

## APPRENTICESHIP CURRICULUM (OPTIONAL TRADE)

### Rubber

#### Latex Harvest Technician\_Tapper

Course Code: C0092200008

☒NAPS ☐Non-NAPS

NSQF Level: 3



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## Course Details

1.	<b>Course Name</b>	<b>Latex Harvest Technician_Tapper</b>									
2.	<b>Course Code</b>	CO092200008									
3.	<b>Apprenticeship Training Duration:</b> (2 to 4 weeks of BT is embedded in this duration as per the requirement of the establishment)	<b>Months: 12 months</b>									
	<b>Remarks</b>										
4.	<b>Credit</b>	<b>TBD</b>									
5.	<b>NSQF Level</b> (Mandatory for NAPS)	3	<b>NSQC Approval Date:</b> 31 <sup>st</sup> March 2022								
6.	<b>Related NSQF aligned qualification details</b>	<table border="1"> <thead> <tr> <th>S. No.</th><th>QP/ Qualification/ NOS Name (As applicable)</th><th>QP/ NOS Code &amp; Version</th><th>NQR Code</th></tr> </thead> <tbody> <tr> <td>1.</td><td><b>Latex Harvest Technician - Tapper</b></td><td>RSC/Q6701_1.0</td><td>2022/RUB/RSDC/05749</td></tr> </tbody> </table>		S. No.	QP/ Qualification/ NOS Name (As applicable)	QP/ NOS Code & Version	NQR Code	1.	<b>Latex Harvest Technician - Tapper</b>	RSC/Q6701_1.0	2022/RUB/RSDC/05749
S. No.	QP/ Qualification/ NOS Name (As applicable)	QP/ NOS Code & Version	NQR Code								
1.	<b>Latex Harvest Technician - Tapper</b>	RSC/Q6701_1.0	2022/RUB/RSDC/05749								
7.	<b>Brief Job Role Description</b>	The individual in this job is responsible for tapping rubber trees to extract optimum yield from the plantation without causing any damage to the trees.									
8.	<b>NCO-2015 Code &amp; Occupation</b> (Access the NCO 2015 volumes from: <a href="https://labour.gov.in/organizationsofmole/directorate-general-employment-training-dget">https://labour.gov.in/organizationsofmole/directorate-general-employment-training-dget</a> )	NCO-2015/NIL									
9.	<b>Minimum Eligibility Criteria</b> (Educational and/ or Technical Qualification)	8th Class (1 year of relevant experience) OR 5th Class (3 years of relevant experience)									
10.	<b>Entry Age for Apprenticeship</b>	18 years									
11.	<b>Any Licensing Requirements</b> (wherever applicable)	NA									

12.	Is the Job Role amenable to Persons with Disability	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No If yes, check the applicable type of Disability  <div style="display: flex; flex-wrap: wrap;"> <div style="width: 20%;"><input type="checkbox"/> Locomotor Disability</div> <div style="width: 20%;"><input type="checkbox"/> Leprosy Cured Person</div> <div style="width: 20%;"><input type="checkbox"/> Cerebral Palsy</div> <div style="width: 20%;"><input type="checkbox"/> Dwarfism</div> <div style="width: 20%;"><input type="checkbox"/> Muscular Dystrophy</div> <div style="width: 20%;"><input type="checkbox"/> Acid Attack Victims</div> <div style="width: 20%;"><input type="checkbox"/> Blindness</div> <div style="width: 20%;"><input type="checkbox"/> Low Vision</div> <div style="width: 20%;"><input type="checkbox"/> Deaf</div> <div style="width: 20%;"><input type="checkbox"/> Hard of Hearing</div> <div style="width: 20%;"><input type="checkbox"/> Speech and Language Disability</div> <div style="width: 20%;"><input type="checkbox"/> Intellectual Disability</div> <div style="width: 20%;"><input type="checkbox"/> Specific Learning Disabilities</div> <div style="width: 20%;"><input type="checkbox"/> Autism Spectrum Disorder</div> <div style="width: 20%;"><input type="checkbox"/> Mental Illness</div> <div style="width: 20%;"><input type="checkbox"/> Multiple Sclerosis</div> <div style="width: 20%;"><input type="checkbox"/> Parkinson's Disease</div> <div style="width: 20%;"><input type="checkbox"/> Haemophilia</div> <div style="width: 20%;"><input type="checkbox"/> Thalassemia</div> <div style="width: 20%;"><input type="checkbox"/> Sickle Cell Disease</div> <div style="width: 20%;"><input type="checkbox"/> Multiple Disabilities</div> </div>
		Remarks:
13.	Submitting Body Details	<b>Name:</b> Rubber, Chemical & Petrochemical Skill Development Council <b>E-mail ID:</b> ceo@rcpsdc.in <b>Contact Number:</b> 011-41009347- 48
14.	Certifying Body	Rubber, Chemical & Petrochemical Skill development Council
15.	Employment Avenues/Opportunities	Self-Employment: Trainees can also start their own business and also provide jobs to other people.

		Rubber Product Finishing Jobs Opportunities in private companies: The trainees can get a job in a corporate as Latex Harvest Technician -Tapper
16.	<b>Career Progression</b>	Latex Harvest Technician (Tapper) role in Production-Rubber Plantation– occupation lead to Field Supervisor in Natural rubber plantation
17.	<b>Trainer’s Qualification &amp; Experience:</b>	Diploma/Graduate in any agricultural stream
18.	<b>Curriculum Creation Date</b>	01/09/2022
19.	<b>Curriculum Valid up to Date</b>	31/03/2025

## Module Details

S. No	Module/NOS Name, Code, Version	Outcomes	Assessment Marks		Passing Percentage	
			Th.	Pr.	Th.	Pr.
1.	<b>Introduction</b>	<ul style="list-style-type: none"> <li>Describe various stages of development of rubber.</li> <li>Explain current industrial scenario of rubber and its prospects in future.</li> <li>State the rubber consumption pattern in different sectors.</li> <li>List the source of different types of rubber.</li> <li>Describe usage of rubber for making various products.</li> <li>Recognise major rubber industrial associations and their functions.</li> <li>Identify the rubber products from the given product samples.</li> <li>Tell the source of rubber for given rubber raw material samples.</li> <li>Differentiate between the given rubber plants images.</li> </ul>	0	0	0	0
2.	<b>RSC/N6701 Perform latex harvesting/processing_V 1.0</b>	<ul style="list-style-type: none"> <li>Classify the types of rubber plants used in for latex tapping.</li> <li>List the major tools and equipment used in latex tapping process.</li> <li>Explain the latex tapping equipment mechanism.</li> <li>Describe the properties and usages of different rubber latex.</li> <li>State the importance of cleaning process to maintain quality during latex harvesting.</li> <li>Demonstrate field coagulum collection from the tree just before tapping.</li> <li>Demonstrate cleaning of the tapping tools and utensils for handling latex.</li> <li>Demonstrate usage of panel protectants in the field.</li> <li>Demonstrate usage of rain guarding materials and fixation of rain guards.</li> <li>Demonstrate stimulation process of latex flow using chemical stimulants.</li> <li>Demonstrate use of anticoagulants such as ammonia and Sodium Sulphite in latex harvesting.</li> <li>Prepare stock solutions of anticoagulants and their addition to latex in the cup as well as in the bucket.</li> <li>Demonstrate sieving process of latex.</li> <li>Demonstrate the handover process of latex and the field coagulum to the collection centre/ processing factory.</li> </ul>	40	60	50%	50%

S. No	Module/NOS Name, Code, Version	Outcomes	Assessment Marks		Passing Percentage	
			Th.	Pr.	Th.	Pr.
3.	<b>RSC/N5612 Perform Natural Resource Management_V1.0</b>	<ul style="list-style-type: none"> <li>Identify the possibilities and causes of soil erosion.</li> <li>Explain the concept of rainwater harvesting.</li> <li>Outline the Importance of working area cleanliness.</li> <li>Describe the methods of prevention of diseases and moisture depletion through appropriate management strategies.</li> <li>Outline the consequences of chemical contamination.</li> <li>List the usage of organic and bio- fertilizers.</li> <li>Explain the importance of protecting water source from pollution.</li> <li>Demonstrate the methods and precautions to minimize the soil erosion.</li> <li>Demonstrate the correct method and direction of terrace preparation.</li> <li>Demonstrate the optimum use of water during irrigation.</li> <li>Prepare mulching for soil and moisture.</li> <li>Prepare and use optimum dosage of fertilisers and chemicals to minimise damage to soil micro flora and micro fauna.</li> <li>Demonstrate collection and storage of empty containers, worn out polythene bags, waste budding tapes, fertilizer bags etc. from the field for reuse/disposal.</li> <li>Demonstrate timely detection and treatment for diseases to avoid over dosage of chemicals.</li> <li>Demonstrate treatment of wastewater from coir pith seasoning.</li> <li>Demonstrate elimination of mosquito breeding sources to control possible epidemics.</li> <li>Select pesticides and fungicides as per the recommendations.</li> <li>Demonstrate the use of herbicides judiciously.</li> </ul>	40	60	50%	50%
4.	<b>RSC/N5613 Provide Feedback to Higher Authorities_V1.0</b>	<ul style="list-style-type: none"> <li>List the reports used for daily operation reporting to the management.</li> <li>Outline the importance of report daily operations status to the management.</li> <li>List the information given in a standard production report for latex harvesting.</li> <li>Recall the documents used during latex harvesting process.</li> <li>Explain the ways of overcoming general problems encountered in communication at workplace.</li> <li>Describe the general issues occurring during rubber latex harvesting.</li> <li>Explain the process of daily reporting and feedback to the higher management.</li> <li>List the possible reasons for the general conflict within the team.</li> </ul>	40	60	50%	50%

S. No	Module/NOS Name, Code, Version	Outcomes	Assessment Marks		Passing Percentage	
			Th.	Pr.	Th.	Pr.
		<ul style="list-style-type: none"> <li>• Prepare reports to the higher authorities for trial, modifications and evaluation made in the production process.</li> <li>• Prepare and submit the daily operations report.</li> <li>• Identify the issues requiring troubleshooting.</li> <li>• Report the effectiveness of the control measures taken on various issues.</li> <li>• Report the effect of climatic factors on the functioning of the factory.</li> </ul>				
5.	<b>RSC/N5603 Follow ethical and sustainable practices at the workplace_V1.0</b>	<ul style="list-style-type: none"> <li>• Describe the organizational policies for usage of alternate energy source, such as solar energy, at workplace.</li> <li>• List alternate energy sources (such as solar and wind energy) and fuels (such as bio-fuel), their production/consumption and advantages of using at workplace for effective resource conservation.</li> <li>• Explain the importance of working with zero wastage of water and following water conservation practices.</li> <li>• Differentiate between the types of waste (such as recyclable, non-recyclable, and hazardous) generated at workplace and their segregation processes.</li> <li>• Outline the procedure for proper and timely disposal of hazardous waste.</li> <li>• List the appropriate non-verbal communications means while taking gender and disability of the person into consideration.</li> <li>• Emphasize on the importance of providing assistance/support to PwD team members at work and if requested.</li> <li>• Employ various techniques for ensuring proper usage of fuels at workplace to minimise pollution and conserve energy</li> <li>• Demonstrate how to work in a responsible manner to ensure optimal use of resources.</li> <li>• Perform necessary steps to carry out processes while preventing soil erosion during plantation and other related activities.</li> <li>• Implement prescribed methods for storing different types of waste into appropriate bins/containers or areas.</li> <li>• Demonstrate how to safely dispose non-recyclable waste as per the prescribed procedure.</li> </ul>	40	60	50%	50%



S. No	Module/NOS Name, Code, Version	Outcomes	Assessment Marks		Passing Percentage	
			Th.	Pr.	Th.	Pr.
		<ul style="list-style-type: none"> <li>Employ necessary ways for organising the storage of recyclable and reusable material at an identified location.</li> <li>Implement prescribed etiquette and emotional behaviour at workplace while working in a team.</li> <li>Demonstrate how to communicate in a polite and appropriate manner irrespective of the ability and gender of the person.</li> </ul>				
			<b>160</b>	<b>240</b>		

## Glossary

Term	Description
<b>Sector</b>	Sector is a conglomeration of different business operations
<b>Sub-sector</b>	Sub-sector is derived from a further breakdown based on the characteristics and interests of its components.
<b>Occupation</b>	Occupation is a set of job roles, which perform similar/ related set of functions in an industry.
<b>Job role</b>	Job role defines a unique set of functions that together form a unique employment opportunity in an organization.
<b>National Occupational Standards (NOS)</b>	NOS are occupational standards which apply uniquely in the Indian context.

## Acronyms

Acronym	Description
<b>NOS</b>	National Occupational Standard(s)
<b>NSQF</b>	National Skills Qualifications Framework
<b>QP</b>	Qualifications Pack
<b>TVET</b>	Technical and Vocational Education and Training

## Annexure 1: Tools and Equipment

### List of Tools and Equipment

The tools and equipment required are:

Sno	Tool / Equipment Name	Specification (as per batch of 30 trainees)
1	Measuring tape, Sharpener, Spout, Cup, hanger, Cup, Marking knife, Template	15
2	Long handled gauge knife, Tapping knife	5
3	Suthly	300
4	Head light	1

### Classroom Aids

The aids required to conduct sessions in the classroom are:

- 1 Projector
- 2 Computer/laptops
- 3 Internet connectivity
- 4 Whiteboard

## Annexure 2: Assessment Strategy

This section includes the processes involved in identifying, gathering and interpreting information to evaluate the learner on the required competencies of the program.

### Assessment System Overview:

- Batches assigned to the assessment agencies for conducting the assessment on SDSM/SIP or email
- Assessment agencies send the assessment confirmation to VTP/TC looping SSC
- Assessment agency deploys the ToA certified Assessor for executing the assessment
- SSC monitors the assessment process & records
- If the batch size is more than 30, then there should be 2 Assessors.

### Testing Environment: Assessor must:

- Confirm that the centre is available at the same address as mentioned on SDMS or SIP
- Check the duration of the training.
- Check the Assessment Start and End time to be as 10 a.m. and 5 p.m.
- Check that the allotted time to the candidates to complete Theory & Practical Assessment is correct.
- Check the mode of assessment—Online (TAB/Computer) or Offline (OMR/PP).
- Confirm the number of TABs on the ground are correct to execute the Assessment smoothly.
- Check the availability of the Lab Equipment for the particular Job Role.

### Assessment Quality Assurance levels / Framework:

- Question papers created by the Subject Matter Experts (SME)
- Question papers created by the SME should be verified by the other subject Matter Experts along with the approval required from SSC
- Questions are mapped with NOS and PC

- Question papers are prepared considering that level 1 to 3 is for the unskilled & semi-skilled individuals, and level 4 and above are for the skilled, supervisor & higher management
- Assessor must be ToA certified
- Assessment agency must follow the assessment guidelines to conduct the assessment

#### Types of evidence or evidence-gathering protocol:

- Time-stamped & geotagged reporting of the assessor from assessment location
- Centre photographs with signboards and scheme specific branding
- Biometric or manual attendance sheet (stamped by TP) of the trainees during the training period
- Time-stamped & geotagged assessment (Theory + Viva + Practical) photographs & videos.

#### Method of verification or validation:

- Surprise visit to the assessment location
- Random audit of the batch
- Random audit of any candidate

#### Method for assessment documentation, archiving, and access

- Hard copies of the documents are stored
- Soft copies of the documents & photographs of the assessment are uploaded / accessed from Cloud Storage and are stored in the Hard Drive

## On the Job:

1. Assessment for on the job training to be conducted by the industry partner on the practical competency output defined in the NOS/QP and the assessment criteria.
2. The candidate must score 70% in each module to complete the OJT.
3. Tools of Assessment that can be used are:
  - a. Videos of Trainees during OJT should be shared by employer to RCPSDC.
4. Assessment will ensure that the apprentice will be able to:
  - a. Work effectively and efficiently as per schedules and timelines while complying with the health and hygiene norms.
  - b. Implement safety practices.
  - c. Optimize the use of resources to ensure less wastage and maximum conservation.
  - d. Communicate effectively and develop interpersonal skills.