







Model Curriculum

Layer Farm Worker

SECTOR: AGRICULTURE & ALLIED

SUB-SECTOR: POULTRY

OCCUPATION: POULTRY FARMING

REF ID: AGR/Q4307, V1.0

NSQF LEVEL: 3















Certificate

CURRICULUM COMPLIANCE TO QUALIFICATION PACK – NATIONAL OCCUPATIONAL STANDARDS

is hereby issued by the

AGRICULTURE SKILL COUNCIL OF INDIA

forthe

MODEL CURRICULUM

Complying to National Occupational Standards of Job Role/Qualification Pack: 'Layer Farm Worker' QP No. 'AGR/ Q4307 NSQF Level 3'

Date of Issuance: February 20th, 2017

Valid up to: March 31st, 2020

* Valid up to the next review date of the Qualification Pack

Authorised Signatory (Agriculture Skill Council of India)









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Layer Farm Worker

CURRICULUM / SYLLABUS

This program is aimed at training candidates for the job of a "<u>Layer Farm Worker</u>", in the "<u>Agriculture & Allied</u>" Sector/Industry and aims at building the following key competencies amongst the learner

Program Name	Layer Farm Worker		
Qualification Pack Name & Reference ID. ID	AGR/Q4307, v1.0		
Version No.	1.0 Version Update Date		
Pre-requisites to Training	Class 5 preferably		
Training Outcomes	 After completing this programme, participants will be able to: Prepare Layer shed: Introduction to Poultry Farm, site selection, construction of shed Carry out Feeding, Brooding & Chick Management: Work environment, brooding management of chicks, feeding of chicks Carry out the routine work in shed: Handling & caring, health management, vaccination, record keeping, documentation etc Maintain health and safety: Clean and disinfect the shed, hygiene maintenance, disease prevention, shed hygiene 		









This course encompasses $\underline{5}$ out of $\underline{5}$ National Occupational Standards (NOS) of "<u>Layer Farm Worker</u>" Qualification Pack issued by "<u>Agriculture Skill Council of India</u>".

Sr. No.	Module	Key Learning Outcomes	Equipment Required
1	Introduction Theory Duration (hh:mm) 5:00 Practical Duration (hh:mm) 0:00 Corresponding NOS Code	 Understand General Discipline in the class room (Do's & Don'ts) Get acquainted with the Poultry Industry Types of Poultry-Broiler, Layer, Breeder Understand the importance of layer farming and the work environment Get acquainted with different Poultry Breeds used for Layer Farming Understand the role of a Poultry Farm Worker and the progression pathways 	Laptop, white board, marker, projector
2	Construct poultry sheds and ensure their maintenance Theory Duration (hh:mm) 15:00 Practical Duration (hh:mm) 30:00 Corresponding NOS Code AGR/N4335	 Identify and procure the materials required for construction of layer house Construct shed in the selected area Construct comfortable house with following parameters: No water logging Adequate light, heat and ventilation Proper supply of feed and other facilities Free from predators, rodents or other animals etc Understand the resource requirements Estimate the space required for the Growers and layer birds Understand the frequency of resource requirements Undertake maintenance of the shed Undertake cleaning and disinfection of shed at regular interval Understand the importance of bio security – Movement of people, workers in the shed, buyers entering into shed etc Create the Footbath at the entrance (Chemicals/ disinfectants) 	Laptop, white board, marker, projector, Cage structure, Sawdust/paddy husk(in case it is deep littered), PVC Pipes, water nipples, ventilators, tube lights, egg trays, other house construction material etc
3	Feeding, brooding and chick management Theory Duration (hh:mm) 15:00 Practical Duration (hh:mm) 30:00	 Prepare the brooding room for the placement of chicks Undertake feeding and watering of chicks, growers and layer birds Undertake brooding management of chicks Undertake management of growers Undertake management of layers Get acquainted with different Feed ingredients and composition required for 	Laptop, white board, marker, projector, chemicals, disinfectants, curtains-gunny bags/plastic, binding wire, cutting player, electrical wires/









Sr. No.	Module	Key Learning Outcomes	Equipment Required
	Corresponding NOS Code AGR/N4336	 Chicks, Brooders, growers and Layer birds Understand time and frequency of Feeding, food diet of birds at different stages Feed according to the feed chart or as directed Undertake mixing of medicines through feed Collect feed samples for analysis Get acquainted with Space, Light, heat and moisture requirement for the birds Clean, disinfect, sanitize and fumigate the tools/ equipments and shed Understand and maintain the comfort environment for chicks- adequate light, temperature, clean water, feed Undertake safe handling of chicks 	folder/plugs etc, electrical bulbs, insulation tape, brooders, brooder guards, chick feeders, chick drinkers, taps, newspaper, thermometer, foot dips, slippers/footware, balance/weighing scale, platform scale, scoops, feed bins, trolley/wheel barrow
4	Disease prevention and poultry hygiene Theory Duration (hh:mm) 15:00 Practical Duration (hh:mm) 20:00 Corresponding NOS Code AGR/N4337	 Observe behaviour and health of chicks Identify the early signs of infection in layer chicks Understand the importance of biosecurity and disinfection in disease prevention Identify and segregate sick and dead birds Undertake Vaccination of Birds Medicines to be used Vaccination Schedule Undertake Cleaning and hygienic maintenance of Poultry shed using disinfectants, sanitizers etc Proper disposal of dead birds and other organic matter Proper management of Shed Understand and practice the waste minimization Precautions for diseases in birds Disease management Record the weight of the birds and health check up at regular interval Undertake litter management Restrict the movement of free flying birds and other animals, Restrict the entry of men & material 	Laptop, white board, marker, projector, Vaccines, Neem Powder, sanitizers, disinfectants, PPEs, sprayer, pressure pump, funnel, bottle opener, foot dips, buckets, mugs and mixing vessels, measuring jar, balance, etc
5	Complete documentation and record keeping related to layer farming	 Document and maintain records of raw materials (related to layer farming) Chicks Brooding requirements Shed infrastructure 	Laptop, white board, marker, projector, Record book, Diet Chart, Vaccination









Sr. No.	Module	Key Learning Outcomes	Equipment Required
	Theory Duration (hh:mm) 15:00 Practical Duration (hh:mm) 20:00 Corresponding NOS Code AGR/N4338	 Feed and water Vaccination Egg Trays etc Document and maintain records of layers (related to layer farming and production) Number of chicks Diet chart Investment required Eggs Collection/day/bird Egg weight/grading/sorting etc Culled Birds Disposal of Birds (Batch Number, reason of death etc) Marketed Eggs Eggs in Stock, Storage Loss etc 	Schedule etc
6	Safety, hygiene and sanitation of poultry farm Theory Duration (hh:mm) 15:00 Practical Duration (hh:mm) 20:00 Corresponding NOS Code AGR/N4316	 Maintain a clean & efficient workplace Observe the behaviour and health of chicks Clean equipments and premises by disinfectants Ensure proper temperature level, light intensity, moisture level, ventilation etc. Ensure lesser mortality Undertake culling and safe disposal of dead birds Render appropriate emergency procedures Report to supervisor at regular time intervals Practice General safety and first aid 	Laptop, white board, marker, projector, disinfectants, sanitizers, sprayer, first aid kit, face mask, gloves, gum boots, disposal bags
	Total Duration: Theory Duration (hh:mm) 80:00 Practical Duration (hh:mm) 120:00	Unique Equipment Required: Laptop, white board, marker, projector, che poultry shed, feeder, waterer, first aid kit, machine, Diet Chart, Vaccination schedule of Sawdust/paddy husk(in case it is deep litter nipples, ventilators, tube lights, egg trays, oth material, curtains-gunny bags/plastic, binding electrical wires/ folder/plugs etc, electrical brooders, brooder guards, chick feeders, newspaper, thermometer, foot dips, balance/weighing scale, platform scale, trolley/wheel barrow, Vaccines, Neem disinfectants, PPEs, sprayer, pressure pump, foot dips, buckets, mugs and mixing vessels, nifirst aid kit, face mask, gloves, gum boots, dispersion.	Egg trays, weighing chart, Cage structure, ed), PVC Pipes, water er house construction g wire, cutting player, bulbs, insulation tape, chick drinkers, taps, slippers/footware, scoops, feed bins, Powder, sanitizers, funnel, bottle opener, neasuring jar, balance,

Grand Total Course Duration: 200 Hours, 0 Minutes

(This syllabus/ curriculum has been approved by **Agriculture Skill Council of India)**









Trainer Prerequisites for Job role: <u>"Layer Farm Worker" mapped to Qualification Pack:</u> <u>"AGR/Q4307, v1.0"</u>

Sr. No.	Area	Details		
1	Description	Trainer is responsible for educating the trainees - feeding, watering and ensuring general well-being of birds and ensuring that the shed/housing of the birds is clean and safe and that the farm is in a proper condition to carry out layer farming and production of eggs		
2	Personal Attributes	Trainer should be Subject matter Expert. He/ she should have good communication, leadership, observation and practical oriented skills		
3	Minimum Educational Qualifications	Diploma in Veterinary Science/Animal Husbandry/Poultry		
4a	Domain Certification	Certified for Job Role: " <u>Layer Farm Worker</u> " mapped to QP: " <u>AGR/Q4307, v1.0"</u> . Minimum accepted score is 80%		
4b	Platform Certification	Certified for the Job Role: "Trainer", mapped to the Qualification Pack: "MEP/Q0102". Minimum accepted score is 80%		
5	Experience	 M V Sc M Sc (Animal Science) B. V. Sc. With 1 year of work experience B. Sc. Agriculture with 2 years of relevant work experience B.Sc. with 3 years of relevant work experience Diploma in Veterinary Sciences /Animal Husbandry / Poultry) with 5 years of relevant work experience Any Graduate with 4 years of relevant work experience 10+2 with 5 years of relevant work experience 		









Annexure: Assessment Criteria

Assessment Criteria	
Job Role	Layer Farm Worker
Qualification Pack	AGR/Q4307, v1.0
Sector Skill Council	Agriculture

Sr. No.	Guidelines for Assessment
1	Criteria for assessment for each Qualification Pack will be created by the Sector Skill Council. Each Performance Criteria (PC) will be assigned marks proportional to its importance in NOS. SSC will also lay down proportion of marks for Theory and Skills Practical for each PC.
2	The assessment for the theory part will be based on knowledge bank of questions created by the SSC.
3	Individual assessment agencies will create unique question papers for theory part for each candidate at each examination/training centre (as per assessment criteria below)
4	Individual assessment agencies will create unique evaluations for skill practical for every student at each examination/training canter based on this criteria
5	To pass the Qualification Pack, every trainee should score a minimum of 50% in aggregate
6	In case of successfully passing only certain number of NOS's, the trainee is eligible to take subsequent assessment on the balance NOS's to pass the Qualification Pack









Assessable outcomes	Assessment criteria	Total Marks	Out Of	Theory	Skills Practical
1.AGR/Q4335 Construct poultry sheds and ensure their maintenance	PC1. select well raised land for poultry sheds; land with hard rock or murram is best suited for construction of poultry sheds		10	3	7
	PC2. ensure that there is no water logging and flooding near the sheds		10	3	7
	PC3. establish separate sheds for growers and layers		7	2	5
	PC4. provide strong roof and hard flooring with a raised plinth of the shed which is atleast one feet above the outside ground level		7	2	5
	PC5. provide 3 to 4 feet overhang to avoid entry of rainwater inside the sheds		10	3	7
	PC6. provide atleast 50 feet distance between two sheds in the same sector and about 150 ft between growing and laying sector		7	2	5
	PC7. provide adequate light and ventilation and comfortable housing conditions during all seasons (cool in summer and warm in winter)	100	7	2	5
	PC8. construct sheds in such a way that predators (cats/dogs/snakes) do not enter the sheds; avoid entry of rats by constructing rat proof civil structure		7	2	5
	PC9. keep the shed clean and free from flies/mosquitoes etc		7	2	5
	PC10. remove dirty litter material and manure after every batch of growers/culled birds is disposed off		7	2	5
	PC11. white wash the walls with lime and disinfect the walls and floors		7	2	5
	PC12. use dry and clean litter material (sawdust,paddy husk, etc.) in case deep litter system is followed		7	2	5
	PC13. keep clean/disinfect brooding, feeding and watering equipment and then introduce the new batch of chicks in the shelters		7	3	4
			100	30	70
2. AGR/Q4336 Feeding, brooding and chick management	PC1. ensure that the feed is fresh and has not become stale; ensure that fresh feed and premixes are bought and they are not allowed to stand for long periods		2	0.5	1.5
	PC2. ensure that there is enough feeder space for the birds		2	0.5	1.5
	PC3. provide five hanging feeders, each 50		2	0.5	1.5









	cm in diameter with 20-25 kg capacity
	for 100 layers
	, , , , , , , , , , , , , , , , , , , ,
PC4.	place the feeders within 3 meters
	from the water container
PC5.	stir the feed few times a day to
	promote eating
PC6.	ensure that greenfeed is fed daily to
	the birds so that the yolk colour is
	good
PC7.	ensure that there is hard grit such as
PC7.	_
	fine blue metal chips to promote
	digestion
PC8.	ensure that the feed is stored in a dry,
	vermin and rodent free area
	vernim and rodent nee area
PC9.	ensure that there is adequate amount
	of water available to the poulty birds
	at all times and there is a minimum
	space of 100mm between each bird
PC10.	ensure that there is extra drinking
	space during hot weather
PC11.	clean the water container daily and
	keep it in a shaded area
PC12.	set heating system/brooders (if
FC12.	available) at 29-32 degree celcius for
	cage brooding or at 32-35 degree
	celcius at chick level for floor
	brooding
	brooding
PC13.	cover the floor (litter) of brooder with
	newspaper and arrange feeders, water
	etc.
PC14.	check water system and adjust to
	proper height of chicks, disinfect and
	flush water lines
PC15.	while placing the chicks in the
	brooders, count the number of chicks
	placed in each portion cell to ensure
	proper stocking density
PC16.	fill water containers with clean water

2	0.5	1.5
2	1	1
2	0.5	1.5
2	0.5	1.5
2	0.5	1.5
2	0.5	1.5
2	0.5	1.5
2	0.5	1.5
2	1	1
2	0.5	1.5
2	1	1
2	0.5	1.5
2	0.5	1.5









	or operate water system (if available)
PC17.	ensure that for the first six weeks, the
	chicks are provided feed more than
	•
	twice a day
PC18.	check brooder temperature regularly
PC19.	provide the feed in mash or crumble
	form; crumble/pellet feed ensure
	more uniform growth
PC20.	provide adequate light continuously
	during the first two days
PC21.	ensure that the chicks have sufficient
	hover and floor space
	·
PC22.	provide 6 sq inches per chick under
	the brooder
PC23.	reduce the temperature of the
	brooder from 32 degree celcius by 5
	degree celcius every week until it
	reaches 21 degree celcius
	reaches 21 degree celeius
PC24.	provide continuous light during
	brooding period
PC25.	provide continuous supply of clean
	fresh water during this period
PC26.	inspect the birds daily for any
	abnormalities
PC27.	adjust the height of the feeder to the
	convenience of the chicks
PC28.	, , , ,
	is available in case of electricity failure
PC29.	transfer the birds to grower shelter at
	9 weeks of age
PC30.	adjust the height of the feeder to the
	convenience of the birds
PC31.	feed grower mash to the birds
PC32.	ensure that there is cross ventilation
	in the shelters
1	

0.5	1.5
0.5	1.5
0.5	1.5
0.5	1.5
0.5	1.5
0.5	1.5
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PC33.	ensure that de-breaking is done if
	necessary
PC34.	ensure vaccination of birds as per
	schedule
PC35.	check feed intake and body weight at
	regular interval
PC36.	provide light 12 hours a day
PC37.	
	diseased birds as early as possible
PC38.	ensure that the ventilation in the layer
	shelter is adequate without any drafts
PC39.	feed layer mash to the birds
PC40.	provide laying nests/box to the birds
	and use clean bedding material in the
	laying nest
PC41.	1 3
	intervals
PC42.	J
	provided to the birds and it is
	increased by 15-30 minutes every
	week until 16 hours of light is reached
PC43.	use the following criteria to choose
	which eggs to hatch:
	use fertilized eggsuse undamaged and clean
	eggs which are neither too
	small nor too large
	 collect eggs regularly, e.g.
	three times a day
	 store the eggs at 14 to 16 degree celcius if they are to
	be stored for a week
PC44.	ensure that the birds selected for
	brooding are healthy and not too
	small; a broody bird can be
	recognized by:
	a characteristic broody sound
	a wrinkled comb
	an unwillingness to leave
	her nest

2	0.5	1.5
2	0.5	1.5
2	0.5	1.5
2	1	1
2	1	1
2	1	1
2	1	1
2	1	1
2	1	1
3	1.5	1.5
4	1	3
4	1	3









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	PC45.	use a clean and parasite-free brooding coop, which is 35*35 cm and 40 cm high		3	0.5	2.5
	PC46.	place the coop in a cool, dark place to stimulate the brooding process		2	0.5	1.5
	PC47.	place good feed and clean, fresh water near the brooding bird		2	0.5	1.5
				100	30	70
3. AGR/Q4337 Disease prevention and poultry hygiene	PC1.	identify the early signs of infection in layer chicks. Such signs may include: • sudden death without any signs • lack of coordination • purple discoloration of the combs and legs • soft-shelled or misshapen eggs • lack of energy and appetite • diarrohea • swelling of the head, eyelids, comb, wattles and hocks • nasal discharge • decreased egg production • coughing, sneezing		10	3	7
	PC2.	follow a proper vaccination schedule and vaccinate the layer chicks regularly		10	3	7
	PC3.	use high quality vaccine purchased from reputed manufacturers		10	3	7
	PC4.	keep vaccines in cool, dry conditions away from sunlight		10	3	7
	PC5.	ensure that the vaccines have not passed their expiry date and dispose off any left-over vaccine in a proper manner		10	3	7
	PC6.	remove any dead bird immediately from the shed and send to laboratory for examination		5	1	4
	PC7.	ensure that the dead bird is buried/burnt away from the poultry sheds		5	1	4









	PC8. identify birds that show any advanced signs of disease and remove them from the shed and get them culled after diagnosis in the laboratory	5	1	4
	PC9. keep the poultry manure/litter dry and remove it after flock is sold or removed and dispose the manure properly and quickly	5	1	4
	PC10. ensure that there is restricted entry of visitors inside the poultry farm, especially inside the sheds	5	2	3
	PC11. ask the visitors to dip their feet in a disinfectant solution, wash and clean hands and wear apron/boots provided in the farm	5	2	3
	PC12. do not let birds have contact with their droppings, which can be collected under slats and perches	5	2	3
	PC13. recycle litter regularly, and avoid storing old litter near layer shelter	5	2	3
	PC14. ensure that there is no fether pecking or cannibalism amongst the poultry birds, which could be due to any of the following reasons: • high stocking density • too little feedingor drinking space • insufficient laying nests • lack of litter or scattered grain • lack of perches to rest on • lack of sand to take a dust-bath	10	3	7
		100	30	70
4. AGR/Q4338 Complete documentation and	PC1. document the details of type of poultry shed to be constructed	10	7	3
record keeping related to layer farming	PC2. document and maintain records of details of raw materials, construction materialsrequired to construct the poultry shed	20	10	10
	PC3. document and maintain record of observations (if any) related to raw	10	6	4









Ι	materials			
	PC4. document and maintain records of feed consumption, water consumption and egg production of layers(birds)	20	10	10
	PC5. document and maintain records of mortality rate of birds	10	6	4
PC6	PC6. document and maintain records of quantity of feed fed to the birds	10	6	4
	PC7. maintain financial records of any items bought, eg. feed, equipments, etc	20	15	5
		100	60	40
5. AGR/Q4316 Safety, hygiene and sanitation of poultry farm	PC1. comply with food safety and hygiene procedures followed in the organisation	10	3	7
	PC2. ensure personal hygiene by using of gloves, masks, goggles, boots, etc. whenever required	10	3	7
	PC3. appropriate protective clothing or use protective equipment as and when required	5	2	3
	PC4. perform all procedures and follow work instructions for controlling operational risks	5	2	3
	PC5. understand the hazards of use and contamination mentioned on labels of vaccine / medication / pesticides / fumigants bottles	5	2	3
	PC6. take safety measures when handling chemicals used for disinfection	5	2	3
	PC7. use safety equipment such as fire extinguisher, first aid kit and eyewash station when required	5	2	3
	PC8. check all tools and equipments before operating them	5	2	3
	PC9. perform duties in a manner which	5	2	3









	minimizes environmental damage				
	PC10. report any accidents, incidents or problems without delay to farm supervisor and take necessary immediate action to reduce further danger		5	1	4
	PC11. clean, maintain and monitor poultry sheltersand equipmentsperiodically,		10	3	7
	PC12. ensure proper disposal of waste and other potentially hazardous materials		5	1	4
	PC13. identify, document and report problems such as rodents and pests to management		5	1	4
	PC14. conduct workplace checklist audits before and after work to ensure safety and hygiene		5	1	4
	PC15. ensure the procedures for dealing with accidents, fires and emergencies are followed at all times		5	1	4
	PC16. ensure that first aid treatment is provided to any injured in case of an accident		5	1	4
	PC17. ensure that emergency equipments are in place and in a proper working condition		5	1	4
			100	30	70
1	Total	500	500	180	320
Р	ercentage Weightage:			36%	64%
Minimum	Minimum Pass% to qualify (aggregate):			50)%