



QUALIFICATION FILE

Chemical Safety Supervisor

☒ Short Term Training (STT) ☐ Long Term Training (LTT) ☐ Apprenticeship

☐ Upskilling ☐ Dual/Flexi Qualification ☐ For ToT ☐ For ToA

☒ General ☐ Multi-skill (MS) ☐ Cross Sectoral (CS) ☐ Future Skills ☐ OEM

NCrF/NSQF Level: 5

Submitted By:

Rubber, Chemical & Polymer Skill Development Council (RCPSDC)

304, 3rd Floor, Rectangle One, Saket District Center,

New Delhi – 110017 (India)

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Section 1: Basic Details

1.	Qualification Name	Chemical Safety Supervisor																
2.	Sector/s	Rubber, Chemical and Polymer																
3.	Type of Qualification: ☒ New ☐ Revised ☐ Has Electives/Options ☐ OEM	NQR Code & version of existing/previous qualification: <i>(change to previous, once approved)</i>	Qualification Name of existing/previous version: NA															
4.	a. OEM Name b. Qualification Name <i>(Wherever applicable)</i>																	
5.	National Qualification Register (NQR) Code & Version <i>(Will be issued after NSQC approval)</i>	QG-05-RI-03675-2025-V1-RSDC	6. NCrF/NSQF Level: 5															
7.	Award (Certificate/Diploma/Advance Diploma/ Any Other) <i>(Wherever applicable specify multiple entry/exits also & provide details in annexure)</i>	Certificate																
8.	Brief Description of the Qualification	The Chemical Safety Supervisor is responsible for conducting chemical risk assessments followed by developing and implementing a safety program. The person is also responsible for conducting safety audits and maintaining the related documents as well as performing accident investigation and suggesting preventive measures.																
9.	Eligibility Criteria for Entry for Student/Trainee/Learner/Employee	a. Entry Qualification & Relevant Experience: <table border="1"> <thead> <tr> <th>S. No.</th> <th>Academic/Skill Qualification (with Specialization - if applicable)</th> <th>Required Experience (with Specialization - if applicable)</th> </tr> </thead> <tbody> <tr> <td>1</td> <td>Completed UG Diploma or Equivalent (Chemistry/ Chemical Engineering)</td> <td>2 years relevant experience</td> </tr> <tr> <td>2</td> <td>3-year diploma after 10th</td> <td>4 years relevant experience</td> </tr> <tr> <td>3</td> <td>12th grade Pass (Science)</td> <td>5 years relevant experience</td> </tr> <tr> <td>4</td> <td>Previous relevant Qualification of NSQF Level 4</td> <td>3 years relevant experience</td> </tr> </tbody> </table> b. Age: 18 years		S. No.	Academic/Skill Qualification (with Specialization - if applicable)	Required Experience (with Specialization - if applicable)	1	Completed UG Diploma or Equivalent (Chemistry/ Chemical Engineering)	2 years relevant experience	2	3-year diploma after 10 th	4 years relevant experience	3	12th grade Pass (Science)	5 years relevant experience	4	Previous relevant Qualification of NSQF Level 4	3 years relevant experience
S. No.	Academic/Skill Qualification (with Specialization - if applicable)	Required Experience (with Specialization - if applicable)																
1	Completed UG Diploma or Equivalent (Chemistry/ Chemical Engineering)	2 years relevant experience																
2	3-year diploma after 10 th	4 years relevant experience																
3	12th grade Pass (Science)	5 years relevant experience																
4	Previous relevant Qualification of NSQF Level 4	3 years relevant experience																
10.	Credits Assigned to this Qualification, Subject to Assessment <i>(as per National Credit Framework (NCrF))</i>	18	11. Common Cost Norm Category (I/II/III) <i>(wherever applicable): I</i>															

12.	Any Licensing requirements for Undertaking Training on This Qualification <i>(wherever applicable)</i>	NA																							
13.	Training Duration by Modes of Training Delivery <i>(Specify Total Duration as per selected training delivery modes and as per requirement of the qualification)</i>	☒ Offline ☐ Online ☐ Blended <table border="1"> <thead> <tr> <th>Training Delivery Modes</th> <th>Theory (Hours)</th> <th>Practical (Hours)</th> <th>OJT Mandatory (Hours)</th> <th>OJT Recommended (Hours)</th> <th>Total (Hours)</th> </tr> </thead> <tbody> <tr> <td>Classroom (offline)</td> <td>160:00</td> <td>320:00</td> <td>60:00</td> <td></td> <td>540:00</td> </tr> <tr> <td>Online</td> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> </tbody> </table> <i>(Refer Blended Learning Annexure for details)</i>						Training Delivery Modes	Theory (Hours)	Practical (Hours)	OJT Mandatory (Hours)	OJT Recommended (Hours)	Total (Hours)	Classroom (offline)	160:00	320:00	60:00		540:00	Online					
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Classroom (offline)	160:00	320:00	60:00		540:00																				
Online																									
14.	Aligned to NCO/ISCO Code/s <i>(if no code is available mention the same)</i>	NCO-2015/2141.2600																							
15.	Progression path after attaining the qualification <i>(Please show Professional and Academic progression)</i>	Chemical Safety Manager																							
16.	Other Indian languages in which the Qualification & Model Curriculum are being submitted	Hindi																							
17.	Is similar Qualification(s) available on NQR-if yes, justification for this qualification	☐ Yes ☒ No URLs of similar Qualifications:																							
18.	Is the Job Role Amenable to Persons with Disability	☐ Yes ☒ No If "Yes", specify applicable type of Disability:																							
19.	How Participation of Women will be Encouraged	Initiatives like gender-sensitive workplace policies, targeted skill development programs, mentorship opportunities, and flexible work hours can be implemented. Promoting safety, offering equal career growth prospects, and raising awareness about the importance of women's contributions in chemical safety will further enhance their involvement.																							
20.	Are Greening/ Environment Sustainability Aspects Covered <i>(Specify the NOS/Module which covers it)</i>	☒ Yes ☐ No																							
21.	Is Qualification Suitable to be Offered in Schools/Colleges	Schools ☒ Yes ☐ No Colleges ☒ Yes ☐ No																							
22.	Name and Contact Details of Submitting / Awarding Body SPOC <i>(In case of CS or MS, provide details of both Lead AB & Supporting ABs)</i>	Name: Saif Mohammad Email: ceo@rcpsdc.in Website: https://www.rcpsdc.in Contact No.: 91-11-41009347-48																							
23.	Final Approval Date by NSQC: 18/02/2025	24. Validity Duration: 3 Years			25. Next Review Date: 18/02/2028																				

Section 2: Module Summary

NOS/s of Qualifications

(In exceptional cases these could be described as components)

Mandatory NOS/s:

Specify the training duration and assessment criteria at NOS/ Module level. For further details refer to the curriculum document.

Th.-Theory Pr.-Practical OJT-On the Job Man.-Mandatory Training Rec.-Recommended Proj. -Project

S. No	NOS/Module Name	NOS/Module Code & Version (if applicable)	Core/non-core	NCrF/NSQF Level	Credits as per NCrF	Training Duration (Hours)					Assessment Marks					
						Th.	Pr.	OJT-Man.	OJT-Rec.	Total	Th.	Pr.	Proj.	Viva	Total	Weightage (%) (if applicable)
1.	Conduct chemical risk assessment	RSC/N7202	Core	5	3	30	60			90	40	60			100	20
2.	Develop and implement safety program	RSC/N7203	Core	5	4	35	85			120	40	60			100	20
3.	Perform accident investigation and suggest preventive measures	RSC/N7204	Core	5	2	20	40			60	40	60			100	20
4.	Conduct safety audits and maintain documents including Global Standards on Chemical Safety	RSC/N7205	Core	5	3	25	65			90	40	60			100	20
5.	Maintain health and safety	RSC/N5601	Non-Core	5.5	2	20	40			60	40	60			100	10
6.	Employability Skills (60 hours)	DGT/VSQ/N0102	Non-core	4	2	30	30			60	40	60			100	10
Duration (in Hours) / Total Marks					16	160	320	60		540	160	360			600	100

Elective NOS/s:

S. No	NOS/Module Name	NOS/Module Code & Version (if applicable)	Core/ Non-Core	NCrF/NSQF Level	Credits as per NCrF	Training Duration (Hours)					Assessment Marks					
						Th.	Pr.	OJT-Man.	OJT-Rec.	Total	Th.	Pr.	Proj.	Viva	Total	Weightage (%) (if applicable)
Duration (in Hours) / Total Marks																

Optional NOS/s:

S. No	NOS/Module Name	NOS/Module Code & Version (if applicable)	Core/ Non-Core	NCrF/NSQF Level	Credits as per NCrF	Training Duration (Hours)					Assessment Marks					
						Th.	Pr.	OJT-Man.	OJT-Rec.	Total	Th.	Pr.	Proj.	Viva	Total	Weightage (%) (if applicable)
1.																
2.																
Duration (in Hours) / Total Marks																

Assessment - Minimum Qualifying Percentage

Please specify **any one** of the following:

Minimum Pass Percentage – Aggregate at qualification level: 70 % (Every Trainee should score specified minimum aggregate passing percentage at qualification level to successfully clear the assessment.)

Minimum Pass Percentage – NOS/Module-wise: ____% (Every Trainee should score specified minimum passing percentage in each mandatory and selected elective NOS/Module to successfully clear the assessment.)

Section 3: Training Related

1.	Trainer's Qualification and experience in the relevant sector (in years) (as per NCVET guidelines)	ITI (Relevant Trade) with 6 years relevant experience required in chemical industry Or Diploma (Mechanical) with 5 years relevant experience required in chemical industry Or Graduation (B. Tech in Chemical Engg.) with 4 years relevant experience required in chemical industry
2.	Master Trainer's Qualification and experience in the relevant sector (in years) (as per NCVET guidelines)	ITI (Relevant Trade) with 8 years relevant experience required in chemical industry Or

		Diploma (Mechanical) with 7 years relevant experience required in chemical industry Or Graduation (B. Tech in Chemical Engg.) with 6 years relevant experience required in chemical industry
3.	Tools and Equipment Required for Training	☒ Yes ☐ No (If "Yes", details to be provided in Annexure)
4.	In Case of Revised Qualification, Details of Any Upskilling Required for Trainer	

Section 4: Assessment Related

1.	Assessor's Qualification and experience in relevant sector (in years) (as per NCVET guidelines)	Diploma in Chemical Engineering with 3 yrs. of relevant experience Or BSc. Chemistry with 2 yrs. of relevant experience Or Graduation (B. Tech/ B.E in Chemical Engg.) with 1 yr. of relevant experience
2.	Proctor's Qualification and experience in relevant sector (in years) (as per NCVET guidelines)	12 th Pass with Science stream
3.	Lead Assessor's/Proctor's Qualification and experience in relevant sector (in years) (as per NCVET guidelines)	Diploma in Chemical Engineering with 5 yrs. of relevant experience Or BSc. Chemistry with 4 yrs. of relevant experience Or Graduation (B. Tech/ B.E in Chemical Engg.) with 2 yr. of relevant experience
4.	Assessment Mode (Specify the assessment mode)	Blended (only theory)
5.	Tools and Equipment Required for Assessment	☒ Same as for training ☐ Yes ☐ No (details to be provided in Annexure-if it is different for Assessment)

Section 5: Evidence of the need for the Qualification

Provide Annexure/Supporting documents name.

1.	Latest Skill Gap Study (not older than 2 years) (Yes/No): In process
2.	Latest Market Research Reports or any other source (not older than 2 years) (Yes/No): In process
3.	Government /Industry initiatives/ requirement (Yes/No): Yes
4.	Number of Industry validation provided: 3

5.	Estimated nos. of persons to be trained and employed:
6.	Evidence of Concurrence/Consultation with Line Ministry/State Departments: In progress If “No”, why:

Section 6: Annexure & Supporting Documents Check List

Specify Annexure Name / Supporting document file name

1.	Annexure: NCrf/NSQF level justification based on NCrf level/NSQF descriptors <i>(Mandatory)</i>	<i>Attached</i>
2.	Annexure: List of tools and equipment relevant for qualification <i>(Mandatory, except in case of online course)</i>	<i>Attached</i>
3.	Annexure: Detailed Assessment Criteria <i>(Mandatory)</i>	<i>Attached</i>
4.	Annexure: Assessment Strategy <i>(Mandatory)</i>	<i>Attached</i>
5.	Annexure: Blended Learning <i>(Mandatory, in case selected Mode of delivery is “Blended Learning”)</i>	<i>Filled</i>
6.	Annexure: Multiple Entry-Exit Details <i>(Mandatory, in case qualification has multiple Entry-Exit)</i>	<i>Filled</i>
7.	Annexure: Acronym and Glossary <i>(Optional)</i>	
8.	Supporting Document: Model Curriculum <i>(Mandatory – Public view)</i>	<i>Attached</i>
9.	Supporting Document: Career Progression <i>(Mandatory - Public view)</i>	<i>Attached</i>
10.	Supporting Document: Occupational Map <i>(Mandatory)</i>	<i>Attached</i>
11.	Supporting Document: Assessment SOP <i>(Mandatory)</i>	<i>Attached</i>
12.	Any other document you wish to submit:	

Annexure: Evidence of Level

NCrf/NSQF Level Descriptors	Key requirements of the job role/ outcome of the qualification	How the job role/ outcomes relate to the NCrf/NSQF level descriptor	NCrf/NSQF Level
Professional Theoretical Knowledge/Process	Possess expertise in understanding chemical properties, assessing hazards, and implementing risk management strategies to ensure workplace safety and environmental protection.	This role corresponds to Level 5 of the (NCrf) / (NSQF), signifying proficiency in applying specialized theoretical knowledge to solve complex problems, contribute to organizational safety	5

		protocols, and facilitate compliance with industry regulations.	
Professional and Technical Skills/ Expertise/ Professional Knowledge	Demonstrate mastery in applying professional knowledge and technical skills to conduct thorough risk assessments, develop comprehensive safety protocols, and ensure regulatory compliance in handling hazardous chemicals.	Indicating competence in applying specialized professional knowledge and technical expertise to address complex challenges in chemical safety, contributing significantly to organizational safety practices and regulatory adherence.	5
Employment Readiness & Entrepreneurship Skills & Mind-set/Professional Skill	Demonstrate adeptness in critical thinking, problem-solving, and adaptability, fostering a proactive mindset essential for navigating diverse workplace challenges and fostering innovative safety solutions.	Emphasizes the development of entrepreneurial skills and a proactive mindset, enabling Chemical Safety Supervisors to navigate complex challenges, foster innovation, and contribute to organizational success while upholding stringent safety standards and regulatory compliance.	5
Broad Learning Outcomes/Core Skill	Role demands a comprehensive understanding of chemical properties, safety protocols, and regulatory frameworks, empowering Chemical Safety Supervisors to effectively mitigate risks, implement safety measures, and uphold compliance standards to safeguard personnel and the environment.	Signifies the mastery of specialized core skills, enabling Chemical Safety Supervisors to autonomously assess and manage chemical risks, contribute to organizational safety protocols, and ensure compliance with industry regulations.	5
Responsibility	Entrusted with ensuring adherence to safety protocols, regulatory compliance, and the implementation of risk management strategies, safeguarding workplace environments and mitigating hazards associated with hazardous chemicals. Their role encompasses accountability for fostering a culture of safety and environmental stewardship while upholding organizational standards and legal obligations.	Ensuring workplace safety, regulatory compliance, and environmental protection through their expertise in hazard assessment and risk management. Reflecting their accountability for implementing safety protocols, mitigating hazards, and upholding industry standards within hazardous chemical environments.	5

Annexure: Tools and Equipment (Lab Set-Up)

List of Tools and Equipment

Batch Size: 30

S. No.	Tool / Equipment Name	Specification	Quantity for specified Batch size
1	Chemical Samples	As per Industry Standards	As required
2	Molecular Models	As per Industry Standards	10
3	Chemical Databases	As per Industry Standards	1
4	Exposure Assessment Tools	As per Industry Standards	1
5	Environmental Impact Assessment Tool	As per Industry Standards	1
6	Chemical Safety Manuals	As per Industry Standards	As required
7	Risk Assessment Software	As per Industry Standards	1
8	Camera	As per Industry Standards	5
9	Measurement Devices	Gas detectors, Chemical analyser, pH meter, Ion selective electrodes, Particle counter, radiation detectors, thermal imaging cameras	2 each
10	Evidence collection tools	Sampling containers, sampling swabs, pH test strips, absorbent pads, scaling and packaging materials, air samplers, water quality meters, soil testing kits.	2 each
11	Root Cause Analysis Tools	Fishbone diagram, 5whys, fault tree analysis, change analysis	1 each
12	Chemical Accident Prevention Simulation Software	SACHe	1
13	Document Evaluation Software	MS Office	1
14	Document Control System Software	MS Office	1
15	Safety Helmets	Safety Helmets	30
16	Safety goggles	Safety goggles	30
17	Safety shoes	Safety shoes	30
18	Safety gloves	Safety gloves	30
19	Gas mask	Gas mask	30
20	Fire Extinguisher	Industrial Fire Extinguisher	3
21	First Aid Box	Industrial First Aid Box	3

Classroom Aids

The aids required to conduct sessions in the classroom are:

1. Whiteboard

2. Projector
3. Computer/Laptop
4. Chairs
5. Tables
6. Whiteboard marker

Annexure: Industry Validations Summary

Provide the summary information of all the industry validations in table. This is not required for OEM qualifications.

S. No	Organization Name	Representative Name	Designation	Contact Address	Contact Phone No	E-mail ID	LinkedIn Profile (if available)
1	Sakata Inx (India) Pvt. Ltd.	Mr. Anurag Sharma	Head – HR	D-17, Infocity Phase II, Sector – 33, Gurugram	9560450465	Anurag.sharma@sakataindia.com	
2	Indian Plastics Federation	Mr. Manesh Sharma	Secretary General	1 st Floor, 8B, Royd St., Esplanade, Taltala, Kolkata	7003440051	secretarygeneral@ipfindia.org	
3	India Glycols Ltd.	Mr. Shailesh Chand	Head Engineering	E-1, Sector-15, GLDA, Gorakhpur, UP	8808475775		

Annexure: Training & Employment Details

Training and Employment Projections: 600

Year	Total Candidates		Women		People with Disability	
	Estimated Training #	Estimated Employment Opportunities	Estimated Training #	Estimated Employment Opportunities	Estimated Training #	Estimated Employment Opportunities
2023-24	100	100	25	25	0	0
2024-25	200	200	50	50	0	0
2025-26	300	300	75	75	0	0

Data to be provided year-wise for next 3 years

Training, Assessment, Certification, and Placement Data for previous versions of qualifications:

Qualification Version	Year	Total Candidates				Women				People with Disability			
		Trained	Assessed	Certified	Placed	Trained	Assessed	Certified	Placed	Trained	Assessed	Certified	Placed

Applicable for revised qualifications only, data to be provided year-wise for past 3 years.

List Schemes in which the previous version of Qualification was implemented:

- 1.
- 2.

Content availability for previous versions of qualifications:

☐ Participant Handbook ☐ Facilitator Guide ☐ Digital Content ☐ Qualification Handbook ☐ Any Other:

Languages in which Content is available:

Annexure: Blended Learning

Blended Learning Estimated Ratio & Recommended Tools:

Refer NCVET “Guidelines for Blended Learning for Vocational Education, Training & Skilling” available on:

<https://ncvet.gov.in/sites/default/files/Guidelines%20for%20Blended%20Learning%20for%20Vocational%20Education.%20Training%20&%20Skilling.pdf>

S. No.	Select the Components of the Qualification	List Recommended Tools – for all Selected Components	Offline : Online Ratio
1	☒ Theory/ Lectures - Imparting theoretical and conceptual knowledge	- Books/ e-books - Presentations - Reference Material - Audio / Video Modules	40:60
2	☒ Imparting Soft Skills, Life Skills, and Employability Skills /Mentorship to Learners	- Self-Learning Videos - Broadcasts - Mobile Learning - Curated Digital content	40:60
3	☒ Showing Practical Demonstrations to the learners	- Video Content - E-Resource library - AR/ VR/ XR	40:60
4	☒ Imparting Practical Hands-on Skills/ Lab Work/ workshop/ shop floor training	- Training tools (tools list attached) - Video Play - Presentations	40:60
5	☒ Tutorials/ Assignments/ Drill/ Practice	- Online Question Bank - Mobile Quick test app - MCQ based tests	40:60
6	☒ Proctored Monitoring/ Assessment/ Evaluation/ Examinations	- Assessment engine for Essays - Up-loadable file examinations - Mock test sessions	40:60
7	☒ On the Job Training (OJT)/ Project Work Internship/ Apprenticeship Training	- Online tests - Offline assessments	40:60

Annexure: Detailed Assessment Criteria

Detailed assessment criteria for each NOS/Module are as follows:

NOS/Module Name	Assessment Criteria for Performance Criteria/Learning Outcomes	Theory Marks	Practical Marks	Project Marks	Viva Marks
RSC/N7202: Conduct chemical risk assessment	<i>Identifying and categorizing chemicals</i>	9	19	-	-
	PC1. create a wide list of all chemicals used, stored, or produced in the workplace	2	5	-	-
	PC2. refer to Safety Data Sheets (SDS) to understand the physical, chemical, and toxicological properties of each chemical	2	4	-	-
	PC3. review and understand local, national, and international regulations pertaining to chemical safety	3	5	-	-
	PC4. Identify and categorize potential hazards associated with each chemical, including health hazards (toxicity), physical hazards (flammability, reactivity) and environmental hazards	2	5	-	-
	<i>Assessing chemical exposure and consequences</i>	13	24	-	-
	PC5. determine potential exposure routes, such as inhalation, ingestion, and skin contact	2	5	-	-
	PC6. quantify potential exposure levels by considering factors like concentration, duration, and frequency of exposure	2	3	-	-
	PC7. determine effect of mixing chemical with other chemicals or exposure to high temperatures or pressure	1	3	-	-
	PC8. evaluate the potential health effects resulting from exposure, considering acute and chronic effects	3	5	-	-
	PC9. evaluate potential health effects resulting from mixing chemicals or their exposure to high temperatures or pressure	2	3	-	-
	PC10. assess the impact of chemical releases on the environment, including air, water, and soil	3	5	-	-
	<i>Perform chemical risk evaluation</i>	8	27	-	-
	PC11. use qualitative methods (e.g., risk matrices) to assess and prioritize risks based on the likelihood and severity of potential harm which can be caused by different chemicals	1	2	-	-
	PC12. employ quantitative methods, such as exposure modelling or calculations, to assess risks more precisely	2	6	-	-
	PC13. prioritize identified risks based on the results of the risk assessment, focusing on high priority hazards	2	6	-	-
	PC14. document the entire risk assessment process, including data sources, assumptions, methodologies, and outcomes. Keep records for future references and regulatory compliance	2	7	-	-
	PC15. periodically review and update the risk assessment, especially when there are changes in chemicals used, processes, or regulations	1	6	-	-
Total Marks		30	70	-	-
	<i>Proposing risk mitigation measures</i>	14	35	-	-

RSC/N7203: Develop and implement safety program	PC1.	propose appropriate control measures to mitigate identified chemical risks	2	4	-	-
	PC2.	consider the hierarchy of controls and recommend measures that eliminate or minimize the risks at the source	2	8	-	-
	PC3.	provide justifications for the selected risk mitigation measures, considering their effectiveness and feasibility	2	5	-	-
	PC4.	propose control measures to eliminate or reduce identified risks. Follow the hierarchy of controls: elimination, substitution, engineering controls, administrative controls, and personal protective equipment	2	8	-	-
	PC5.	develop and implement chemical safety policies and procedures to minimize risks and ensure compliance with regulatory requirements	3	5	-	-
	PC6.	create detailed procedures for the safe handling, storage, transportation, and disposal of chemicals	3	5	-	-
	<i>Implementation of safety program</i>		16	35	-	-
	PC7.	ensure that the organization complies with all relevant safety standards and regulatory requirements	2	5	-	-
	PC8.	develop and implement training programs for employees, emphasizing chemical hazards, emergency response, and proper use of personal protective equipment (PPE)	2	5	-	-
	PC9.	conduct regular training sessions and refresher courses to ensure ongoing awareness and compliance	2	4	-	-
	PC10.	develop comprehensive emergency response plans specific to chemical incidents	2	5	-	-
	PC11.	coordinate drills and exercises to test the effectiveness of the plans	2	4		
	PC12.	establish a clear communication plan for disseminating chemical safety information to all relevant stakeholders	2	4		
	PC13.	ensure proper labelling of chemicals and effective communication of hazards through Safety Data Sheets (SDS)	2	4		
	PC14.	implement systems for reporting and documenting chemical incidents, spills, or exposure	2	4		
	Total Marks		30	70	-	-
RSC/N7204: Perform accident investigation and suggest preventive measures	<i>Incident reporting and investigation</i>		20	45	-	-
	PC1.	implement systems for reporting and documenting chemical incidents, spills, exposures, or any type of chemical hazard	3	6	-	-
	PC2.	implement damage control methods and ensure that employees are safe and sound	3	7	-	-
	PC3.	perform thorough accident investigation and collect requisite data and perform analysis	3	7	-	-

	PC4. perform root cause identification and suggest preventive measures after successful analysis	3	7	-	-
	PC5. perform case study of accidents that happened in the past	3	6	-	-
	PC6. implement preventive measures on the basis of the analysis done on past accidents	3	7		
	PC7. communicate investigation findings and preventive measures to management, employees, and relevant stakeholders	2	5		
	<i>Implementing preventive measures</i>	10	25	-	-
	PC8. conduct group exercises simulating accident scenarios	2	6	-	-
	PC9. participants practice conducting investigations, identifying root causes, and proposing preventive measures	2	6	-	-
	PC10. ensure preventive measures are being implemented	2	5	-	-
	PC11. ensure safety guidelines are being implemented as per the set rules and regulations	2	4	-	-
	PC12. update regulations, guidelines, preventive measures to be followed as required	2	4	-	-
	Total Marks	30	70		
RSC/N7205 Conduct safety audits and maintain documents including global standards on chemical safety	<i>Conduct safety audits</i>	12	31	-	-
	PC1. plan and conduct routine safety audits of chemical storage and handling areas	3	7	-	-
	PC2. recommend and implement corrective actions to address safety deficiencies	3	7	-	-
	PC3. interpret and apply regulatory requirements to chemical processes	2	6	-	-
	PC4. respond to inquiries and provide guidance on chemical safety matters	2	5	-	-
	PC5. collaboration with regulatory agencies during inspections and audits	2	6	-	-
	<i>Maintaining documents</i>	18	39	-	-
	PC6. evaluate and document safety procedures, protocols and global standards on chemical safety	3	7	-	-
	PC7. develop and implement a document control system for chemical safety procedures	3	6	-	-
	PC8. maintain records of safety audits, inspections, and incident reports	2	6	-	-
	PC9. ensure accessibility and confidentiality of safety documents	2	5	-	-
	PC10. review and update documents in accordance with regulatory changes	2	4	-	-
	PC11. communicate regulatory changes to relevant stakeholders	2	3	-	-
	PC12. communicate safety procedures and guidelines to employees	2	4	-	-
	PC13. collaboration with cross-functional teams to enhance safety awareness	2	4	-	-
	Total Marks	30	70		
RSC/N5601: Maintain health and safety	<i>Maintain a safe and hygienic workplace</i>	9	24	-	-
	PC1. undertake basic safety checks before operation of all machinery and equipment	2	4	-	-
	PC2. assess risk prior to performing manual handling jobs	2	4	-	-
	PC3. follow standard safety procedures while handling equipment and hazardous materials	-	3	-	-

PC4. take preventive actions to protect from leakages, water logging, pests, fire, pollution, etc.	2	2	-	-
PC5. identify contamination and cross- contamination risks and take steps to reduce them	1	2	-	-
PC6. observe hygiene and sanitation practices as per regulatory and workplace requirements	2	4	-	-
PC7. report hazards, breach of company safety procedures and accidents without delay to an appropriate authority	-	2	-	-
PC8. ensure segregation of waste as hazardous/ non-hazardous	-	2	-	-
PC9. dispose-off waste safely and correctly in the designated area	-	1	-	-
<i>Maintain an organized workplace as per 5S procedures</i>	11	22	-	-
PC10. follow the 5S sorting process to remove unnecessary items from work area	2	4	-	-
PC11. place sorted items and red tag items at their proper locations as mentioned in the 5S guidelines/work instructions	2	4	-	-
PC12. ensure extra material and all items are returned to the designated storage areas after work	2	4	-	-
PC13. ensure that storage area is organized and does not overflow	1	2	-	-
PC14. ensure work area is cleaned before and after completion of job/shift	-	2	-	-
PC15. inspect work area regularly for compliance to specified standards including 5S	-	2	-	-
PC16. follow the proper mechanism for labelling instruments, containers, chemicals etc.	3	2	-	-
PC17. maintain documents and records as per given coding procedures	1	2	-	-
<i>Use safety equipment</i>	3	8	-	-
PC18. use personal protective equipment (e.g. goggles, caps, shoes, etc.) as per workplace policy	2	4	-	-
PC19. handle heavy and hazardous materials with care using appropriate tools and equipment such as trolleys, ladders	1	4	-	-
<i>Follow appropriate emergency procedures</i>	7	16	-	-
PC20. follow procedures for dealing with accidents, fires, evacuations, and emergencies as per company standards and workplace requirements	1	3	-	-
PC21. use emergency equipment in accordance with manufacturers' specifications and workplace requirements.	1	3	-	-
PC22. use the appropriate fire extinguishers on different types of fires correctly	1	2	-	-
PC23. avoid accidents while using hazardous chemicals, machines, sharp tools, and equipment	1	3	-	-
PC24. provide appropriate first aid treatment as per recognized techniques.	2	2	-	-
PC25. report details of first aid administered in accordance with workplace procedures	1	3	-	-
Total Marks	30	70		

DGT/VSQ/N0102: Employability Skills (60 Hours)	<i>Introduction to Employability Skills</i>	1	1	-	-
	PC1. identify employability skills required for jobs in various industries	-	-	-	-
	PC2. identify and explore learning and employability portals	-	-	-	-
	<i>Constitutional values – Citizenship</i>	1	1	-	-
	PC3. recognize the significance of constitutional values, including civic rights and duties, citizenship, responsibility towards society etc. and personal values and ethics such as honesty, integrity, caring and respecting others, etc.	-	-	-	-
	PC4. follow environmentally sustainable practices	-	-	-	-
	<i>Becoming a Professional in the 21st Century</i>	2	4	-	-
	PC5. recognize the significance of 21st Century Skills for employment	-	-	-	-
	PC6. practice the 21st Century Skills such as Self- Awareness, Behavior Skills, time management, critical and adaptive thinking, problem-solving, creative thinking, social and cultural awareness, emotional awareness, learning to learn for continuous learning etc. in personal and professional life	-	-	-	-
	<i>Basic English Skills</i>	2	3	-	-
	PC7. use basic English for everyday conversation in different contexts, in person and over the telephone	-	-	-	-
	PC8. read and understand routine information, notes, instructions, mails, letters etc. written in English	-	-	-	-
	PC9. write short messages, notes, letters, e-mails etc. in English	-	-	-	-
	<i>Career Development & Goal Setting</i>	1	2	-	-
	PC10. understand the difference between job and career	-	-	-	-
	PC11. prepare a career development plan with short- and long-term goals, based on aptitude	-	-	-	-
	<i>Communication Skills</i>	1	1	-	-
	PC12. follow verbal and non-verbal communication etiquette and active listening techniques in various settings	-	-	-	-
	PC13. work collaboratively with others in a team	-	-	-	-
	<i>Diversity & Inclusion</i>	1	2	-	-
	PC14. communicate and behave appropriately with all genders and PwD	-	-	-	-
	PC15. escalate any issues related to sexual harassment at workplace according to POSH Act	-	-	-	-
	<i>Financial and Legal Literacy</i>	2	3	-	-
	PC16. select financial institutions, products and services as per requirement	-	-	-	-
	PC17. carry out offline and online financial transactions, safely and securely	-	-	-	-
	PC18. identify common components of salary and computing income, expenses, taxes, investments etc.	-	-	-	-
	PC19. identify relevant rights and laws and use legal aid to fight against legal exploitation	-	-	-	-
	<i>Essential Digital Skills</i>	3	4	-	-

	PC21. use e- mail and social media platforms and virtual collaboration tools to work effectively	-	-	-	-
	PC22. use basic features of word processor, spreadsheets, and presentations	-	-	-	-
	<i>Entrepreneurship</i>	2	3	-	-
	PC23. identify different types of Entrepreneurship and Enterprises and assess opportunities for potential business through research	-	-	-	-
	PC24. develop a business plan and a work model, considering the 4Ps of Marketing Product, Price, Place and Promotion	-	-	-	-
	PC25. identify sources of funding, anticipate, and mitigate any financial/ legal hurdles for the potential business opportunity	-	-	-	-
	<i>Customer Service</i>	1	2	-	-
	PC26. identify different types of customers	-	-	-	-
	PC27. identify customer needs and address them appropriately	-	-	-	-
	PC28. follow appropriate hygiene and grooming standards	-	-	-	-
	<i>Getting ready for apprenticeship & Jobs</i>	2	3	-	-
	PC29. create a professional Curriculum vitae (Résumé)	-	-	-	-
	PC30. search for suitable jobs using reliable offline and online sources such as Employment exchange, recruitment agencies, newspapers etc. and job portals, respectively	-	-	-	-
	PC31. apply to identified job openings using offline/online methods as per requirement	-	-	-	-
	PC33. identify apprenticeship opportunities and register for it as per guidelines and requirements	-	-	-	-
	Total Marks	20	30	-	-
	Grand Total	170	380		

Annexure: Assessment Strategy

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

Mention the detailed assessment strategy in the provided template.

Assessment System Overview

Assessment will be carried out by RCPSDC affiliated assessment partners. Based on the results of assessment, RCPSDC certifies the learners. Candidates must pass online theoretical assessment which is approved by RCPSDC.

The assessment will have both theory and practical components in 40:60 ratio.

While theory assessment is summative and an online written exam; practical will involve demonstrations of applications and presentations of procedures and other components. Practical assessment will also be summative in nature.

Testing Environment

Training partner must share the batch start date and end date, number of trainees and the job role.

Assessment is fixed for a day after the end date of training. It could be next day or later. Assessment will be conducted at the training venue.

Question bank of theory and practical will be prepared by assessment agency and approved by RCPSPDC. From this set of questions, assessment agency will prepare the question paper. Theory testing will include multiple choice questions, pictorial question, etc. which will test the trainee on theoretical knowledge of the subject.

The theory and practical assessments will be carried out on same day. If number of candidates are many, more assessors and venue will be organized on same day of the assessment.

Assessment			
Assessment Type	Formative or Summative	Strategies	Examples
Theory	Summative	Written Examination	Knowledge of facts related to the role and functions of the job. Understanding of principles and concepts related to the job role and functions
Practical	Summative	Structured tasks	Presentation
Viva	Summative	Questioning and Probing	Mock interview on topics

Assessment Quality Assurance Framework

Only certified assessor can be assigned for conducting assessment. Provision of 100 % video recording with clear audio to be maintained and the same is to be submitted to RCPSPDC.

The training partner will intimate the time of arrival of the assessor and time of leaving the venue.

Methods of Validation

Unless the trainee is registered, the person cannot undergo assessment. To further ensure that the person registered is the person appearing for assessment, id verification will be carried out. Aadhar card number is required of registering the candidate for training. This will form the basis of further verification during the assessment. Assessor conducts the assessment in accordance with the assessment guidelines and question bank as per the job role. The assessor carries tablet with the loaded questions. This tablet is geotagged and so it is monitored to check their arrival and completion of assessment. Video of the practical session is prepared and submitted to RCPSPDC. Random spot checks/audit is conducted by RCPSPDC assigned persons to check the quality of assessment. Assessment agency will be responsible to put details in SIP.

RCPSPDC will also validate the data and result received from the assessment agency.

Method of assessment documentation and access

The assessment agency will upload the result of assessment in the portal. The data will not be accessible for change by the assessment agency after the upload. The assessment data will be validated by RCPSDC assessment team. After upload, only RCPSDC can access this data. RCPSDC approves the results within a week and uploads on SIP.

On the Job:

1. Each module (which covers the job profile of Agar Tree Artificial Inoculation Technician will be assessed separately.
2. The candidate must score 50% in each module to successfully complete the OJT.
3. Tools of Assessment that will be used for assessing whether the candidate is having desired skills and etiquette of dealing with customers, understanding needs & requirements, assessing the customer and perform Soft Skills effectively:
 - Videos of Trainees during OJT
 - Answer Sheets of Question Banks
 - Assessing the Log Book entries of Trainees at Employer location
 - Employer Performance Feedback.
4. Assessment of each Module will ensure that the candidate is able to:
 - Carry out preparatory activities such as lifting of workpiece, inspection of tools and equipment etc.
 - Carry out artificial inoculation process in agar trees.
 - Carry out maintenance activities after inoculation process.
 - Work effectively and efficiently as per schedules and timelines.
 - Escalate the problem to appropriate authority.
 - Implement safety practices.
 - Optimize the use of resources to ensure less wastage and maximum conservation.

Annexure: Acronym and Glossary

Acronym

Acronym	Description
AA	Assessment Agency
AB	Awarding Body
ISCO	International Standard Classification of Occupations
NCO	National Classification of Occupations
NCrF	National Credit Framework
NOS	National Occupational Standard(s)
NQR	National Qualification Register
NSQF	National Skills Qualifications Framework
OJT	On the Job Training

Glossary

Term	Description
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National Occupational Standards (NOS)	NOS define the measurable performance outcomes required from an individual engaged in a particular task. They list down what an individual performing that task should know and also do.
Qualification	A formal outcome of an assessment and validation process which is obtained when a competent body determines that an individual has achieved learning outcomes to given standards
Qualification File	A Qualification File is a template designed to capture necessary information of a Qualification from the perspective of NSQF compliance. The Qualification File will be normally submitted by the awarding body for the qualification.
Sector	A grouping of professional activities on the basis of their main economic function, product, service or technology.
Long Term Training	Long-term skilling means any vocational training program undertaken for a year and above. https://ncvet.gov.in/sites/default/files/NCVET.pdf