
Artificial Insemination Technician

(Model Curriculum for Recognition of Prior Learning)

SECTOR: AGRICULTURE & ALLIED
SUB-SECTOR: ANIMAL HUSBANDRY
OCCUPATION: LIVESTOCK HEALTH MANAGEMENT
REF ID: AGR/Q4803, V1.0
NSQF LEVEL: 3

Artificial Insemination Technician

CURRICULUM / SYLLABUS

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

Program Name	Artificial Insemination Technician		
Qualification Pack Name & Reference ID.	AGR/Q4803, v1.0		
Version No.	1.0	Version Update Date	
Pre-requisites to Training	8th Standard passed		
Training Outcomes : Orientation and Soft Skill	<p>After completing this programme, participants will be able to:</p> <ul style="list-style-type: none"> Identify personal strengths and value systems: safe work habits, achievement motivation, time management, anger management, stress management. Prepare for employment and self-employment: preparing for an interview, effective resume writing, basic workplace terminology. Illustrate the basics of entrepreneurship and identify new business opportunities Develop personality and learn general ethics and discipline Learn about health and safety hazards and hygiene at work place Learn effective communication skills Learn about importance of RPL certification and process of assessment 		
Training Outcomes : Bridge Course	<p>After completing this programme, participants will be able to:</p> <ul style="list-style-type: none"> Implementing cattle breeding service: Cattle breeds and basics of breeding, artificial insemination, assistance to farmers on management of unproductive animals, breeding related data, recording and performance monitoring. Assist in Veterinary extension services: Promotion of approved technologies for productivity and profitability of farm operations. Assist in development program implementation: Engagement with farmers’ institutions, promotion of economic activities, and marketing of farm inputs. 		

1. Orientation and Soft Skill Details

Sr. No.	Module	Key Learning Outcomes	Equipment Required
A.	Orientation , General Discipline, doubts/gaps in Domain Training and Health and Safety		
1.	<p>Orientation, General Discipline, doubts/gaps in Domain Training and Health and Safety</p> <p>Theory Duration (hh:mm) 06:00</p> <p>Practical Duration (hh:mm) 00:00</p>	<ul style="list-style-type: none"> • Domain Training (clarifying any doubts/gaps regarding Job Role) • Understanding Qualification Packs, NOS • Understanding about NSQF framework and applied level descriptors • Understand skill development ecosystem, roles of various stakeholders • Recognize the importance of general discipline in the class room (dos and don'ts) • List expectations from the program • Outline the objectives of the RPL and importance of skill and certification • Identify risks to health and safety at the workplace and measures to be taken to control them 	White Board, Marker, Laptop, projector,
B.	Soft Skills and Entrepreneurship Tips specific to the Job Role		
1.	<p>Entrepreneurship</p> <p>Theory Duration (hh:mm) 02:00</p>	<ul style="list-style-type: none"> • Discuss the concept and significance of entrepreneurship and the characteristics of an entrepreneur • List the traits of an effective team and team dynamics • Resolve problems by identifying important problem-solving traits • Discuss how to identify new business opportunities within your business • Follow the entrepreneurial process and explain the entrepreneurship ecosystem • Identify key schemes of the govt. and banks to promote entrepreneurship • Define the relationship between entrepreneurship and risk appetite and entrepreneurship and resilience • Importance of book keeping and accounts management. • Understand market dynamics and value chain of agri products. • Understanding formation of cooperatives, FPO, FPC and enterprise creation 	<p>Laptop, white board, marker and projector,</p> <p>SWOT activity: pen and paper individual exercise, charts, coloured pens, Group</p> <p>Activity: poster making on entrepreneurship ecosystem.</p> <p>Activity: SMART Goal writing</p>

	Personal Strengths and Value Systems Theory Duration (hh:mm) 01:00 Practical Duration (hh:mm) 00:00	<ul style="list-style-type: none"> • Self-Improvement, inculcate leadership qualities. • Importance of Discipline in managing small business. • Discuss how to maintain a positive attitude • List your strengths and weaknesses • Describe the importance of honesty in entrepreneurs • Discuss the benefits of time management and applied techniques • Apply tips for anger management and stress management • Effective interpersonal skills, listening and speaking skills. 	Workbook exercises on health standards, Laptop, activity on strengths and weaknesses, white board, marker, projector
	Preparing for Employment and Self-Employment Theory Duration (hh:mm) 01:00 Practical Duration (hh:mm) 00:00	<ul style="list-style-type: none"> • Follow the steps to prepare for an interview • Create an effective Resume • Conduct mock interviews • Identify the most frequently asked interview questions and how to answer them 	Laptop, white board, marker, projector, sample CVs, Mock interviews, role plays, role play briefs, FAQs, quiz on basic workplace technologies.
C.	Familiarization with Assessment Process and Terms		
1	Familiarization with Assessment Process and Terms (hh:mm) 02:00	<ul style="list-style-type: none"> • Familiarization about assessment process • Understanding the need of assessment • Preparation tips for assessment • Doubt clearance session 	
	Total Duration: Theory Duration (hh:mm) 12:00 Practical Duration (hh:mm) 00:00	Laptop, white board, marker and projector, SWOT activity: pen and paper individual exercise, charts, coloured pens, Group Activity: poster making on entrepreneurship ecosystem. Activity: SMART Goal writing	

2. Bridge Course Details

This course encompasses 3 out of 3 National Occupational Standards (NOS) of “Artificial Insemination Technician” Qualification Pack issued by “Agriculture Skill Council of India”.

Sr. No.	Module	Key Learning Outcomes	Equipment Required
1	<p>Introduction</p> <p>Theory Duration (hh:mm) 05:00</p> <p>Practical Duration (hh:mm) 05:00</p> <p>Corresponding NOS Code Bridge Module</p>	<ul style="list-style-type: none"> Understand the connect between rural livelihood and livestock farming Gather knowledge of serving area / Village Appreciate Village institutions and resources within village Understand the role and responsibilities of Artificial Insemination Technicians 	Laptop, white board, marker, projector
2	<p>Implementation of cattle breeding services</p> <p>Theory Duration (hh:mm) 08:00</p> <p>Practical Duration (hh:mm) 20:00</p> <p>Corresponding NOS Code AGR/N4820</p>	<ul style="list-style-type: none"> Understand the female reproductive system of cattle and buffalo. Understand important concepts e.g. Reproductive cell (Sperm/Ova), Fertilization, Foetus, Gestation, parturition, Puberty, Fertility, conception. Understand estrous / reproductive cycle in cattle / buffalo vis a vis heat detection, time of insemination etc. Understand the basics of genetics e.g. Heredity, breeds, objective of breeding, types of breeding, breeding plan at farm level and basic aspect of state breeding policy Appreciate the importance of artificial insemination, proper timing of AI and use of appropriate semen straws. Use and maintain AI related equipment and accessories. Appreciate and adhere to standard protocol of handling liquid nitrogen and artificial insemination taking care of hygiene, welfare and safety precautions etc. Understand basic aspects of management of productive / unproductive animals, including reproductive disorder, need of proper feeding and supplementation 	Laptop, white board, marker, projector, Stored reproductive organs, animal models, Liquid nitrogen, AI Gun and accessories, Straws etc.

		<ul style="list-style-type: none"> Undertake breeding related animal identification, data recording and performance monitoring 	
3	<p>Assisting in Veterinary Extension Services</p> <p>Theory Duration (hh:mm) 05:00</p> <p>Practical Duration (hh:mm) 15:00</p> <p>Corresponding NOS Code AGR/N4808</p>	<ul style="list-style-type: none"> Understand the extension services required to identify farmers need, organize meetings etc. and to promote technology and best practices across all species e.g. KASA technology adoption and extension methods, basics of PRA, Leadership, working with farmer groups, organizational / government extension delivery system. Understand the production cycle of farm animals (all species) Understand the practical aspect of farm input selection and procurement (e.g. organoleptic testing of feed) Understand the basic principles of animal housing Understand the basics of livestock feeding, feed ingredient (including compound feed), fodder variety and preservation. Understand the body condition scoring and selection of animals Understand the hygienic milking and livestock production handling Understand the use of communication devices e.g. mobile applications such as YouTube 	board, marker, projector, Promotion
4	<p>Development program implementation and marketing in livestock sector</p> <p>Theory Duration (hh:mm) 05:00</p> <p>Practical Duration (hh:mm) 05:00</p> <p>Corresponding NOS Code AGR/N4810</p>	<ul style="list-style-type: none"> Explain the meaning of sustainable development and goal thereof Understand the basic aspect of development project management Undertake basic business planning Understand basics of marketing Familiarize with the government or private organisation promoted development programs including those related to insurance. Familiarize with livestock related economic activities and formation of 	Laptop, white board, marker, projector, Promotion tools

		<p>Self Help Groups.</p> <ul style="list-style-type: none"> Familiarize with the functioning of farmer's institutions and engagement with them 	
	<p>Total Duration:</p> <p>Theory Duration (hh:mm) 23:00</p> <p>Practical Duration (hh:mm) 45:00</p>	<p>Unique Equipment Required: Laptop, white board, marker, projector, Stored reproductive organs, animal models, Liquid nitrogen, AI Gun and accessories, Straws, promotion tools etc</p>	

Grand Total Course Duration: 12 (Orientation session) + 68 (Bridge Course) = 80 Hours, 0 Minutes