

CURRICULUM OF “ASSISTANT SUPERVISOR”

Level-4



**National Vocational & Technical
Training Commission**

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Introduction

Definition/ Description of the training programme for Assistant Supervisor

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.

Purpose of the training programme

The Computer Networking and Cloud Computing 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 management.

Competencies to be gained after completion of

course

- Establish and Maintain the Occupational Health and Safety System
- Perform Advance Communication
- Manage Inventory at Site
- Perform Basic Farm and Hatchery Management
- Operate System Software/Control Panel
- Perform Sample Collection
- Perform Troubleshooting
- Perform Basic Green Skills for Farm and Hatchery

Trainee entry level

The entry requirement for this qualification would be level-3

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 08 modules. The recommended delivery time is 1200 hours. 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-4	Theory¹ Days/hours	Workplace² Days/hours	Total hours	Credit Hours
Module 1 Establish and Maintain the Occupational Health and Safety System	12	48	60	6
Module 2 Perform Advance Communication	12	48	60	6
Module 3 Manage Inventory at Site	18	72	90	9
Module 4 Perform Basic Farm and Hatchery Management	78	312	390	39
Module 5 Operate System Software/Control Panel	60	240	300	30
Module 6 Perform Sample Collection	18	72	90	9
Module 7 Perform Troubleshooting	24	96	120	12
Module 8 Perform Basic Green Skills for Farm and Hatchery	18	72	90	9
Total	240	960	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-4

Module-1: Establish and Maintain the Occupational Health and Safety System	Module-5: Operate System Software/Control Panel
Module-2: Perform Advance Communication	Module-7: Perform Troubleshooting
Module-3: Manage Inventory at Site	Module-6: Perform Sample Collection
Module-4: Perform Basic Farm and Hatchery Management	
Module-8: Perform Basic Green Skills for Farm and Hatchery	

Summary – overview of the curriculum

Module Title and Aim	Learning Units	Theory Days/hours	Workplace Days/hours	Timeframe of modules
Module 1: Establish and maintain the occupational Health and Safety System Aim: The aim of this module to establish, maintain and evaluate an occupational health and safety system in the work environment.	LU1. Carry out risk assessment at work place LU2. Follow emergency response protocol/ procedure LU3. Perform safe storage and disposal of waste LU4. Maintain ergonomics condition at work place	12 hours	48 hours	60 hours
Module 2: Perform Advance Communication Aim: The aim of this module to describe performance outcomes, skills and knowledge required to develop communication skills used professionally.	LU1. Demonstrate basic communication skills LU2. Plan and organize work LU3. Conduct professional activities ethically	12 hours	48 hours	60 hours
Module 3: Manage inventory at site Aim: The aim of this module to identify competency required to manage inventory at site.	LU1. Perform storage of feed/eggs LU2. Maintain record	18 hours	72 hours	90 hours

Module Title and Aim	Learning Units	Theory Days/hours	Workplace Days/hours	Timeframe of modules
Module 4: Perform basic farm and hatchery management Aim: The aim of this module to deal with learning the competency needed to basic farm and hatchery management.	LU1. Carry out ventilation management LU2. Perform basic brooding management LU3. Perform basic growing/ rearing management LU4. Perform basic production management LU5. Perform culling practices LU6. Handle dead birds	78 hours	312 hours	390 hours
Module 5: Operate system software/control panel Aim: The aim of this module to perform hatchery operations and to describe the performance outcomes required to operate system software/control panel.	LU1. Maintain ventilation LU2. Operate feeding system LU3. Perform lighting control LU4. Perform hatchery operation	60 hours	240 hours	300 hours
Module 6: Perform sample collection Aim: The aim of this module to cover blood swab and organ samples required to perform sample collection.	LU1. Perform blood sample LU2. Perform swab sample LU3. Perform organ sample	18 hours	72 hours	90 hours

Module Title and Aim	Learning Units	Theory Days/hours	Workplace Days/hours	Timeframe of modules
Module 7: Perform troubleshooting Aim: The aim of this module to cover troubleshooting of feed/water management and ventilation system.	LU1. Perform troubleshooting of feeding system LU2. Perform trouble shooting of water system LU3. Perform troubleshooting of ventilation system LU4. Perform troubleshooting of power supply	24 hours	96 hours	120 hours
Module 8: Perform basic green skills for farm and hatchery Aim: The aim of this module to perform basic green skills for farm and hatchery.	LU1. Manage sustainability of materials used at site LU2. Manage waste LU3. prepare poultry compost	18 hours	72 hours	90 hours

Modules

LEVEL 4

Module 1 : Standard: Establish and Maintain the Occupational Health and Safety System

Objective of the module: After this competency standard candidate will be able to establish and maintain the occupational health and safety system. The underpinning knowledge regarding risk assessment at workplace, emergency response protocols and safe storage and disposal of waste will be sufficient to provide the basis for the job at workplace.

Duration:	60Hours	Theory:	12hours	Practical:	48 hours
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Learning Unit	Learning Outcomes	Learning Elements	Duration	Materials Required	Learning Place
LU1. Carryout Risk assessment at workplace	Trainee will be able to: <ol style="list-style-type: none"> 1. Identify potential hazards at workplace 2. Evaluate the risk 3. Take corrective/preventive action to mitigate the risk 4. Record your findings 5. Review the risk assessment 	<ul style="list-style-type: none"> • Risk assessment at workplace • Hazard identification • Demonstrate Ergonomic working condition <p><u>Practical Activity</u></p> <ul style="list-style-type: none"> • Potential hazards identification • Recording and assessment of risk 	Theory: 3 hours Practical: 12 hours Total: 15 hours	<ul style="list-style-type: none"> • White board marker • Duster • Note book • Pencil • Eraser • Sharpener <p>Non-Consumable</p> <ul style="list-style-type: none"> • Computer System • Printer • White board • Multimedia 	Class room/Farm/Hatchery
LU2. Follow emergency	Trainee will be able to: <ol style="list-style-type: none"> 1. Identify emergency exits at workplace 	<ul style="list-style-type: none"> • Risk assessment at workplace • Hazard identification 	Theory: 3 hours	<ul style="list-style-type: none"> • White board marker • Duster • Note book 	Class room/Farm/

response protocol/procedure	<ol style="list-style-type: none"> 2. Select suitable positions 3. Identify assembly area at workplace 4. Follow procedure and instructions to evacuate the building 5. Report immediately at designated assembly area in case of emergency 	<ul style="list-style-type: none"> Ergonomic working condition Knowledge to identify emergency exits at workplace <p><u>Practical Activity</u></p> <ul style="list-style-type: none"> Perform procedure to evacuate building. 	<p>Practical: 12 hours</p> <p>Total: 15 hours</p>	<ul style="list-style-type: none"> Pencil Eraser Sharpener <p>Non-Consumable</p> <ul style="list-style-type: none"> Computer System Printer White board Multimedia 	Hatchery
LU3. Perform safe storage and disposal of waste	<p>Trainee will be able to:</p> <ol style="list-style-type: none"> 1. Identify different types of waste material 2. Identify types of containers to store the different types of waste material 3. Use required labels on storage containers 4. Store the waste materials according to standards 5. Identify types of waste bins 6. Dispose- off waste material according to the safety procedure 	<ul style="list-style-type: none"> Storage and disposal of hazardous material Emergency protocol/procedure for fire, hazardous chemical spills, major power failure and terrorism activity and nature disasters Current Safety principles and practices used at workplace <p><u>Practical Activity</u></p> <ul style="list-style-type: none"> Identification of waste material. Labelling of storage containers. Storage of waste materials. 	<p>Theory: 3 hours</p> <p>Practical: 12 hours</p> <p>Total: 15 hours</p>	<ul style="list-style-type: none"> White board marker Duster Note book Pencil Eraser Sharpener <p>Non-Consumable</p> <ul style="list-style-type: none"> Computer System Internet Connection White board Multimedia 	Class room/Farm/ Hatchery

LU4. Maintain ergonomics condition at workplace	<ol style="list-style-type: none"> 1. Follow standard working posture/position at workplace 2. Follow standard procedure to provide sufficient light at workplace 3. Use ergonomic workstations to avoid muscle fatigue 	<ul style="list-style-type: none"> • Knowledge of standard protocols to provide sufficient light at workplace. • Learning of ergonomic workstations. <p><u>Practical Activity</u></p> <ul style="list-style-type: none"> • Perform standard procedure of providing light at workplace. 	<p>Theory: 3 hours</p> <p>Practical: 12 hours</p> <p>Total:15 hours</p>	<ul style="list-style-type: none"> • White board marker • Duster • Note book • Pencil • Eraser • Sharpener <p>Non-Consumable</p> <ul style="list-style-type: none"> • Computer System • Printer • White board • Multimedia 	<p>Class room/Farm/Hatchery</p>
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Module 2 Perform Advance Communication

Objective of the module: This module covers the knowledge and skills required to perform advance communication. The underpinning knowledge regarding advance communication skills, plan and organize work will be sufficient to provide the basis for the job at workplace.

Duration:	60Hours	Theory:	12hours	Practical:	48hours
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Learning Unit	Learning Outcomes	Learning Elements	Duration	Materials Required	Learning Place
LU1. Demonstrate basic communication skills	Trainee will be able to: <ol style="list-style-type: none"> 1. Demonstrate different modes of communication: <ul style="list-style-type: none"> ✓ Speaking ✓ Reading ✓ Writing ✓ Listening 2. Demonstrate presentation skills through multimedia etc. 3. Develop CV according requirements 4. Develop interview skills according to job requirement 	<ul style="list-style-type: none"> • Importance of different modes of communication to communicate • Describe skills for CV <ul style="list-style-type: none"> ◦ Creativity. ◦ Interpersonal Skills. ◦ Critical Thinking. ◦ Problem Solving. ◦ Public Speaking. ◦ Customer Service Skills. ◦ Teamwork Skills. ◦ Communication, etc. • Importance of hard skills 	Theory:4 hours Practical:16 hours Total:21 hours	<ul style="list-style-type: none"> • White board marker • Duster • Note book • Pencil • Eraser • Sharpener <div>Non-Consumable</div> <ul style="list-style-type: none"> • Computer System • Internet Connection • White board 	Class room/Farm/Hatchery

				<ul style="list-style-type: none"> Multimedia 	
LU2. Plan and Organize work	Trainee will be able to: <ol style="list-style-type: none"> Identify task requirements. Plan steps to complete tasks Review planning and organizing process Organize work as per task requirement 	<ul style="list-style-type: none"> Importance of task requirements. Describe the planning and organizing process	Theory: 4 hours Practical: 16 hours Total: 21 hours	<ul style="list-style-type: none"> White board marker Duster Note book Pencil Eraser Sharpener <div>Non-Consumable</div> <ul style="list-style-type: none"> Computer System Scanner White board Multimedia 	Class room/Farm/Hatchery
LU3. Conduct Professional Activities Ethically	Trainee will be able to: <ol style="list-style-type: none"> Identify the ethical problems Identify affected parties and their interests 	<ul style="list-style-type: none"> Types of ethical problems Knowledge of effected parties. 	Theory: 4 hours Practical: 16 hours	<ul style="list-style-type: none"> Internet Connection White board marker Duster 	Class room/Farm/Hatchery

	<p>3. Evaluate each solution using the interest of those involved</p>		<p>Total: 21 hours</p>	<ul style="list-style-type: none">• Note book• Pencil• Eraser• Sharpener <p>Non-Consumable</p> <ul style="list-style-type: none">• Computer System• Printer• White board	
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Module 3 : Manage Inventory at Site

Objective of the module: This module covers the knowledge and skills required to manage inventory at site. The underpinning knowledge regarding storage of feed/eggs and record keeping will be sufficient to provide the basis for the job at workplace.

Duration:	90Hours	Theory:	18hours	Practical:	72hours
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Learning Unit	Learning Outcomes	Learning Elements	Duration	Materials Required	Learning Place
LU1. Perform storage of feed/eggs	Trainee will be able to: <ol style="list-style-type: none"> 1. Calculate amount of feed available on farm 2. Maintain storage site 3. Implement rodents control program 4. Cross check with the log register 5. Adjust demands in accordance with the available feed 6. Manage production plan accordingly 	<ul style="list-style-type: none"> • SOPs for Feed Storage • SOPs for rodent control • SOPs for egg receiving and storage <p><u>Practical Activity</u></p> <ul style="list-style-type: none"> • Practice to Calculate feed on farm • Practice to maintain storage site for feed and eggs • Practice to generate feed demand as per requirement • Practice to receive and place feed/eggs in storage room according to SOPs 	<p>Total: 45hrs</p> <p>Theory: 9hrs</p> <p>Practical: 36hrs</p>	<p>Consumable</p> <ul style="list-style-type: none"> • Internet Connection • White board marker • Duster • Rodent control medicines • Eggs • Feed bags • Log register • Note book • Pencil 	Class room/Farm/Hatchery

	<p>7. Place feed bags in feed store according to SOPs</p> <p>8. Check and maintain eggs storage conditions</p> <p>9. Receive eggs at storage site according to work instructions</p> <p>10. Place eggs in eggs storage room</p>			<ul style="list-style-type: none"> Eraser Sharpener <div>Non-Consumable</div> <ul style="list-style-type: none"> Computer System Internet Connection Printer Scanner White board Multimedia Calculator Rodent trap Egg Trays Egg storage cabinets 	
LU2. Maintain record	<p>Trainee will be able to:</p> <p>1. Arrange material for record keeping</p>	<ul style="list-style-type: none"> Importance of record keeping <p><u>Practical Activity</u></p>	<p>Total:</p> <p>45hrs</p> <p>Theory:</p>	<div>Consumable</div> <ul style="list-style-type: none"> Internet Connection 	Class room/Farm/Hatchery

	<ol style="list-style-type: none"> 2. Maintain Log Register on daily basis 3. Maintain Stock Register 4. Maintain Dead Stock Register 5. Maintain Flock Register 6. Maintain Production Register 7. Maintain Hatchery Register 8. Maintain history sheets for repair and maintenance 9. Enter data corresponding to every type of material 10. Audit Log register with available materials at site 11. Report to in charge in case of any issues 12. Prepare production / dispatch record sheet 	<ul style="list-style-type: none"> • Practice to maintain dead stock and Log Register on daily basis • Maintain Flock and production Register • Maintain Hatchery Register • Maintain history sheets for repair and maintenance • Audit log register and enter data corresponding to every type of material • Report to in charge in case of any issues • Prepare production / dispatch record sheet 	<p>9hrs</p> <p>Practical:</p> <p>36hrs</p>	<ul style="list-style-type: none"> • White board marker • Duster • Log register • Note book • Pencil • Eraser • Sharpener <div style="background-color: #cccccc; padding: 2px;">Non-Consumable</div> <ul style="list-style-type: none"> • Computer System • Internet Connection • Printer • Scanner • White board • Multimedia 	
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Module 4: Perform Basic Farm and Hatchery Management

Objective of the module: This module covers the knowledge and skills required to perform basic farm and hatchery management. The underpinning knowledge ventilation, basic brooding, growing/rearing management will be sufficient to provide the basis for the job at workplace.

Duration:	390Hours	Theory:	78hours	Practical:	312hours
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Learning Unit	Learning Outcomes	Learning Elements	Duration	Materials Required	Learning Place
LU1. Carryout ventilation Management	Trainee will be able to: <ol style="list-style-type: none"> 1. Check working of all fans and motors 2. Check all cooling pads condition 3. Check all sensors and controller 4. Check the working of inlets 5. Perform natural ventilation 6. Operate artificial/forced ventilation 	<ul style="list-style-type: none"> • Explain Importance and types of ventilation • Knowledge of ventilation tools and equipment • <u>Practical Activity</u> • Practice of different types of ventilation systems • Practice of ventilation in open or semi control poultry house • Practice of ventilation according to bird type and age 	Total:	Consumable	Class room/Farm/Hatchery
			79 hrs	<ul style="list-style-type: none"> • Internet Connection • White board marker • Duster • Internet Connection • Note book • Pencil • Eraser • Sharpener 	
			Theory:		
			13 hrs		
			Practical:		
			63 hrs		

				Non-Consumable <ul style="list-style-type: none"> • Computer System • Printer • Scanner • White Board • Multimedia • Fans and motors • Sensors • Cooling pads • Inlets 	
LU2. Perform Basic Brooding Management	Trainee will be able to: <ol style="list-style-type: none"> 1. Prepare brooding site 2. Receive chicks as per SOPs 3. Maintain house temperature according to requirement 4. Maintain relative humidity according to requirement 	<ul style="list-style-type: none"> • Importance of brooding • Describe chick receiving protocols • Knowledge about pre chick arrival management • Understanding of housing requirements during brooding <p><u>Practical Activity</u></p>	Total: 79hrs Theory: 13hrs Practical: 63hrs	Consumable <ul style="list-style-type: none"> • Internet Connection • White board marker • Duster • Internet Connection 	Class room/Farm/Hatchery

	<p>5. Maintain light according to requirement</p> <p>6. Perform feeding practices according to requirement</p> <p>7. Perform medication and vaccination as per requirement</p>	<ul style="list-style-type: none"> Practice to calculate area, feed, water, light and equipment required for brooding Practice to perform vaccination and medication of day-old chick (DOC) Practice to operate controller during brooding 		<ul style="list-style-type: none"> Note book Pencil Eraser Sharpener Litter Brooding paper Polythene sheet Medicine Vaccine <div>Non-Consumable</div> <ul style="list-style-type: none"> Computer System Printer Scanner White Board Multimedia Feeding plates Wire mesh 	
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				<ul style="list-style-type: none"> • Brooders • Bulbs • Sprayer 	
LU3. Perform Basic Growing/Rearing Management	Trainee will be able to: <ol style="list-style-type: none"> 1. Maintain house temperature according to requirement 2. Maintain relative humidity according to requirement 3. Maintain light according to requirement 4. Perform feeding practices according to requirement 5. Perform medication as per requirement 6. Perform vaccination as per schedule 	<ul style="list-style-type: none"> • Define basic growing/rearing • Importance of growing/rearing phase according to bird type • Knowledge about housing requirement including temperature, relative humidity and light according to bird type and age • Explain different feeding strategies according to bird requirement • Describe different methods of medication and vaccination <p><u>Practical Activity</u></p> <ul style="list-style-type: none"> • Practice to maintain temperature, relative humidity and lighting 	Total: 61hrs Theory: 13hrs Practical: 48hrs	<div>Consumable</div> <ul style="list-style-type: none"> • Internet Connection • White board marker • Duster • Internet Connection • Note book • Pencil • Eraser • Sharpener • Litter • Medicine • Vaccine <div>Non-Consumable</div>	Class room/Farm/Hatchery

		<p>according to birds requirement</p> <ul style="list-style-type: none"> • Practice of feeding procedure as per requirement • Practice to perform medication and vaccination by different methods 		<ul style="list-style-type: none"> • Computer System • Printer • Scanner • White Board • Multimedia • Hygrometer • Thermometer • Feeders • Bulbs • Vaccine gun • Lux meter 	
LU4. Perform Basic Production Management	<p>Trainee will be able to:</p> <ol style="list-style-type: none"> 1. Maintain house temperature according to requirement 2. Maintain relative humidity according to requirement 3. Maintain light according to requirement 4. Perform feeding practices according to requirement 	<ul style="list-style-type: none"> • Define basic production • Importance of production phase according to bird type • Knowledge about housing requirement including temperature, relative humidity according to bird type and age • Importance of laying nests 	<p>Total: 61hrs</p> <p>Theory: 13hrs</p> <p>Practical: 48hrs</p>	<p>Consumable</p> <ul style="list-style-type: none"> • Internet Connection • White board marker • Duster • Internet Connection • Note book • Pencil 	Class room/Farm/Hatchery

	<p>5. Perform laying nests management as per requirement</p> <p>6. Operate different automatic egg collection systems</p> <p>7. Perform medication as per requirement</p> <p>8. Perform vaccination as per schedule</p>	<ul style="list-style-type: none"> • Understanding of lighting schedule for laying bird • Explain different feeding strategies according to bird requirement • Describe different automatic egg collection systems • Describe different methods of medication and vaccination <p><u>Practical Activity</u></p> <ul style="list-style-type: none"> • Practice to maintain temperature, relative humidity and lighting according to bird's requirement • Practice to calculate and place laying nests in the farm according to bird's requirement • Practice of feeding procedure as per requirement 		<ul style="list-style-type: none"> • Eraser • Sharpener • Litter • Medicine • Vaccine • PPEs <p>Non-Consumable</p> <ul style="list-style-type: none"> • Computer System • Printer • Scanner • White Board • Multimedia • Hygrometer • Thermometer • Feeders • Bulbs • Vaccine gun • Lux meter • PPEs 	
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		<ul style="list-style-type: none"> Practice to perform medication and vaccination by different methods Practice to operate different automatic egg collection systems 			
LU5. Perform Culling Practices	Trainee will be able to: <ol style="list-style-type: none"> 1. Wear PPEs 2. Perform soft handling of birds as per SOPs 3. Select culling birds as per instructions 4. Maintain Biosecurity protocols 	<ul style="list-style-type: none"> Importance of culling practices Explain criteria for culling of birds Knowledge of PPEs Describe Biosecurity protocols for culling <p><u>Practical Activity</u></p> <ul style="list-style-type: none"> Practice to handle, isolate and place the culled birds 	Total: 55hrs Theory: 13hrs Practical: 42hrs	<div>Consumable</div> <ul style="list-style-type: none"> Internet Connection White board marker Duster Internet Connection Note book Pencil Eraser Sharpener PPEs <div>Non-Consumable</div>	Class room/Farm/Hatchery

				<ul style="list-style-type: none"> • Computer System • Printer • Scanner • White Board • Multimedia • PPEs • Post mortem kit • Post mortem table 	
LU6. Handle dead birds	Trainee will be able to: <ol style="list-style-type: none"> 1. Wear PPEs 2. Identify position/location of dead birds 3. Collect dead birds at site 4. Transport dead birds to post-mortem room 5. Dispose-off dead birds after post-mortem 6. Maintain record keeping 	<ul style="list-style-type: none"> • Knowledge about post-mortem kit • Describe protocols of dead birds' transportation • Explain different methods of dead birds' disposal <p><u>Practical Activity</u></p> <ul style="list-style-type: none"> • Practice to perform dead birds transportation and different disposal methods • Practice to maintain record 	Total: 61hrs Theory: 13hrs Practical: 48hrs	Consumable <ul style="list-style-type: none"> • Internet Connection • White board marker • Duster • Internet Connection • Note book • Pencil • Eraser 	Class room/Farm/Hatchery

				<ul style="list-style-type: none"> • Sharpener • PPEs • Log register <div>Non-Consumable</div> <ul style="list-style-type: none"> • Computer System • Printer • Scanner • White Board • Multimedia • PPEs • Wheel barrow • Baskets 	
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Module 5 : Operate System Software/Control Panel

Objective of the module: This competency unit covers the skills and required knowledge to operate system software/control panel. The underpinning knowledge regarding ventilation, feeding system, lighting control and hatchery operation will be sufficient to provide the basis for the job at workplace.

Duration:	300Hours	Theory:	60hours	Practical:	240hours
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Learning Unit	Learning Outcomes	Learning Elements	Duration	Materials Required	Learning Place
LU1. Maintain ventilation	<p><i>Trainee will be able to:</i></p> <ol style="list-style-type: none"> 1. Perform pre checks of ventilation system 2. Operate fans from controllers as per requirement 3. Operate cooling pads from controllers as per requirement 4. Maintain air quality 5. Operate inlets from controllers as per requirement 6. Perform troubleshooting of faulty equipment 	<ul style="list-style-type: none"> • Knowledge of Control panel • Importance of air quality <p><u>Practical Activity:</u></p> <ul style="list-style-type: none"> • Practice to operate fans, cooling pads, inlets from control panel • Practice to perform trouble shooting as per requirement 	<p>Total:</p> <p>75hrs</p> <p>Theory:</p> <p>15hrs</p> <p>Practical:</p> <p>60hrs</p>	<p>Consumable</p> <ul style="list-style-type: none"> • Internet Connection • White board marker • Duster • Internet Connection • Note book • Pencil • Eraser • Sharpener • PPEs <p>Non-Consumable</p> <ul style="list-style-type: none"> • Computer System • Control panel 	Classroom /Shed

Learning Unit	• Learning Outcomes	Learning Elements	Duration	Materials Required	Learning Place
				<ul style="list-style-type: none"> Fans Cooling pads Air inlets Sensors Tool kit PPEs Automatic feeding system Lux meter 	
LU2. Operate feeding system	<i>Trainee will be able to:</i> <ol style="list-style-type: none"> 1. Check working of all feeding chain 2. Adjust feeders' level according to birds' requirement 3. Maintain all feeding system 	<ul style="list-style-type: none"> Types of feeding systems Knowledge about feeders' adjustments according to bird requirements <p><u>Practical Activity: -</u></p> <ul style="list-style-type: none"> Maintenance of feeding systems Adjustment of feeders according to birds' requirements 	<p>Total</p> <p>75hrs</p> <p>Theory:</p> <p>15 hrs</p> <p>Practical:</p> <p>60hrs</p>	<p>Consumable</p> <ul style="list-style-type: none"> Internet Connection White board marker Duster Internet Connection Note book Pencil Eraser Sharpener PPEs <p>Non-Consumable</p> <ul style="list-style-type: none"> Computer System 	Classroom /Shed

Learning Unit	• Learning Outcomes	Learning Elements	Duration	Materials Required	Learning Place
				<ul style="list-style-type: none"> Control panel Tool kit PPEs Automatic feeding system 	
LU3. Perform lighting control	<i>Trainee will be able to:</i> <ol style="list-style-type: none"> 1. Check working of all lighting system 2. Calibrate Lux meter 3. Manage light intensity and schedule 	<ul style="list-style-type: none"> Understanding of light requirement according to bird type Understanding of Light manual according to bird type Knowledge of calibration through Lux meter <p><u>Practical Activity</u></p> <ul style="list-style-type: none"> Practice to interpret light manuals Practice of Lux meter calibration Practice to manage light intensity and schedule 	Theory:15 hours Practical:60 hours Total : 75 hours	<div>Consumable</div> <ul style="list-style-type: none"> Internet Connection White board marker Duster Internet Connection Note book Pencil Eraser Sharpener PPEs <div>Non-Consumable</div> <ul style="list-style-type: none"> Computer System Control panel Tool kit PPEs Lux meter 	Classroom /Shed

Learning Unit	Learning Outcomes	Learning Elements	Duration	Materials Required	Learning Place
LU4. Perform hatchery operation	<i>Trainee will be able to:</i> <ol style="list-style-type: none"> 1. Manage temperature and relative humidity in incubator as per requirement 2. Operate turning of eggs 3. Maintain air quality 4. Perform automated hatchery operation 	<ul style="list-style-type: none"> • Knowledge of Incubation condition according to bird type • Importance of turning of eggs • Importance of air quality <p><u>Practical Activity</u></p> <ul style="list-style-type: none"> • Practice to manage temperature, air quality and relative humidity in incubator • Practice to operate turning of eggs • practice to perform automated hatchery operation 	Theory: 15 hours Practical: 60 hours Total :75 hours	<div>Consumable</div> <ul style="list-style-type: none"> • Internet Connection • White board marker • Duster • Internet Connection • Note book • Pencil • Eraser • Sharpener • PPEs <div>Non-Consumable</div> <ul style="list-style-type: none"> • Computer System • PPEs • Automated Incubator 	Classroom /Shed/Hatchery

Module 6 Perform Sample Collection

Objective of the module: After this competency standard candidate will be able to perform sample collection. The underpinning knowledge regarding blood, swab and organ sampling will be sufficient to provide the basis for the job at workplace.

Duration: 90 hours **Theory:** 18hours **Practical:** 72hours

Learning Unit	Learning Outcomes	Learning Elements	Duration	Materials Required	Learning Place
LU1. Perform blood sampling	<i>Trainee will be able to:</i> <ol style="list-style-type: none"> 1. Wear PPEs 2. Select tools 3. Collect blood sample as per SOPs 4. Perform labelling 5. Perform handling and storage 6. Maintain record 	<ul style="list-style-type: none"> • Routes for blood sample collection • Importance of labelling, handling, and storage of blood sample <u>Practical Activity:</u> <ul style="list-style-type: none"> • Sample collection as per SOPs • Perform labelling • Perform handling and storage of sample as per SOPs 	Total: 30hrs Theory: 6 hours Practical: 24hrs	Consumable <ul style="list-style-type: none"> • Internet Connection • White board marker • Duster • Internet Connection • Note book • Pencil • Eraser • Sharpener • PPEs • Cotton • Needles • Syringes • Vacutainers • Tape 	Class room/Farm

				<ul style="list-style-type: none"> • Sample bag • Marker Non-Consumable <ul style="list-style-type: none"> • Computer System • White board • Multimedia • PPEs • Ice box 	
LU2. Perform swab sample	<i>Trainee will be able to:</i> P1. Wear PPEs P2. Select tools P3. Collect swab sample as per SOPs P4. Perform labelling P5. Perform handling and storage P6. Maintain record	<ul style="list-style-type: none"> • Knowledge about site of swab sampling • Importance of Labelling, handling, and storage of samples <u>Practical Activity:</u> <ul style="list-style-type: none"> • Collection of swab samples as per instructions • Perform labelling • Perform handling and storage of sample as per SOPs 	Total: 30hrs Theory: 6hrs Practical: 24hrs	Consumable <ul style="list-style-type: none"> • Internet Connection • White board marker • Duster • Internet Connection • Note book • Pencil • Eraser • Sharpener • PPEs • Swab sticks • Tape • Sample bag • Marker Non-Consumable <ul style="list-style-type: none"> • Computer System • White board 	Class room/Farm /Hatchery

				<ul style="list-style-type: none"> Multimedia PPEs 	
LU3. Perform organ sample	<p><i>Trainee will be able to:</i></p> <ol style="list-style-type: none"> 1. Wear PPEs 2. Select tools 3. Collect organ sample as per SOPs 4. Perform labelling 5. Perform handling and storage 6. Maintain record 	<ul style="list-style-type: none"> Knowledge about organs for samples Importance of Labelling, handling, and storage of samples <p><u>Practical Activity</u></p> <ul style="list-style-type: none"> Collection of organs samples as per instructions Perform labelling Perform handling and storage of sample as per SOPs 	<p>Total:</p> <p>30hrs</p> <p>Theory:</p> <p>6hrs</p> <p>Practical:</p> <p>24hrs</p>	<p>Consumable</p> <ul style="list-style-type: none"> Internet Connection White board marker Duster Internet Connection Note book Pencil Eraser Sharpener PPEs Post mortem kit Tape Sample bag Marker <p>Non-Consumable</p> <ul style="list-style-type: none"> Computer System White board Multimedia PPEs Ice box Post mortem table 	Class room/Farm

Module 7: Perform Troubleshooting

Objective of the module: This unit describes the skills and knowledge required to perform troubleshooting. The underpinning knowledge regarding trouble shooting of feeding, ventilation and water system will be sufficient to provide the basis for the job at workplace.

Duration: 120hours **Theory:** 24hours **Practical:** 96hours

Learning Unit	Learning Outcomes	Learning Elements	Duration	Materials Required	Learning Place
LU1. Perform troubleshooting of feeding system	<i>Trainee will be able to:</i> <ol style="list-style-type: none"> 1. Select tools 2. Wear PPEs 3. Identify fault in feeding system 4. Prepare report on troubleshooting 5. Replace basic faulty parts 6. Perform manual feeding according to requirement 7. Maintain record 	<ul style="list-style-type: none"> • Knowledge about trouble shooting according to requirement • Feeding system <p><u>Practical Activity:</u></p> <ul style="list-style-type: none"> • Practice to identify the faults • Prepare report on troubleshooting • Maintain records 	<p>Total: 30 hours</p> <p>Theory: 6 hours</p> <p>Practical:24 hours</p>	<p>Consumable</p> <ul style="list-style-type: none"> • Internet Connection • White board marker • Duster • Internet Connection <p>Non-Consumable</p> <ul style="list-style-type: none"> • Computer System • Printer • Scanner • White Board • Multimedia • Feeding system 	Shed

LU2. Perform troubleshooting of water system	<i>Trainee will be able to:</i> <ol style="list-style-type: none"> 1. Select tools 2. Wear PPEs 3. Identify fault in watering system 4. Prepare report on troubleshooting 5. Replace basic faulty parts 6. Perform manual watering according to requirement 7. Maintain record 	<ul style="list-style-type: none"> • Knowledge about trouble shooting according to requirement • Watering system <p><u>Practical Activity:</u></p> <ul style="list-style-type: none"> • Practice to identify the faults • Prepare report on troubleshooting • Maintain records 	<p>Total:</p> <p>30 hours</p> <p>Theory:</p> <p>6 hours</p> <p>Practical:</p> <p>24hrs</p>	<p>Consumable</p> <ul style="list-style-type: none"> • Internet Connection • White board marker • Duster • Internet Connection <p>Non-Consumable</p> <ul style="list-style-type: none"> • Computer System • Printer • Water system 	Shed
LU3. Perform troubleshooting of ventilation system	<i>Trainee will be able to:</i> <ol style="list-style-type: none"> 1. Select tools 2. Wear PPEs 3. Identify fault in ventilation system 4. Prepare report on troubleshooting 5. Follow emergency plan as per situation 6. Replace basic faulty parts 7. Maintain record 	<ul style="list-style-type: none"> • Knowledge about trouble shooting according to requirement • Ventilation system • Importance of air quality, temperature and humidity <p><u>Practical Activity:</u></p> <ul style="list-style-type: none"> • Practice to identify the faults • Prepare report on troubleshooting 	<p>Theory=6 hours</p> <p>Practical=24 hours</p> <p>Total=30 hours</p>	<p>Consumable</p> <ul style="list-style-type: none"> • Internet Connection • White board marker • Duster • Internet Connection <p>Non-Consumable</p>	Shed

		<ul style="list-style-type: none"> • Maintain records 		<ul style="list-style-type: none"> • Computer System • Printer • Ventilation system 	
LU4. Perform restoration of power supply	<i>Trainee will be able to:</i> <ol style="list-style-type: none"> 1. Select tools 2. Wear PPEs 3. Identify fault in power supply 4. Prepare report 5. Follow emergency plan as per situation 6. Maintain record 	<ul style="list-style-type: none"> • Knowledge about trouble shooting according to requirement • Power supply system <p><u>Practical Activity:</u></p> <ul style="list-style-type: none"> • Practice to identify the faults • Prepare report on troubleshooting • Maintain records 	<p>Theory=6 hours</p> <p>Practical=24 hours</p> <p>Total=30 hours</p>	<p>Consumable</p> <ul style="list-style-type: none"> • Internet Connection • White board marker • Duster • Internet Connection <p>Non-Consumable</p> <ul style="list-style-type: none"> • Computer System • Printer • Tool kit 	Shed

Module 8 : Perform Basic Green Skills for Farm and Hatchery

Objective of the module: This unit describes the skills and knowledge required to perform basic green skills for farm and hatchery. The underpinning knowledge regarding sustainability of materials used at site will be sufficient to provide the basis for the job at workplace.

Duration: 90 hours **Theory:** 18hours **Practical:** 72 hours

Learning Unit	Learning Outcomes	Learning Elements	Duration	Materials Required	Learning Place
LU1. Manage sustainability of materials used at site	<p><i>Trainee will be able to:</i></p> <ol style="list-style-type: none"> 1. Select sustainable raw materials as per requirement 2. Follow standard procedure to manage systems (waste, energy, water) 3. Identify various types of waste at site 4. Sort and categorize reusable waste 	<ul style="list-style-type: none"> • Environmental degradation • Types of raw materials at site • Types of waste • Reusable materials • Recyclable materials • Methods for disposal of unusable materials • Just-in-time (JIT) approach • Basic knowledge of green energy resources (solar, biogas, natural light, rainwater, wind energy etc.) <p><u>Practical Activity</u></p>	<p>Total- 30 hours</p> <p>Theory- 6 hours</p> <p>Practical- 24hours</p>	<p>Consumable</p> <ul style="list-style-type: none"> • Internet Connection • White board marker • Duster • Different types of waste • Raw material • Plastic bags <p>Non-Consumable</p> <ul style="list-style-type: none"> • Computer System 	Class Room/Shed/Hatchery

	5. Dispose unusable waste as per set standards 6. Place reusable material at designated storage area 7. Transport waste material to designated place	<ul style="list-style-type: none"> Practice to collect different waste and reusable material and transport to designated place 		<ul style="list-style-type: none"> Printer Wheel barrow Spade White board Broom Bins 	
LU2. Manage waste	<i>Trainee will be able to:</i> 1. Identify various types of wastes at site 2. Sort and categorise reusable waste 3. Dispose unusable waste as per set standards. 4. Place reusable material at designated storage area 5. Transport waste material to designated place.	<ul style="list-style-type: none"> Types of waste Waste reduction techniques Methods of disposal of unusable materials Just-In-Time (JIT) approach. <p><u>Practical Activity</u></p> <ul style="list-style-type: none"> Practice to collect different waste and reusable material and transport to designated place 	Theory= 6 hours Practical=24 hours Total=30 hours	<div>Consumable</div> <ul style="list-style-type: none"> Internet Connection White board marker Duster Different types of waste Raw material Plastic bags <div>Non-Consumable</div> <ul style="list-style-type: none"> Computer System 	Class Room/Shed/Hatchery

				<ul style="list-style-type: none"> • Printer • Wheel barrow • Spade • White board • Broom • Bins 	
Lu3. Prepare poultry compost	<p><i>Trainee will be able to:</i></p> <ol style="list-style-type: none"> 1. Wear PPEs 2. Select tools and material 3. Prepare site for composting 4. Collect farm and hatchery organic waste 5. Prepare compost according to standard procedure 6. Perform packaging of the compost 	<ul style="list-style-type: none"> • Types of Composting • SOPs for composting • Organic wastes to be selected for composting • Explain Site preparation <p><u>Practical Activity:</u></p> <ul style="list-style-type: none"> • Site preparation for composting • Collection and handling of shed/hatchery organic waste • Preparation and packaging of compost 	<p>Theory= 6 hours</p> <p>Practical=24 hours</p> <p>Total= 30 hours</p>	<p>Consumable</p> <ul style="list-style-type: none"> • Internet Connection • White board marker • Duster • Organic waste • Manure • Dead birds • Packing material <p>Non-Consumable</p>	Class Room/Compost unit

				<ul style="list-style-type: none"> • Computer System • Printer • Wheel barrow • Spade • White board • Compost bin material • Thermometer • Hygrometer • Sensors • Spray pump 	
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General assessment guidance for “Assistant 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 Assistant Supervisor:

- Work performances, for example basic farm and hatchery management
- Work Performances, for example operate system software/control panel
- Demonstrations, for example perform troubleshooting
- 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 Assistant Supervisor include:

- Work products, Project portfolio
- Workplace documents, such as a report on health and safety or log registers for inventory 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 “Assistant Supervisor”

This curriculum consists of 8 modules

- Module 1: Establish and Maintain the Occupational Health and Safety System
- Module 2: Perform Advance Communication
- Module 3: Manage Inventory at Site
- Module 4: Perform Basic Farm and Hatchery Management
- Module 5: Operate System Software/Control Panel
- Module 6: Perform Sample Collection
- Module 7: Perform Troubleshooting
- Module 8: Perform Basic Green Skills for Farm and Hatchery

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 -4

- Module 1: Establish and Maintain the Occupational Health and Safety System
- Module 2: Perform Advance Communication
- Module 3: Manage Inventory at Site
- Module 4: Perform Basic Farm and Hatchery Management
- Module 5: Operate System Software/Control Panel
- Module 6: Perform Sample Collection
- Module 7: Perform Troubleshooting
- Module 8: Perform Basic Green Skills for Farm and Hatchery

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
- Resources and duties

Complete list of tools and equipment

Sr#	Description	Quantity
1	Air inlet	As per requirement
2	Barometer	5
3	Brooders	5
4	Bulb	25
5	Calculator	25
6	Candler	2
7	Computers	26
8	Construction material of compost bins	As per size
9	Conveyor Belt	As per requirement
10	Cooling pads	As per requirement
11	Droppers	25
12	Egg Storage cabinet	2
13	Egg trolleys	2
14	Feed Grinder	1
15	Feeder	10
16	Fire Buckets	5
17	Fire Extinguishers	5
18	Fogger system	As per requirement
19	Hygrometer	2
20	Incubator	1
21	Internet router	1
22	Laying Nests	5
23	Light trapper	As per requirement
24	Lux Meter	1
25	Measuring Tape	25
26	Mixer	1
27	Multimeter	5
28	Petri dish	25
29	pH Meter	1

30	Printer	1
31	Refrigerator	1
32	Relative humidity sensors	As per requirement
33	Safety Blankets	5
34	Sample collection kit	25
35	Scanner	1
36	Shifting trays	5
37	TDS meter	1
38	Temperature Sensors	As per requirement
39	Thermometer wet bulb	5
40	Vaccine gun	1
41	Ventilation Fan	As per requirement
42	Water drinkers	10
43	Water tank	As per requirement

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 set
7.	Syringes	500
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
Module 1: Establish and Maintain the Occupational Health and Safety System	60	6
Module 2: Perform Advance Communication	60	6
Module 3: Manage Inventory at Site	90	9
Module 4: Perform Basic Farm and Hatchery Management	390	39
Module 5: Operate System Software/Control Panel	300	30
Module 6: Perform Sample Collection	90	9
Module 7: Perform Troubleshooting	120	12
Module 8: Perform Basic Green Skills for Farm and Hatchery	90	9
Total	1200	120

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