

Model Curriculum

QP Name: Artificial Insemination Technician

QP Code: AGR/Q4803

Version: 3.0

NSQF Level: 4

Model Curriculum Version: 2.0

Training Parameters

Sector	Agriculture
Sub-Sector	Animal Husbandry
Occupation	Artificial Insemination Technician
Country	India
NSQF Level	3
Aligned to NCO/ISCO/ISIC Code	NCO-2015/NILL
Minimum Educational Qualification and Experience	<p>Minimum Educational Qualification: 12th Class</p> <p>OR</p> <p>10th Class with 2 Year of relevant experience</p> <p>OR</p> <p>Previous relevant qualification of NSQF Level 3 and with minimum education as 5th grade pass with 2 Year relevant experience</p> <p>Age: 18 Years</p>
Pre-Requisite License or Training	NA
Minimum Job Entry Age	18 Years
Last Reviewed On	25/11/2021
Next Review Date	25/11/2024
NSQC Approval Date	25/11/2021
QP Version	3.0
Model Curriculum Creation Date	25/11/2021
Model Curriculum Valid Up to Date	25/11/2024
Model Curriculum Version	2.0
Minimum Duration of the Course	60 Hours
Maximum Duration of the Course	60 Hours

Module Details

Module 1: Introduction to the role of an Artificial Insemination Technician

Bridge Module

Terminal Outcomes:

- Explain the scope, job role, societal and professional responsibility of a Livestock Service Provider

Duration: 05:00	Duration: 0:00
Theory – Key Learning Outcomes	Practical – Key Learning Outcomes
<ul style="list-style-type: none"> • Practice general Discipline in the classroom (Do's & Don'ts) • Recognize the importance of rural Livelihood and livestock farming. • Identify village institutions, list and assess resources for effective service delivery • Recognize the scope and demand of veterinary service and animal husbandry extension. • Explain the likely career path of a Livestock Service Provider • Describe and adhere to Laws/rules related to Minor Veterinary Practice / Drug dispensing and appreciate the importance of supervision by Veterinarians. • Summarise the role and responsibility of a Livestock Service Provider • Appreciate the importance of continuous learning, skill acquisition, and use the support system for the referral. 	<ul style="list-style-type: none"> • Demonstrate social awareness and communication skills
Classroom Aids	
Training Kit - Trainer Guide, Presentations, Whiteboard, Marker, Projector, Laptop	
Tools, Equipment and Other Requirements	
NA	

Module 2: Veterinary First Aid

Mapped to AGR/N4805 v2.0

Terminal Outcomes:

- Perform first aid treatment/emergency care during emergency conditions under the supervision of veterinarians following approved government / organizational guidelines.

Duration: 04:00	Duration: 04:00
Theory – Key Learning Outcomes	Practical – Key Learning Outcomes
<ul style="list-style-type: none"> • Define the meaning of emergency conditions and predisposing factors related to the cause of a disease with some suitable examples. • Define a healthy animal from a diseased animal. • Describe various common symptoms of disease and their basic treatments in • Describe the importance of record keeping. • Classify the available approved traditional medicinal products and practices to apply in an emergency. • Explain how to prepare a standard first aid kit and its applications. • Describe the safety measures to be taken during an emergency or during giving first aid. • Explain the common approaches in handling poisoning and natural calamities. 	<ul style="list-style-type: none"> • Demonstrate how to prepare an antiseptic solution for cleaning and washing of muzzle, hooves, mouth, etc. • Demonstrate how to prepare a datasheet/ fill up health monitoring proforma. • Demonstrate cardiopulmonary resuscitation (CPR) for small and new born animals. • Practice handling of superficial wounds / Abscess. • Demonstrate ways to approach and handle fractures and horn injuries. • Demonstrate the first aid during animal
Classroom Aids:	
Training Kit (Trainer Guide, Presentations). Whiteboard, Marker, Projector, Laptop, Kit required to demonstrate first aid.	
Tools, Equipment, and Other Requirements	
Syringe, Needle, Antiseptic solutions, Bandage, Cotton, Gauge, Intravenous infusion set, scalp vein set, Normal saline solution/Dextrose saline solution	

Module 3: Assisting in veterinary extension services

Mapped to AGR/N4808 v2.0

Terminal Outcomes:

- Practice record-keeping, audiovisual aids, prepare program reports, fill out datasheet and survey form following approved government / organizational guidelines.

Duration: 06:00	Duration: 04:00
Theory – Key Learning Outcomes	Practical – Key Learning Outcomes
<ul style="list-style-type: none"> • Explain the meaning of KASA (Knowledge, Attitude, Skills, and Action) • Explain leadership qualities. • Define the meaning of extension and what it involves. • Explain extension related schemes and institutions within the district / state. • Explain the production cycle in farm animals. • Explain the basics of livestock housing, feeding, breeding and general farm management. • Explain points to be considered for selection of breeding animals to farm with. • Describe the applications and benefits of commonly approved technologies in feeding, breeding, and other best practices (including organic practices (s) in various situations/opportunities/constraints • Explain the concept of quality and various parameters/components associated with quality farm input • Describe the importance of record-keeping Or Why should one maintain records of different farmer meeting/school activities? • Describe the different components of record-keeping (e.g., targeted and need-based) 	<ul style="list-style-type: none"> • Demonstrate the applications of mobile and other technologies (e.g., modern communication devices or audiovisual aids) • Demonstrate how to prepare a brief field program report, fill datasheet and survey form. • Identify various fodder species and livestock feed ingredients. • Conduct organoleptic testing of feed • Use mobile application for ration balancing • Demonstrate fodder preservation, enrichment and silage making.
Classroom Aids:	
Training Kit (Trainer Guide, Presentations). Whiteboard, Marker, Projector, Laptop	
Tools, Equipment, and Other Requirements	
Paper, pen, datasheet, manual, brochures/pamphlets, mobile, audiovisual aids	

Module 4: Development program implementation and marketing in the livestock sector

Mapped to AGR/N4810 v2.0

Terminal Outcomes:

- Assist in implementation of development program.
- Participate in sales / marketing of livestock farm inputs
- Support producers on marketing of livestock products

Duration: 06:00	Duration: 02:00
Theory – Key Learning Outcomes	Practical – Key Learning Outcomes
<ul style="list-style-type: none"> • State expectation from a development worker • State the purpose of development program implementation and Sustainable development goal. • Explain basic aspect of development project management • Describe business planning • Describe guidelines for setting price of products • Explain how to promote demand of livestock products in the market. • Describe various marketing task • Describe the basics of project development and management. 	<ul style="list-style-type: none"> • Observe and record implementation of various livestock and rural development programs at village level. • Observe and record functioning of a Self Help Group • Conduct program to promote development schemes of government to potential beneficiaries. • Conduct mock selling of any compound feed brand available in the local market. • Practice promotion of a livestock insurance product to farmers. • Illustrate livestock product markets within the district / state. • Prepare a basic business plan to set up livestock link enterprise.
Classroom Aids:	
Training Kit (Trainer Guide, Presentations). Whiteboard, Marker, Projector, Laptop	
Tools, Equipment and Other Requirements	
Mobile/Electronic gadgets, Paper, Pen, Datasheet, Manual	

Module 5: Implementation of cattle breeding services

Mapped to AGR/N4820 v2.0

Terminal Outcomes:

- Perform small animal breeding, including pre-breeding-related activities such as breeder database maintenance, quality animal selection for breeding, and performance monitoring.

Duration: 14:00	Duration: 03:00
Theory – Key Learning Outcomes	Practical – Key Learning Outcomes
<ul style="list-style-type: none"> • Describe the basics of the reproductive system in small farm animals. • Describe basic concepts of genetics. • Describe the parameters related to the selection of breeding animals and explain how one can assist the farmers/clients in selective breeding of small farm animals • Explain how to assess the right artificial insemination (AI) time in small farm animals. • Describe the procedures/protocols in conducting artificial insemination (AI) in goats and pigs, including biosecurity, safety, hygiene, and animal welfare. • Describe parturition in goat, sheep and farrowing in pigs • Describe the common infertility issues in small farm animals • Explain how one can guide the farmers regarding the management of infertility in small farm animals. 	<ul style="list-style-type: none"> • Demonstrate how to examine various reproductive organs in small farm animals • Identify signs of heat in sheep, goat, pigs • Practice analysis of appropriate quality of semen for artificial insemination (AI). • Demonstrate how to handle semen straw while conducting artificial insemination (AI). • Practice artificial insemination (AI). •
Classroom Aids:	
Training Kit (Trainer Guide, Presentations). Whiteboard, Marker, Projector, Laptop	
Tools, Equipment, and Other Requirements	
AI Kit, Straw, Semen, Animal for demonstration purpose (both male and female)	

Module 6: Employability Skills (12 hours)

Mapped to NOS DGT/VSQ/N0102 v1.0

Duration: 12:00

Key Learning Outcomes

Introduction to Employability Skills Duration: 0.5 Hours

After completing this programme, participants will be able to:

1. Discuss the Employability Skills required for jobs in various industries
2. List different learning and employability related GOI and private portals and their usage

Constitutional values - Citizenship Duration: 1 Hours

3. Explain the constitutional values, including civic rights and duties, citizenship, responsibility towards society and personal values and ethics such as honesty, integrity, caring and respecting others that are required to become a responsible citizen
4. Show how to practice different environmentally sustainable practices.

Becoming a Professional in the 21st Century Duration: 1.5 Hours

5. Discuss importance of relevant 21st century skills.
6. Exhibit 21st century skills like Self-Awareness, Behavior Skills, time management, critical and adaptive thinking, problem-solving, creative thinking, social and cultural awareness, emotional awareness, learning to learn etc. in personal or professional life.
7. Describe the benefits of continuous learning.

Basic English Skills Duration: 3 Hours

8. Show how to use basic English sentences for everyday conversation in different contexts, in person and over the telephone
9. Read and interpret text written in basic English
10. Write a short note/paragraph / letter/e-mail using basic English

Career Development & Goal Setting Duration: 1 Hours

11. Create a career development plan with well-defined short- and long-term goals

Communication Skills Duration: 2 Hours

12. Demonstrate how to communicate effectively using verbal and nonverbal communication etiquette.
13. Explain the importance of active listening for effective communication
14. Discuss the significance of working collaboratively with others in a team

Diversity & Inclusion Duration: 1 Hours

15. Demonstrate how to behave, communicate, and conduct oneself appropriately with all genders and PwD
16. Discuss the significance of escalating sexual harassment issues as per POSH act.

Financial and Legal Literacy Duration:2 Hours

17. Outline the importance of selecting the right financial institution, product, and service
18. Demonstrate how to carry out offline and online financial transactions, safely and securely
19. List the common components of salary and compute income, expenditure, taxes, investments etc.
20. Discuss the legal rights, laws, and aids

Annexure

Trainer Requirements

Trainer Prerequisites						
Minimum Educational Qualification	Specialization	Relevant Industry Experience		Training Experience		Remarks
		Years	Specialization	Years	Specialization	
Diploma	Veterinary /Animal Husbandary / Dairying	5	Cattle Breeding and Animal Welfare	0		Regular Diploma more than 15 months in veterinary /Animal Husbandary / Dairying
B. V. Sc.		1	Cattle Breeding and Animal Welfare	0		
Post Graduate	Animal science	0		0		

Trainer Certification	
Domain Certification	Platform Certification
Certified for Job Role: “Artificial Insemination Technician” mapped to QP: “AGR/Q4803, v3.0”. Minimum accepted score is 80%	Recommended that the Trainer is certified for the Job Role: “Trainer (Vet and Skills)”, mapped to the Qualification Pack: “MEP/Q2601 V2.0”. Minimum accepted % as per respective SSC guidelines is 80%.