/or evaluation of the process.

Methods include direct assessment, which is the most desirable form of assessment. For this method, evidence is obtained by direct observation of the student's performance.

Examples for direct assessment of Supervisor:

- Work performances, for example Manage Farm and Hatchery Practices
- Work Performances, for example Perform Small Scale Poultry Management
- Direct questioning, where the assessor would ask the student why he is preparing for a particular application.

- Paper-based tests, such as short answer questions on health and safety, communication skills etc.

Indirect assessment is the method used where the performance could not be watched and evidence is gained indirectly.

Examples for indirect assessment of Supervisor include:

- Work products, Project portfolio
- Workplace documents, such as a report on health and safety etc.

Indirect assessment should only be a second choice. (In some cases, it may not even be guaranteed that the work products were produced by the person being assessed.)

Principles of assessment

All assessments should be valid, reliable, fair and flexible:

Fairness means that there should be no advantages or disadvantages for any assessed person. For example, it should not happen that one student gets prior information about the type of work performance that will be assessed, while another candidate does not get any prior information.

Reliability means that the assessment is consistent and reproducible. The results for the particular application should be the same.

Flexibility means that the assessor has to be flexible concerning the assessment approach. For example, if there is a power failure during the assessment, the assessor should modify the arrangements to accommodate the students' needs.

Assessment strategy for “*Supervisor*”

This curriculum consists of 8 modules

- Module 1: Manage Safety at Site
- Module 2: Perform Small Scale Poultry Management
- Module 3: Perform Moulting of Birds
- Module 4: Manage Farm and Hatchery Practices
- Module 5: Perform Procurement
- Module 6: Manage and Supervise the Job Activities
- Module 7: Develop Entrepreneurial Skills
- Module 8: Practice Professionalism

Sessional assessment

The Sessional assessment for all modules shall be in two parts: theoretical assessment and practical assessment. The Sessional marks shall contribute to the final qualification.

Theoretical assessment for all learning modules must consist of a written paper lasting at least half-hour per module. This can be short answer questions.

For practical assessment, all procedures and methods for the modules must be assessed on a sessional basis. Guidance is provided below under Planning for assessment.

Final assessment

Final assessment shall be in two parts: theoretical assessment and practical assessment. The final assessment marks shall contribute to the final qualification.

The final theoretical assessment shall consist of short-answer questions. This part shall cover the technical, functional and generic modules:

For Level -5

- Module 1: Manage Safety at Site
- Module 2: Perform Small Scale Poultry Management
- Module 3: Perform Moulting of Birds
- Module 4: Manage Farm and Hatchery Practices
- Module 5: Perform Procurement
- Module 6: Manage and Supervise the Job Activities
- Module 7: Develop Entrepreneurial Skills
- Module 8: Practice Professionalism

For the final practical assessment each student shall be assessed over a period of one day, with Four-hour sessions for each student. During this period, each student must be assessed on his/her ability to the following parameters of security services;

- Area of responsibility
- Tasks
- Guards
- Resources and duties

Complete list of tools and equipment

Sr#	Description	Quantity
1.	Air Baffles	1
2.	Air inlet	As per requirement
3.	Air Velocity meter	5
4.	Augor feeding system	1
5.	Barometer	5
6.	Brooders	As per requirement
7.	Bulbs	As per requirement
8.	Calculator	25
9.	Candler	5
10.	Computers	25
11.	Conveyor Belt	2
12.	Cooling pads	As per requirement
13.	Droppers	As per requirement
14.	Egg Storage cabinet	2
15.	Egg trolleys	2
16.	Egg Washer	5
17.	Feed Grinder	2
18.	Feed Hoppers	As per requirement
19.	Feeder	As per requirement
20.	Fire Buckets	5
21.	Fire Extinguishers	5
22.	Fogger	5
23.	Grinder	2
24.	Heater	As per requirement
25.	Incubator	2
26.	Internet router	2

27.	Laying Nests	5
28.	Light trapper	5
29.	Lux meter	5
30.	Measuring Tape	5
31.	Mixer	2
32.	Multimeter	5
33.	pH Meter	5
34.	Printer	2
35.	R.O plant	1
36.	Refrigerator	2
37.	Relative humidity sensors	As per requirement
38.	Sample collection kit	15 (5 each type)
39.	Sample Containers	5
40.	Scanner	2
41.	Shifting trays	10
42.	Shocking wire	As per requirement
43.	Temperature Sensors	As per requirement
44.	Thermometer wet bulb	5
45.	Vaccine gun	5
46.	Vaccine diluents	5
47.	Ventilation Fan	As per requirement
48.	Water drinkers	As per requirement
49.	Water Plant Filters	1
50.	Water tank	As per requirement
51.	Winch machines	1

List of consumable supplies

Sr. #	Description	Quantity
1.	Chemicals	As per requirement
2.	Feed manuals	25
3.	First aid Box	2
4.	Plastic bags	As per requirement
5.	PPEs	25 sets
6.	Registers (Log, Hatchery, Production, Flock)	25 sets
7.	Syringes	As per requirement
8.	Stationary	As per requirement

Credit values

The credit value of the National Certificate Security Services is defined by estimating the amount of time/ instruction hours required to complete each competency unit and competency standard. The NVQF uses a standard credit value of 1 credit = 10 hours of learning (Following Higher Education Commission (HEC) guidelines).

The credit values are as follows:

Competency Standard	Estimate of hours	Credit
Manage Safety at Site	60	6
Perform Small Scale Poultry Management	360	36
Perform Moulting of Birds	90	9
Manage Farm and Hatchery Practices	240	24
Perform Procurement	30	3
Manage and Supervise the Job Activities	80	8
Develop Entrepreneurial Skills	40	4
Practice Professionalism	300	30

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