

Model Curriculum

Animal Health Worker

SECTOR: AGRICULTURE & ALLIED

SUB-SECTOR: AGRICULTURE CROP PRODUCTION

OCCUPATION: LIVESTOCK HEALTH MANAGEMENT

REF ID: AGR/Q4804, v1.0

NSQF LEVEL: 3



Certificate

CURRICULUM COMPLIANCE TO QUALIFICATION PACK – NATIONAL OCCUPATIONAL STANDARDS

is hereby issued by the

AGRICULTURE SKILL COUNCIL OF INDIA

for the

MODEL CURRICULUM

Complying to National Occupational Standards of
Job Role/Qualification Pack: **'Animal Health Worker'** OP No. **'AGR/Q.4804 NSQF Level 3'**

Date of Issuance: December 23rd, 2014

Valid up to: December 12th, 2015

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



Authorised Signatory
(Agriculture Skill Council of India)

TABLE OF CONTENTS

1. Curriculum	01
2. Trainer Prerequisites	06
3. Annexure: Assessment Criteria	07

Animal Health Worker

CURRICULUM / SYLLABUS

This program is aimed at training candidates for the job of a “**Animal Health Worker**”, in the “**Agriculture & Allied**” Sector/Industry and aims at building the following key competencies amongst the learner

Program Name	Animal Health Worker		
Qualification Pack Name & Reference ID. ID	AGR/Q4804, v1.0		
Version No.	1.0	Version Update Date	
Pre-requisites to Training	8th Standard passed		
Training Outcomes	<p>After completing this programme, participants will be able to:</p> <ul style="list-style-type: none"> • Provide preventive care to animals as per guideline of veterinarian: Implement preventive care measures e.g. vaccination, deworming, bio-security, etc. • Provide basic first aid to animals: Understand symptom of diseases, provide care as directed by veterinarian, Cleaning and washing of wound, dressing of wound, apply ointments, first aid. • Assist public agencies in animal disease control: Create awareness about the disease preventive measures, data collection, disease reporting, maintaining bio-security provision, prevention of risky practices, culling and disposal of animals. • Assist in animal husbandry extension: Promotion of best practices and appropriate technologies related to farming e.g. feeding, housing, management, breeding etc. 		

This course encompasses 8 out of 8 National Occupational Standards (NOS) of “Animal Health Worker” Qualification Pack issued by “Agriculture Skill Council of India”.

Sr. No.	Module	Key Learning Outcomes	Equipment Required
1	Introduction Theory Duration (hh:mm) 05:00 Practical Duration (hh:mm) 00:00 Corresponding NOS Code	<ul style="list-style-type: none"> Understand General Discipline in the class room (Do's & Don'ts) Refreshing basic language learning in formal schools. More knowledge of serving area / village. Understand the connect between rural livelihood and livestock farming. Role and responsibility of an Animal Health Worker. (Responsible use of medicine and knowledge of practices harmful to public health) Need of self-effort for continuous learning and importance of seeking veterinarian's guidance (where needed) 	Laptop, white board, marker, projector
2	Controlling and restraining of animals Theory Duration (hh:mm) 5:00 Practical Duration (hh:mm) 10:00 Corresponding NOS Code AGR/N4801	<ul style="list-style-type: none"> Know about the external body parts of animals. Understanding of flight zone and point of balance in animals. Know about age and body weight estimation. Know about the animal behaviour and response Know about animal handling and safety. Know about the use of tools and equipment used in restraining animals. Understand personal safety measures and use of personal protective equipment. 	Laptop, white board, marker, projector, rope, animal casting kit
3	Implementing regular preventive animal health care programme Theory Duration (hh:mm) 10:00 Practical Duration (hh:mm) 15:00 Corresponding NOS Code AGR/N4802	<ul style="list-style-type: none"> Know about the animal identification, data recording and data collection tools (including mobile devices). Know about basic health examination of animals. Know about cause and ways of transmission of diseases. Know about concept of herd health. Know about identification and prevention of common animal diseases prevalent in local context. Know about symptom of diseases with focus on scheduled or notifiable diseases as per government directive that requires mandatory reporting to government veterinarian. Know about the vaccination schedule of the animals. Know about handling and administration of vaccines to livestock and poultry. Know about the pre and post vaccination care about animals. 	Laptop, white board, marker, projector, Kit to demonstrate vaccination

Sr. No.	Module	Key Learning Outcomes	Equipment Required
		<ul style="list-style-type: none"> Know about collection samples for laboratory diagnosis. Know about preventive deworming, spraying or other methods for control of parasites. Know to assist veterinarian in Post Mortem. 	
4	Veterinary First Aid Theory Duration (hh:mm) 20:00 Practical Duration (hh:mm) 30:00 Corresponding NOS Code AGR/N4805	<ul style="list-style-type: none"> Know about basic internal organs vis a vis functional systems e.g. Digestive system, circulatory system etc. Know about difference between healthy and sick animals. Know about cleaning and washing of muzzle, mouth, hooves, feet etc. with prepared aseptic solution. Know about first aid of non-infectious conditions e.g. indigestion, tympani, diarrhoea etc. Know about do's and don'ts of accidental situations in animals e.g. poisoning, burn injury etc. Know about handling of superficial wound and injury. Know about initial support in cases related to birth of animals e.g. prolapse of uterus. Know about minor surgical procedures e.g. hoof trimming, handling common fractures, dehorning etc. Know about doses of commonly use medication (non-prescription) Know about use of approved ethno-veterinary (Approved Traditional medicinal) products and practices. Know about various methods of drug-administration. 	Laptop, white board, marker, projector, Kit required to demonstrate first aid.
5	Assisting government agencies in animal disease control Theory Duration (hh:mm) 10:00 Practical Duration (hh:mm) 10:00 Corresponding NOS Code AGR/N4807	<ul style="list-style-type: none"> Know about the basic concept of 'Bio-security' and "one health" and their importance. Know about implementing bio security norms in farm premises. Know about cleaning, disinfection etc. Know about concept of livestock value chain and risky practices at various stages. Learn to communicate disease risk and importance of preventive measures. Know about humane culling methods. Know about the scientific disposal of the culled carcasses Know about importance and procedure of disease reporting to government veterinarian. 	Laptop, white board, marker, projector, kit required for practical demonstration of culling, disposal, disinfection etc.

Sr. No.	Module	Key Learning Outcomes	Equipment Required
6	Assisting in veterinary extension services Theory Duration (hh:mm) 15:00 Practical Duration (hh:mm) 30:00 Corresponding NOS Code AGR/N4808	<ul style="list-style-type: none"> Know about the extension services and importance of technology adoption. Know about organization of community meetings and keeping of records. Use of common communication devices. Know about the basics of animal nutrition, common feed ingredients and local sources for same. Know about selection of quality farm inputs. Know about fodder cultivation. Know about basics of animal housing and farm management (Livestock and Poultry) Know about basics of handling of animal products. e.g. clean milk production Know about basic body scoring for selection and purchase of animals. 	Laptop, white board, marker, projector
7	Development program implementation and marketing in livestock sector Theory Duration (hh:mm) 15:00 Practical Duration (hh:mm) 20:00 Corresponding NOS Code AGR/N4810	<ul style="list-style-type: none"> Know about the implementation of government or private development programs related to livestock and poultry. Know about how to mobilize and handhold activities of farmer groups. Know about basics of marketing of farm inputs e.g. livestock / poultry feed Know about basic economics of livestock based business activities. Know about basics of livestock product markets and marketing. 	Laptop, white board, marker, projector
8	Assisting in animal welfare, breed conservation and disaster management. Theory Duration (hh:mm) 10:00 Practical Duration (hh:mm) 05:00 Corresponding NOS Code AGR/N4813	<ul style="list-style-type: none"> Know about reason of human animal conflict and common protection strategies at community level. Know about the concept of animal welfare e.g. Five freedoms. Know about common animal cruelty and existence of law to punish the same. Know about the basics of disaster management. Know about concept of conservation vis a vis ecosystem functioning. Know about breeds of indigenous animals and importance of their conservation. 	Laptop, white board, marker, projector
9	Implementation of animal breeding services	<ul style="list-style-type: none"> Know about basic reproductive physiology and genetics in case of small animal. 	Laptop, white board, marker, projector

Sr. No.	Module	Key Learning Outcomes	Equipment Required
	in small farm animals Theory Duration (hh:mm) 30:00 Practical Duration (hh:mm) 60:00 Corresponding NOS Code AGR/N4821	<ul style="list-style-type: none"> • Know about conducting artificial insemination in goat and pigs. • Know about infertility problems and handling of same in small animals. • Know about appropriate method for feeding of breeding animals. • Know about record keeping of breeding services. 	
	Total Duration Theory Duration (hh:mm) 120:00 Practical Duration (hh:mm) 180:00	Unique Equipment Required: Laptop, white board, marker, projector, rope, animal casting kit, first aid kit, Kit to demonstrate vaccination , kit required for practical demonstration of culling, disposal, disinfection etc.	

Grand Total Course Duration: **300Hours, 0 Minutes**

(This syllabus/ curriculum has been approved by [Agriculture Skill Council of India](#))

Trainer Prerequisites for Job role: “Animal Health Worker” mapped to Qualification Pack: “AGR/Q4804, v1.0”

Sr. No.	Area	Details
1	Description	Trainer provides education and guidance on preventive health care, assistance in contagious disease control and basic first aid services to farm animal and poultry, mostly in the outdoor setting, veterinary extension, disaster management and other environmental, public health related services.
2	Personal Attributes	Trainer should have a presence of mind, compassion for animals, good leadership, communication & observation skills and Practical oriented skills. Trainer should be Subject Matter Expert.
3	Minimum Educational Qualifications	Diploma in Veterinary Science or relevant field (BVSc Preferable)
4a	Domain Certification	Certified for Job Role: “ <u>Animal Health Worker</u> ” mapped to QP: “ <u>AGR/Q4804, v1.0</u> ”. Minimum accepted score is 80%
4b	Platform Certification	Certified for the Job Role: “Trainer”, mapped to the Qualification Pack: “SSC/Q1402”. Minimum accepted score is 70%
5	Experience	<ul style="list-style-type: none"> • MVSc with 1 Year experience, • BVSc with 3 Years of experience, • Diploma in Veterinary Science with relevant experience of 5 Years

Annexure: Assessment Criteria

Assessment Criteria	
Job Role	Animal Health Worker
Qualification Pack	AGR/Q4804, 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 center based on this criteria
5	To pass the Qualification Pack, every trainee should score a minimum of 50% in aggregate
6	The marks are allocated PC wise; however, every NOS will carry a weight age in the total marks allocated to the specific QP

Assessable Outcome	Assessment Criteria	Total Mark (600)	Out Of	Marks Allocation	
				Theory	Skills Practical
1. AGR/N4801: Controlling / restraining of animals	PC.1 prepare and make the animal to cooperate during handling.	100	20	10	10
	PC2. determine flight zone and point of balance of the animal and approach, hold animal securely and safely.		15	7	8
	PC3. achieve minimum stress and injury to the animal.		5	3	2
	PC4. ensure zero accident.		5	3	2
	PC5. to be able to follow the prescribed procedures related to each tools and equipment.		30	15	15
	PC6. protect oneself from any physical injury arising out of animal handling		5	2	3
	PC7. use various personal protective materials / equipment		10	5	5
	PC8. assess the risk of diseases which can be transmitted from animal to human		10	5	5
	Total		100	50	50
2. AGR/N4802: Implementing regular preventive animal health care program	PC1. use point of care / field data collection tools (including electronic / mobile based data collection) as per given specifications.	100	5	2	3
	PC2. ensure species / population or sample / geographical / specific area coverage for data collection as per given instruction.		5	2	3

PC3. regularly collect and submit health, production and breeding data related to attended individual / herd of animals to appropriate authority on time as per given format / criteria.	5	2	3
PC4. undertake appropriate action which is just for a farmer / client as far as preventing occurrence of preventable known disease(s) in his / her animal / farm is /are concerned.	5	2	3
PC5. take only such actions / use product / follow procedure which is prescribed in the guideline for the scheduled diseases (s).	5	2	3
PC6. create future demand for preventive services by appropriately communicating the risk.	5	2	3
PC7. Ensure high rate of voluntary compliance of bio-security norms.	7	5	2
PC8. schedule vaccination program at appropriate time ensuring technical requirement related to environment and convenience of farmer / client.	5	2	3
PC9. identify sick animals or animals not fit for vaccination.	5	2	3
PC10. be prepared to face any emergency situation following vaccination.	5	2	3
PC11. report side-effect (if any)	5	2	3
PC12. conduct self-evaluation of procedure of procurement / infrastructure for storage etc. and use of vaccines from appropriate source only.	5	2	3

PC13. ensure cold chain and compliance of other guideline during transport to farmers / clients place and point of use.	5	2	3
PC14. rotate vaccine stock in hand so that oldest vaccines are used first, ensuring that no vaccine is used after expiration date.	5	2	3
PC15. follow all scientific guideline related to vaccine administration procedure e.g. use of appropriate dose, use of separate syringe for different vaccines etc.	10	5	5
PC16. follow local area guideline regarding species, age and season of de-worming.	5	2	3
PC17. use only permissible products, following appropriate dose and procedure of administration (As per directive of supervising veterinarian)	2	2	0
PC18. use only permissible products, following appropriate dose and procedure of use / application.	2	2	0
PC19. ensure scale of operation by involving maximum number of farmers in a given area.	1	1	0
PC20. take precaution for minimum effect on animal / immediate environment.	2	1	1
PC21. ensure record of given vaccine and administration related information (individual / herd level) along with batch numbers etc. as per given format.	2	2	0
PC22. timely report vaccine failure to appropriate authority as per format.	1	1	0
PC23. support laboratory for sample test etc. as per directive for monitoring of success of vaccination program.	2	2	0

	PC24. ensure herd coverage and continuity of vaccination program		1	1	0
	Total		100	50	50
3. AGR/N4805 : Veterinary first aid	PC1. prepare aseptic solution	100	5	2	3
	PC2. diagnose emergency situation and use common suggested medications / follow precautions as per manual.		25	10	15
	PC3. describe common symptoms of diseases in animals and report accordingly.		15	8	7
	PC4. identify common infectious / scheduled animal diseases and ensure timely reporting of the same.		7	5	2
	PC5. identify from symptoms the cause of the accident.		8	4	4
	PC6. assess the severity of the accident and suggest for consultation with veterinarian.		5	5	0
	PC7. provide basic / immediate care as specified for each type of accidents.		15	5	10
	PC8. to be able to stop bleeding, clean and protect the wound.		10	5	5
	PC9. to be able to ensure aseptic handling and protection of the prolapsed organ(s) before the arrival of veterinarian.		10	6	4
	Total		100	50	50

4. AGR/N4807 : Assisting government agencies in animal disease control	PC1. relate to multiple factors that can predispose or cause spread of diseases	100	8	6	2
	PC2. appreciate the 'one health approach' in controlling diseases and cooperate with partnering agencies (s).		5	3	2
	PC3. Ensure local resources (e.g. support materials, skills and abilities of local people) to strengthen government effort at reaching out to farmers for events like vaccination camps etc		7	3	4
	PC4. update government records on livestock markets / farms.		5	3	2
	PC5. engage with officials of local self-government and market institutions.		8	5	3
	PC6. guide implementation of approved government guideline related to market operation, cleaning etc.		8	2	6
	PC7. describe routes in relation to approved maps / known border areas.		5	3	2
	PC8. apply judgment regarding nature of trade / frequency of movement / animal holding areas, volume etc.		5	0	5
	PC9. report animal movement as per standard format.		5	3	2
	PC10. understand common activities from farm to fork, relationships between various types of people, movement of goods in livestock / poultry related business		5	3	2
	PC11. identify risky practices and report to veterinarians / superior officers.		8	5	3

	PC12. follow directive and guideline.		5	3	2
	PC13. use standard format for reporting.		5	3	2
	PC14. ensure humane culling methods.		8	3	5
	PC15. ensure scientific disposal of culled carcasses as per guideline.		8	3	5
	PC16. ensure use of appropriate disinfectant and adoption to prescribed procedure of application.		3	0	3
	PC17. ensure coverage of areas / farms as per suggestion of government authority.		2	2	0
	Total		100	50	50
5. AGR/N4808 : Assisting in veterinary extension services	PC1. understand and explain the applicability and benefit associated with common approved technology(s) / best practice(s) in the context of local situations, opportunities and constraints.	100	35	15	20
	PC2. give feedback on technology application in field and need for improvement (if any).		10	6	4
	PC3. organize extension events based on farmer convenience and seasonal suitability.		15	7	8
	PC4. understand and explain quality parameters regarding various farm inputs.		10	7	3

	PC5. scout sources, plan and organize farmers for intelligent (timely, quality and cost based) procurement of inputs.		10	5	5
	PC6. keep record that can help make farmer meeting and farm school activities 'targeted' and 'need based'		10	5	5
	PC7. use modern communication devices, audio-visual aids to explain farmers / clients.		10	5	5
	Total		100	50	50
6. AGR/N4810 : Development program implementation and marketing in livestock sector	PC1. promote awareness of programs and help in targeted beneficiary selection as envisioned in the promoted project / program.	100	10	5	5
	PC2. work with selected project beneficiaries in implementing activities as envisaged in promoted programs.		10	4	6
	PC3. attend and cooperate during meetings / programs of farmer's institutions / panchayats.		10	4	6
	PC4. inform / involve farmer leaders / panchayat functionaries in selection of program beneficiaries.		10	4	6
	PC5. facilitate organization's / panchayat's endeavor to ensure convergence of development projects for synergy.		5	5	0
	PC6. motivate and handhold formation of self-help groups.		15	6	9
	PC7. guide farmers on business options and basic economics of various livestock linked activities.		15	6	9
	PC8. motivate farmers to produce for market and ensure aggregation, collective marketing of livestock products		10	5	5

	PC9. provide market related e.g. prices etc. information to farmers.		7	3	4
	PC10. provide information on livestock farm inputs e.g. feed, fodder, supplements etc.		8	8	0
	Total		100	50	50
7. AGR/N4813 : Assisting in animal welfare, breed conservation and disaster management	PC1. explain the cruelty for effective reporting.	100	10	5	5
	PC2. explain stakeholders on common prevention and protection strategies related to common conflict situation.		10	5	5
	PC3. scout and engage with interested breeding farms / goshala's (Protective shelters for cows in India) for conservation of purebred animals.		10	5	5
	PC4. help in stocking (as a preparedness) and mobilization of feed / fodder at the time of disasters.		10	5	5
	PC5. work with community and disaster management authorities to provide safe passage to animals / livestock.		25	12	13
	PC6. provide care / shelter to animal in distress		15	8	7
	PC7. undertake appropriate measures for carcass disposal.		10	5	5
	PC8. undertake culling and other measures suggested in case of disease related emergencies.		10	5	5
	Total			100	50

8. AGR/N4821 : Implementation of animal breeding services in small farm animals (if required)	PC1. help farmers / clients with information on sources of good breeding animals.	10	2	8
	PC2. assist farmers / clients in selecting animal with proper breed and other characteristics for breeding purpose.	10	5	5
	PC3. detect heat in animals such as goat and pigs.	10	5	5
	PC4. use semen of appropriate quality and blood level.	5	5	0
	PC5. follow protocols pertaining to farm bio-security, safety, hygiene and animal welfare.	10	5	5
	PC6. follow the prescribed procedures in handling semen straw and in conducting insemination.	20	8	12
	PC7. conduct artificial insemination in time.	5	5	0
	PC8. guide farmers / clients on common infertility issues and their handling	5	5	0
	PC9. guide farmers on appropriate feeding of breeding animals e.g. mineral supplementation etc.	5	5	0
	PC10. guide farmers on maintaining optimum number of animals based on breeding plan and suggested performance goal.	5	2	3
	PC11. guide / assist farmer in handling common difficulties related to animal birth.	5	1	4
	PC12. use field data collection tools (including electronic reader / mobile based data collection) as per given specifications.	5	1	4
100				

	PC13. provide organization with standard required information needed to monitor breeding services.		5	1	4
			100	50	50
	Grand Total	800	800	400	400
	<u>Percentage Weightage:</u>			50%	50%
	<u>Minimum Pass% to qualify (aggregate):</u>			60%	