

Model Curriculum for Recognition of Prior Learning (RPL)

Makhana Grower –Cum-Processor

SECTOR: AGRICULTURE & ALLIED
SUB-SECTOR: AGRICULTURE CROP RODUCTION
OCCUPATION: FRUIT CROPS CULTIVATION
REF ID: AGR/Q0306
VERSION: 2.0
NSQF LEVEL: 4

RPL Makhana Grower –cum- Processor

CURRICULUM / SYLLABUS

This program is aimed at training to Recognition of Prior Learning (RPL) candidates for the job of a “Makhana Grower-cum-Processor”, in the “Agriculture & Allied” Sector/Industry and aims at building the following key competencies amongst the RPL

Program Name	Makhana Grower-Cum-Processor		
Qualification Pack Name & Reference ID.	AGR/Q0306		
Version No.	2.0	Version Update Date	
Pre-requisites to Training	<ul style="list-style-type: none"> • 12th grade pass OR • 10th grade pass with 2 years of relevant experience OR • 10th grade pass and pursuing continuous schooling OR • Previous relevant qualification of NSQF Level 3.0 with minimum education as 8th grade pass with 3 years of relevant experience OR • Previous relevant qualification of NSQF Level 3.5 with 1.5 years of relevant experience • Minimum Age: 18 Years 		
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	After completing this programme, participants will be able to: <ul style="list-style-type: none">• Explain the criteria of selecting site, procuring makhana seeds and raising seedlings in the nursery.• Demonstrate the process of cultivating makhana in water body and field.• Demonstrate the process of harvesting and performing post-harvest management of makhana seeds.• Demonstrate various practices to ensure health and safety at work.• Demonstrate the process of processing makhana seeds and prepare makhana products.
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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.	Orientation , General Discipline, doubts/gaps in Domain Training and Health and Safety Theory Duration (hh:mm) 06:00 Practical Duration (hh:mm) 00:00	<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.	Entrepreneurship Theory Duration (hh:mm) 02:00	<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 	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	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
3	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	

Bridge Course Details

This course encompasses 5 out of 5 National Occupational Standards (NOS) of “Makhana Grower-Cum-Processor” Qualification Pack issued by “Agriculture Skill Council of India”.

Sr. No.	Module	Key Learning Outcomes	Equipment Required
1	<p>Introduction to the role of a Makhana Grower cum Processor Theory Duration (hh:mm) 01:00</p> <p>Practical Duration (hh:mm) 00:00</p>	<ul style="list-style-type: none"> Describe the size and scope of the agriculture industry and its sub-sectors. Discuss the role and responsibilities of a Makhana Grower cum Processor. Identify various employment opportunities for a Makhana Grower cum Processor. 	<p>Training Kit - Trainer Guide, Presentations, Whiteboard, Marker, Projector, Laptop, Video Films</p>
2	<p>Process of selecting site, procuring makhana seeds and raising seedlings in the nursery Theory Duration (hh:mm) 07:00</p> <p>Practical Duration (hh:mm) 08:00 Corresponding NOS Code AGR/N0327</p>	<ul style="list-style-type: none"> State different types of stagnant perennial water bodies suitable for makhana cultivation, such as ponds, land depressions, oxbow lakes, swamps and ditches. Explain the nutritional and medicinal properties of makhana and its various uses. Explain the criteria for selecting a land or water body for makhana cultivation. List various inputs required for makhana cultivation. Explain the importance of procuring high-yielding, pests and disease-resistant planting material from reliable sources. List the recommended organic and inorganic fertilizers to be used during nursery cultivation of makhana seedlings. Discuss the relevant weed management practices. Demonstrate the process of treating the makhana seeds following the recommended seed treatment method. Prepare a sample layout of the nursery. Show how to broadcast the appropriate quantity of makhana seeds in the nursery field at the recommended seed rate. Demonstrate how to check the maturity of seedlings for transplanting, and harvest them ensuring no damage. 	<p>Irrigation Equipment, Rubber gloves, Respiratory Masks/ Snorkel, Safety Shoes, Neem Cake, Makhana Gravity Separation Machine, Seed Washer (Capacity 100 Kg / hr Continuous Type), Urea, Zinc</p>

<p>3</p>	<p>Process of cultivating makhana in water body and field</p> <p>Theory Duration (hh:mm) 08:00</p> <p>Practical Duration (hh:mm) 06:00</p> <p>Corresponding NOS Code ARG/N0328</p>	<ul style="list-style-type: none"> • Describe the process of preparing the water body for makhana cultivation. • State the recommended seed rate for broadcasting makhana seeds in a water body. • Describe the process of scooping out makhana seeds from the water body and using them for starting a new crop. • Describe the process of preparing a field for makhana cultivation, i.e. ploughing, fertilizer application, levelling and puddling the field. • State the nutrient requirement of the makhana crop. • Elucidate the benefits and process of intercropping. • List the common pests and diseases that affect the makhana crop. • Explain how to control weed infestation during makhana cultivation. • Demonstrate the process of carrying out appropriate repair and maintenance in the pond. 	<p>Fawda, Makhana First Roasting machine, Makhana Popping Machine, Dryer with (Capacity 100 Kg/hr Continuous Type), Makhana Seed Size Grading Machine (CHALNI), Makhana Raw Seed</p>
<p>4</p>	<p>Process of harvesting and performing post-harvest management of makhana seeds</p> <p>Theory Duration (hh:mm) 05:00</p> <p>Practical Duration (hh:mm) 09:00</p> <p>Corresponding NOS Code AGR/N0329</p>	<ul style="list-style-type: none"> • Explain the maturity indices of makhana seeds. • Describe the process of harvesting makhana seeds from a water body/field and the use of relevant tools and implements. • Describe the process of cleaning and drying the harvested makhana seeds. • Explain the parameters applicable to grading makhana seeds and the use of different types of sieves for the purpose. • Show how to clean the harvested makhana crop with clean water and shake them using the appropriate equipment for further cleaning. • Demonstrate the process of packing dry makhana in the appropriate packing material. 	<p>Compost, DAP, Potash, Automatic Form Fill Sealing Machine, Khurpi, Knapsack Sprayer, Ventury, Cotton Bags, Seeds of different Crops</p>
<p>5</p>	<p>Hygiene and cleanliness, Safety and emergency procedures</p> <p>Theory Duration (hh:mm) 01:00</p> <p>Practical Duration</p>	<ul style="list-style-type: none"> • Explain the requirements of personal health, hygiene and fitness at work. • Demonstrate the correct way of washing hands using soap and water, and alcohol-based hand rubs. • Describe the hazards caused due to chemicals/pesticides/fumigants. 	<p>Personal Protective Equipment, Cleaning Equipment and Materials, Sanitizer, Soap, Mask</p>

	<p>(hh:mm) 01:00 Corresponding NOS Code: AGR/N9903</p>	<ul style="list-style-type: none"> Demonstrate emergency procedures to the given workplace requirements. 	
6	<p>Employability Skills Theory Duration (hh:mm) 02:00</p> <p>Practical Duration (hh:mm) 00:00 Corresponding NOS Code DGT/VSQ/N0102</p>	<p>Entrepreneurship</p> <ul style="list-style-type: none"> Explain the types of entrepreneurship and enterprises Discuss how to identify opportunities for potential business, sources of funding and associated financial and legal risks with its mitigation plan Describe the 4Ps of Marketing-Product, Price, Place and Promotion and apply them as per requirement Create a sample business plan, for the selected business opportunity. 	
	<p>Total Duration: Theory Duration (hh:mm) 24:00</p> <p>Practical Duration (hh:mm) 24:00 Grand Total Bridge Course Duration: (hh:mm) 48:00</p>	<p>Unique Equipment Required: Irrigation Equipment, Rubber gloves, Face Masks, Gumboots, Neem Cake, Urea, Zinc, Makhana Raw Seed, Compost, DAP, Potash, Khurpi, Knapsack Sprayer, Ventury, Cotton Bags, Video Recording Equipment</p>	

Grand Total Course Duration: 12 (Orientation session) + 48 (Bridge Course) = 60 Hours, 0 Minutes