

National Vocational Certificate Level 4 in Poultry Management

(Assistant Supervisor)



Competency Standards

**National Vocational and Technical Training Commission (NAVTTTC),
Government of Pakistan**



National Competency Standards For National Vocational Certificate Level 4 in Poultry Management (Assistant Supervisor)

NVQF Level 4

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INTRODUCTION

Poultry industry plays vital role to reduce malnutrition, alleviate poverty and promoting cost-effective growth. It is one of the largest agro based segment of Pakistan having an investment of more than 1,190 Billion rupees. Poultry Industry of Pakistan continuously reducing the gap between supply and demand of meat protein by producing quality and cheapest protein. Being cheapest available animal protein source for our masses, poultry is also playing as an effective check upon the increasing animal protein prices. Poultry Industry generates employment and provides source of income to more than 1.5 million people of Pakistan directly & indirectly. In our country per capita consumption of meat is only 8.22 kilo grams and 96.75 eggs annually (Economic survey of Pakistan). Whereas developed world is consuming about 40 kilo grams meat and over 300 eggs per capita per year. As per standard of World Health Organization, daily requirement of animal protein for a person is 27 grams whereas public is consuming 17 grams only. Therefore, we are already consuming less animal protein as per required standards.

Poultry management includes all principles and practices involved in production of layer for the purpose of eggs, rearing of broiler for the meat purpose and hatchery unit for the breeding purpose. Poultry industry is one of the sectors which converted their traditional ways of production into fully mechanized system within a short period of time. In latest scenario almost 90 percent of poultry industry rearing their birds on modern mechanized system rather than old traditional ways. Fully controlled system required skilled manpower to operate efficiently which is a major challenge for the industry of Pakistan. Meanwhile, current growth pace of poultry industry produces high demand for skilled labor.

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 QUALIFICATION

The purpose of the training is to provide skilled manpower to improve the existing poultry industry. This will improve the quality in poultry sector and the availability of skilled professionals will bring socio-economic benefits to all stakeholders. The specific objectives of developing these qualifications are as under:

- Improve the professional competence of poultry management
- Capacitate the local community and trainers in modern CBT training, methodologies and processes as envisaged under NVQF
- Provide flexible pathways and progressions in the poultry sector
- Enable the trainees to perform their duties in efficient manner
- Establish a standardized and sustainable system of training for poultry management in Pakistan

DATE OF VALIDATION

This national vocational qualification (NVQ) has been validated by the Qualifications Development Committee (QDC) in 7th March to 11th March 2022 and will remain in currency until 10th March 2032

*Shall be reviewed after 3 years



CODE OF QUALIFICATION

Qualification Title	Code
National Vocational Certificate Level 4 in Poultry farm Management “Assistant Supervisor”	811PM03

ENTRY REQUIREMENTS

- For National Vocational Certificate Level-4 in “Assistant Supervisor”, the entry requirement is award of National Vocational Certificate Level-3 in “Head Worker”. The entry in informal sector is not prescribed.



QUALIFICATIONS DEVELOPMENT COMMITTEE

The following members participated in the qualification development of these qualifications:

Sr. No.	Name	Designation	Organization
1.	Saima Asghar	DACUM Facilitator	CBT Expert/Certified Assessor
2.	Mohammad Ishaq	Coordinator	Deputy Director NAVTTC, Islamabad
3.	Mr. Shahid Javaid	Asst. Professor	Department of Poultry Production ,UVAS, Pattoki
4.	Dr. Masood Haider Jaffery	Poultry Consultant	PPA ,Lahore
5.	Muhammad Faisal Riaz	Ph.D. Scholar	UVAS, Pattoki
6.	Ms.Urooj Khan	Ph.D. Scholar	UVAS, Pattoki
7.	Mr.Shaheryar Ali	M.Phil. Scholar	UVAS, Pattoki
8.	Mr. Mohammad Saeed Ahmad	Agriculture Officer	UVAS, Pattoki
9.	Mr. Muhammad Saleem Minhas	Broiler Farmer	BKM Farms, Sialkot
10.	Dr.Abdul Ghayas	Asst. Farm Manager	Zubair Feeds,Sheikupura
11.	Dr.Abdul Samad Haidary	Poultry Farm Manager	Broiler Grand Parent Flock at Quality Breeders ,Sargodha
12.	Ms. Samia Amir Hamza	M.Phil. Scholar	GCU Faisalabad
13.	Mr. Ahmad Talal Chohan	Poultry Farm Owner	Layyah
14.	Mr. Faizan Nawaz Qureshi	Farm Supervisor	Poultry research Institute, Rawalpindi
15.	Raja Shahid Khan	Veterinary Officer	Poultry research Institute, Jabba Mansehra
16.	Syed Fawad Ali	Asst. Professor	Sindh Agriculture University Tando Jam



VALIDATION COMMITTEE

The following members participated in the qualification development of these qualifications:

Sr. No.	Name	Designation	Organization
1.	Saima Asghar	DACUM Facilitator	CBT Expert/Certified Assessor
2.	Mohammad Ishaq	Coordinator	Deputy Director NAVTTTC, Islamabad
3.	Mr. Shahid Javaid	Asst. Professor	Department of Poultry, UVAS Pattoki
4.	Ms. Maryam Shahid	Ms. Scholar	PU (Agriculture Deptt) ,Lahore
5.	Dr. Muhammad Faisal Riaz	Ph.D. Scholar	UVAS, Pattoki
6.	Mr. Nazim Khawar Butt	Owner	KK poultry & hatchery, Lahore
7.	Mr. Shaharyar Ali	Ph.D. Scholar,	UVAS ,Pattoki
8.	Mr. Muhammad Saeed Ahmed	Agriculture Officer	UVAS ,Pattoki
9.	Mr. Muhammad Saleem Minhas	Broiler Farmer	BKM Farms, Sialkot
10.	Liaqat Ali Jamhro	Director Academics	STEVT
11.	Mr. Faizan Nawaz Qureshi	Farm Supervisor	Poultry Research Institute, Rawalpindi
12.	Dr. Muhammad Naazir Khan Niazi	Chairman	PBTE Lahore
13.	Raja Shahid Khan	Veterinary Officer	Poultry Research Institute, Jabba Mansehra
14.	Syed Fawad Ali	Assistant professor	Sindh Agriculture University, TandoJam
15.	Ms. Hamna	Food Technologist	GCU, Faisalabad



SUMMARY OF COMPETENCY STANDARDS

Code	Competency Standards	Level	Theory		Practical		Total	
			C	Hr.	C	Hr.	C	Hr.
1.	Establish and Maintain the Occupational Health and Safety System	4	1.2	12	4.8	48	6	60
2.	Perform Advance Communication	3	1.2	12	4.8	48	6	60
3.	Manage Inventory at Site	2	1.8	18	7.2	72	9	90
4.	Perform Basic Farm and Hatchery Management	6	7.8	78	31.2	312	39	390
5.	Operate System Software/Control Panel	4	6	60	24	240	30	300
6.	Perform Sample Collection	4	1.8	18	7.2	72	9	90
7.	Perform Troubleshooting	4	2.4	24	9.6	96	12	120
8.	Perform Basic Green Skills for Farm and Hatchery	3	1.8	18	7.2	72	9	90
Total			24	240	96	960	120	1200



811PM03-A Competency Standard: Establish and Maintain the Occupational Health and Safety System

Overview: This unit covers how to establish, maintain and evaluate an occupational health and safety system in the work environment. This unit applies to workers who have either a legislated or delegated responsibility to implement OHS systems to meet the organization's policy requirements. These roles require significant role or delegated authority to allow effective implementation and review. While designed for public safety workers.

Competency Units	Performance Criteria
CU1. Carryout Risk assessment at workplace	<i>You must be able to:</i> P1. Identify potential hazards at workplace P2. Evaluate the risk P3. Take corrective/preventive action to mitigate the risk P4. Record your findings P5. Review the risk assessment
CU2. Follow emergency response protocol/procedure	<i>You must be able to:</i> P1. Identify emergency exits at workplace P2. Select suitable positions P3. Identify assembly area at workplace P4. Follow procedure and instructions to evacuate the building P5. Report immediately at designated assembly area in case of emergency
CU3. Perform safe storage and disposal of waste	<i>You must be able to:</i> P1. Identify different types of waste material P2. Identify types of containers to store the different types of waste material P3. Use required labels on storage containers P4. Store the waste materials according to standards



	<p>P5. Identify types of waste bins</p> <p>P6. Dispose- off waste material according to the safety procedure</p>
<p>CU4. Maintain ergonomics condition at workplace</p>	<p><i>You must be able to:</i></p> <p>P1. Follow standard working posture/position at workplace</p> <p>P2. Follow standard procedure to provide sufficient light at workplace</p> <p>P3. Use ergonomic workstations to avoid muscle fatigue</p>

Knowledge & Understanding

The candidate must be able to demonstrate underpinning knowledge and understanding required to carry out tasks covered in this competency standard. This includes the knowledge of:

- Risk assessment at workplace
- Hazard identification
- Ergonomic working condition
- Hierarchy of control (the preferred order of risk control measures from most to least preferred that is:
 - Elimination
 - Substitution
 - Engineering control
 - Administrative controls
 - And personal protective equipment)
- Types of emergencies at workplace
- 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

Critical Evidence(s) Required

The candidate needs to produce following critical evidence(s) to be competent in this competency standard:

- Perform risk assessment and hazard identification at the workplace
- Demonstrate safe disposal regarding given hazardous material



811PM03-B Competency Standard: Perform Advance Communication

Overview: This unit describes the performance outcomes, skills and knowledge required to develop communication skills used professionally. It covers plan and organise work and conduct trainings at workplace, along with demonstrating professional skills independently.

Competency Units	Performance Criteria
CU1. Demonstrate basic communication skills	<i>You must be able to:</i> P1. Demonstrate different modes of communication: <ul style="list-style-type: none">• Speaking• Reading• Writing• Listening P2. Demonstrate presentation skills through multimedia etc. P3. Develop CV according requirements P4. Develop interview skills according to job requirement
CU2. Plan and Organize work	<i>You must be able to:</i> P1. Identify task requirements. P2. Plan steps to complete tasks P3. Review planning and organizing process P4. Organize work as per task requirement
CU3. Conduct Professional Activities Ethically	<i>You must be able to:</i> P1. Identify the ethical problems P2. Identify affected parties and their interests P3. Evaluate each solution using the interest of those involved.

Knowledge & Understanding

The candidate must be able to demonstrate underpinning knowledge and understanding required to carry out the tasks covered in this competency standard. This includes the knowledge of:

- Training skills
- Professional skills
- Advanced language skills
- Assessment and trainees feedback methods
- Direct and indirect communication methods



- The need of the training type at the work place

Critical Evidence(s) Required

The candidate needs to produce following critical evidence(s) in order to be competent in this competency standard:

- Develop CV
- Prepare report on plan and organize work



811PM03-C Competency Standard: Manage Inventory at Site

Overview: This competency standard identifies competencies required to manage inventory at site. You will be able to maintain log register, stock register, dead stock register, flock register, production and hatchery register. Your underpinning knowledge will be sufficient to provide you the basis for your work.

Competency Units	Performance Criteria
CU1. Perform storage of feed/eggs	<i>You must be able to:</i> P1. Calculate amount of feed available on farm P2. Maintain storage site P3. Implement rodents control program P4. Cross check with the log register P5. Adjust demands in accordance with the available feed P6. Manage production plan accordingly P7. Place feed bags in feed store according to SOPs P8. Check and maintain eggs storage conditions P9. Receive eggs at storage site according to work instructions P10. Place eggs in eggs storage room
CU2. Maintain record	<i>You must be able to:</i> P1. Arrange material for record keeping P2. Maintain Log Register on daily basis P3. Maintain Stock Register P4. Maintain Dead Stock Register P5. Maintain Flock Register P6. Maintain Production Register P7. Maintain Hatchery Register P8. Maintain history sheets for repair and maintenance P9. Enter data corresponding to every type of material P10. Audit Log register with available materials at site P11. Report to in charge in case of any issues P12. Prepare production / dispatch record sheet



Knowledge & Understanding

The candidate must be able to demonstrate underpinning knowledge and understanding required to carry out the tasks covered in this competency standard. This includes the knowledge of:

- Material characteristics
- Stock Register
- Dead Stock Register
- Flock Register
- Production Register
- Hatchery Register

Critical Evidence(s) Required

The candidate needs to produce following critical evidence(s) in order to be competent in this competency standard:

- Maintain Log book including quantity ,quality ,types of stored material and quantity of feed and eggs



811PM03- D Competency Standard: Perform Basic Farm and Hatchery Management

Overview: This competency standard deal with learning the competencies needed to perform basic farm and hatchery management. That includes ventilation, brooding, growing/rearing and production managements. Your underpinning knowledge will be sufficient to provide you the basis for your work.

Competency Units	Performance Criteria
CU1. Carryout ventilation Management	<i>You must be able to:</i> P1. Check working of all fans and motors P2. Check all cooling pads condition P3. Check all sensors and controller P4. Check the working of inlets P5. Perform natural ventilation P6. Operate artificial/forced ventilation
CU2. Perform Basic Brooding Management	<i>You must be able to:</i> P1. Prepare brooding site P2. Receive chicks as per SOPs P3. Maintain house temperature according to requirement P4. Maintain relative humidity according to requirement P5. Maintain light according to requirement P6. Perform feeding practices according to requirement P7. Perform medication and vaccination as per requirement
CU3. Perform Basic Growing/Rearing Management	<i>You must be able to:</i> P1. Maintain house temperature according to requirement P2. Maintain relative humidity according to requirement P3. Maintain light according to requirement P4. Perform feeding practices according to requirement P5. Perform medication as per requirement



	P6. Perform vaccination as per schedule
CU4. Perform Basic Production Management	You must be able to: P1. Maintain house temperature according to requirement P2. Maintain relative humidity according to requirement P3. Maintain light according to requirement P4. Perform feeding practices according to requirement P5. Perform laying nest management as per requirement P6. Operate different automatic egg collection systems P7. Perform medication as per requirement P8. Perform vaccination as per schedule
CU5. Perform Culling Practices	You must be able to: P1. Wear PPEs P2. Perform soft handling of birds as per SOPs P3. Select culling birds as per instructions P4. Maintain Biosecurity protocols
CU6. Handle dead birds	You must be able to: P1. Wear PPEs P2. Identify position/location of dead birds P3. Collect dead birds at site P4. Transport dead birds to postmortem room P5. Dispose-off dead birds after postmortem P6. Maintain record keeping

Knowledge & Understanding

The candidate must be able to demonstrate underpinning knowledge and understanding required to carry out the tasks covered in this competency standard. This includes the knowledge of:

- Importance of ventilation
- Types of Ventilation
- Ventilation tools and equipment
- Brooding management
- Rearing/Growing management



- Production management
- Different automatic egg collection systems
- Culling basis and practices
- Methods of dispose-off the dead birds(Burial, incineration, rendering ,composting)

Critical Evidence(s) Required

The candidate needs to produce any or all of the following documents/evidences:

- Carryout environment/ventilation management
- Carryout Rearing/Growing
- Carryout Culling practices
- Carryout Brooding
- Handle dead birds



811PM03-E Competency Standard: Operate System Software/Control Panel

Overview: This unit describes the performance outcomes, skills and knowledge required to operate system software/control panel. It covers maintenance of ventilation, feeding system and lighting control. It will also allow you to perform hatchery operation. Your underpinning knowledge will be sufficient to provide you the basis for your work.

Competency Units	Performance Criteria
CU1. Maintain ventilation	<p>You must be able to:</p> <p>P1. Perform pre checks of ventilation system</p> <p>P2. Operate fans from controllers as per requirement</p> <p>P3. Operate cooling pads from controllers as per requirement</p> <p>P4. Maintain air quality</p> <p>P5. Operate inlets from controllers as per requirement</p> <p>P6. Perform troubleshooting of faulty equipments.</p>
CU2. Operate feeding system	<p>You must be able to:</p> <p>P1. Check working of all feeding chain</p> <p>P2. Adjust feeders according to birds requirement</p> <p>P3. Maintain all feeding system</p>
CU3. Perform lighting control	<p>You must be able to:</p> <p>P1. Check working of all lighting system</p> <p>P2. Calibrate Lux meter</p> <p>P3. Manage light intensity and schedule</p>
CU4. Perform hatchery operation	<p>You must be able to:</p> <p>P1. Manage temperature and relative humidity in incubator as per requirement</p> <p>P2. Operate turning of eggs</p> <p>P3. Maintain air quality</p> <p>P4. Perform automated hatchery operation</p>



Knowledge & Understanding

The candidate must be able to demonstrate underpinning knowledge and understanding required to carry out the tasks covered in this competency standard. This includes the knowledge of:

- Importance of ventilation
- Types of ventilation
- Types of fan
- Types of cooling pads
- Dimensions and design of inlets
- Controllers and sensors
- Types of feeding system
- Types of hoppers
- Types of conveyor belt
- Types of Lux meter
- Procedure of Lux meter calibration
- Inter-conversion of light units
- Importance of hatchery
- Significance of temperature and humidity in incubator
- Importance of eggs turning in setter
- Significance of air quality in incubator
- Automated hatchery management

Critical Evidence(s) Required

The candidate needs to produce following critical evidence(s) in order to be competent in this competency standard:

- Maintain ventilation
- Operate feeding system
- Perform lighting control
- Perform hatchery operation



811PM03-F Competency Standard: Perform Sample Collection

Overview: This unit describes the performance outcomes, skills and knowledge required to perform sample collection. It covers blood, swab and organ samples. Your underpinning knowledge will be sufficient to provide you the basis for your work.

Competency Units	Performance Criteria
CU1. Perform blood sample	You must be able to: P1. Wear PPEs P2. Select tools P3. Collect blood sample as per SOPs P4. Perform labeling P5. Perform handling and storage P6. Maintain record
CU2. Perform swab sample	You must be able to: P1. Wear PPEs P2. Select tools P3. Collect swab sample as per SOPs P4. Perform labeling P5. Perform handling and storage P6. Maintain record
CU3. Perform organ sample	You must be able to: P1. Wear PPEs P2. Select tools P3. Collect organ sample as per SOPs P4. Perform labeling P5. Perform handling and storage P6. Maintain record

Knowledge & Understanding:

The candidate must be able to demonstrate underpinning knowledge and understanding required to carry out tasks covered in this competency standard. This includes the knowledge of:

- Blood sample



- Blood sample routes
- Type of vacutainers
- Types of swab sample
- Type of Organ for sample
- Handling of samples
- Storage of sample as per SOPs
- Record keeping of samples

Critical Evidence(s) Required

The candidate needs to produce following critical evidence(s) in order to be competent in this competency standard:

- Perform blood sample
- Perform swab sample
- Perform organ sample



811PM03-G Competency Standard: Perform Troubleshooting

Overview: This unit describes the performance outcomes, skills and knowledge required to perform troubleshooting. It covers troubleshooting of feed/water management and ventilation system. It will also allow you to restoration of power supply. Your underpinning knowledge will be sufficient to provide you the basis for your work.

Competency Units	Performance Criteria
CU1. Perform troubleshooting of feeding system	<i>You must be able to:</i> P1. Select tools P2. Wear PPEs P3. Identify fault in feeding system P4. Prepare report on troubleshooting P5. Replace basic faulty parts P6. Perform manual feeding according to requirement P7. Maintain record
CU2. Perform troubleshooting of water system	<i>You must be able to:</i> P1. Select tools P2. Wear PPEs P3. Identify fault in watering system P4. Prepare report on troubleshooting P5. Replace basic faulty parts P6. Perform manual watering according to requirement P7. Maintain record
CU3. Perform troubleshooting of ventilation system	<i>You must be able to:</i> P1. Select tools P2. Wear PPEs P3. Identify fault in ventilation system P4. Prepare report on troubleshooting P5. Follow emergency plan as per situation P6. Replace basic faulty parts P7. Maintain record
CU4. Perform restoration of power supply	<i>You must be able to:</i> P1. Select tools P2. Wear PPEs P3. Identify fault in power supply P4. Prepare report



	P5. Follow emergency plan as per situation P6. Maintain record
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Knowledge & Understanding:

The candidate must be able to demonstrate underpinning knowledge and understanding required to carry out tasks covered in this competency standard. This includes the knowledge of:

- Principle of feed/water system Environmental requirements of birds according to season
- Importance of record keeping
- Methods to identify problems of unit/site
- Interpretation of emergency plans
- PPEs
- Restoration of power supply at site

Critical Evidence(s) Required

The candidate needs to produce following critical evidence(s) in order to be competent in this competency standard:

- Perform trouble shooting of feed/water system
- Perform troubleshooting of ventilation system
- Perform restoration of power supply



811PM03-H Competency Standard: Perform Basic Green Skills for Farm and Hatchery

Overview: This unit describes the performance outcomes, skills and knowledge required to perform basic green skills for farm and hatchery. It will also allow you to manage sustainability of materials used at farm and hatchery at site .Your underpinning knowledge will be sufficient to provide you the basis for your work.

Competency Units	Performance Criteria
CU1. Manage sustainability of materials used at site	<i>You must be able to:</i> P1. Select sustainable raw materials as per requirement P2. Follow standard procedure to manage systems (waste, energy, water) P3. Identify various types of waste at site P4. Sort and categorize reusable waste P5. Dispose unusable waste as per set standards P6. Place reusable material at designated storage area P7. Transport waste material to designated place
CU2. Manage waste	<i>You must be able to:</i> P1. Identify various types of waste at site P2. Sort and categorize reusable waste P3. Dispose unusable waste as per set standards P4. Place reusable material at designated storage area P5. Transport waste material to designated place
CU3. Prepare poultry compost	<i>You must be able to:</i> P1. Wear PPEs P2. Select tools and material P3. Prepare site for composting P4. Collect farm and hatchery organic waste P5. Prepare compost according to standard procedure P6. Perform packaging of the compost



Knowledge & Understanding.

The candidate must be able to demonstrate underpinning knowledge and understanding required to carry out the tasks covered in this competency standard. This includes the knowledge of:

- Environmental degradation
- Types of materials at site
- Types of waste
- Waste reduction techniques
- Concept of 6 R approach (Reduce, Reuse, Recycle, Repair, Renew, and Rethink)
- 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.)
- Usage of organic wastes
- Compost preparation methods

Critical Evidence(s) Required

- Fill checklist of incorporating waste/reusable materials, wastage controls, and resources management as per instructions.
- Prepare impact assessment report of material used at site
- Prepare poultry compost



COMPLETE LIST OF TOOLS AND EQUIPMENT

Sr. #	Description
1.	Safety Blankets
2.	PPEs
3.	Fire Buckets
4.	Fire Extinguishers
5.	First aid Kit
6.	Measuring Tape
7.	Multimeter
8.	Water tank
9.	Cooling pads
10.	Air inlet
11.	Ventilation Fan
12.	Temperature Sensors
13.	Relative humidity sensors
14.	Brooders
15.	Incubator
16.	Laying Nests
17.	Egg Washer
18.	Candler



Sr. #	Description
19.	Syringes
20.	Heater
21.	Fogger
22.	Conveyor Belt
23.	Bulbs
24.	Lux Meter
25.	Feed Hoppers
26.	Sample Containers
27.	Sample collection kit
28.	Registers (Log, Hatchery, Production, Flock)
29.	Computers
30.	Printer
31.	Scanner
32.	Internet router
33.	Plastic bags
34.	Construction material of compost bins
35.	Feeder
36.	Air inlet



Sr. #	Description
37.	Ventilation Fan
38.	Water drinkers
39.	Temperature Sensors
40.	Thermometer
41.	Light trapper
42.	Relative humidity sensors
43.	Hygrometer
44.	Feed Grinder
45.	Brooders
46.	Barometer
47.	Incubator
48.	Egg Storage cabinet
49.	Shifting trays
50.	Egg trolleys
51.	Candler
52.	pH Meter
53.	Syringes
54.	Vaccine gun



Sr. #	Description
55.	Droppers
56.	Refrigerator
57.	Bulb
58.	Heater
59.	Feed manuals
60.	Calculator
61.	Grinder
62.	Mixer
63.	Chemicals
64.	TDS meter
65.	Petri dish