

Qualification Pack



Chemical Manufacturing Plant Operator

QP Code: RSC/Q7401

Version: 1.0

NSQF Level: 4

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RSC/Q7401: Chemical Manufacturing Plant Operator

Brief Job Description

The individual at work is responsible for setting up and preparing plant and equipment for production and performing manufacturing operations in a chemical manufacturing plant.

Personal Attributes

The individual at work should be hard-working, willing to work in an environment with a bad odour of chemicals along with good physical fitness to work for long hours.

Applicable National Occupational Standards (NOS)

Compulsory NOS:

1. [RSC/N7401: Perform chemical manufacturing operations](#)
2. [RSC/N5610: Coordinate and communicate effectively at the workplace](#)
3. [RSC/N5001: Carry out housekeeping](#)
4. [RSC/N5002: Carry out reporting and documentation](#)
5. [RSC/N5007: Carry Out Health & Safety](#)
6. [RSC/N5614: Manage chemical hazards in the workplace](#)
7. [RSC/N5603: Follow ethical and sustainable practices at the workplace](#)
8. [DGT/VSQ/N0102: Employability Skills \(60 Hours\)](#)

Qualification Pack (QP) Parameters

Sector	Rubber
Sub-Sector	Chemical & Petrochemical
Occupation	Manufacturing/utilities
Country	India
NSQF Level	4

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Credits	18
Aligned to NCO/ISCO/ISIC Code	NCO-2015/1321.1000
Minimum Educational Qualification & Experience	Completed 2nd year of the 3-year diploma after 10 (pursuing regular diploma in science stream) OR 12th grade Pass (Science) OR 10th grade pass OR 8th grade pass OR Certificate-NSQF (Level 3-Chemical Plant Assistant Operator/Assistant Operator Chemical Maintenance Plant with minimum education as 8th grade pass) with 3 Years of experience relevant
Minimum Level of Education for Training in School	Not Applicable
Pre-Requisite License or Training	NA
Minimum Job Entry Age	18 Years
Last Reviewed On	NA
Next Review Date	29/03/2026
NSQC Approval Date	29/03/2023
Version	1.0
Reference code on NQR	QG-03-RI-00398-2023-V1-RCPSDC
NQR Version	1

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RSC/N7401: Perform chemical manufacturing operations

Description

This OS unit is about preparing for chemical production and performing chemical manufacturing operations as per instructions.

Scope

The scope covers the following :

- Prepare for chemical production
- Perform chemical manufacturing operations

Elements and Performance Criteria

Prepare for chemical production

To be competent, the user/individual on the job must be able to:

- PC1.** obtain and interpret the production schedule from the supervisor
- PC2.** identify raw material, equipment, and machine requirements as per the production plan and chemical formula
- PC3.** ensure availability of appropriate chemicals and other raw material
- PC4.** inspect the equipment and machinery for proper functioning
- PC5.** repair or replace the damaged equipment, if required
- PC6.** ensure the equipment, machinery and work area are clean at all times
- PC7.** start pumps to wash and rinse reactor vessels, to exhaust gases and vapors, to regulate the flow of oil, steam, air, and perfume to towers, and to add products to converter or blending vessels

Perform chemical manufacturing operations

To be competent, the user/individual on the job must be able to:

- PC8.** start the machines and set the parameters
- PC9.** monitor reaction processes and transfer of products in conformance with safety procedures
- PC10.** monitor meters, gauges, and electronic instrumentation on one or more chemical or formulation units, such as mixers, kettles, blenders, dryers, tableting, encapsulation, granulation, and coating machines
- PC11.** measure, weigh and load chemical ingredients as per the formulation cards
- PC12.** control and operate chemical processes or systems of machines, using panel boards, control boards, or semi-automatic equipment
- PC13.** adjust control settings to make necessary adjustments on equipment units affecting speeds of chemical reactions, quality, or yields
- PC14.** draw samples and perform routine chemical and physical tests of chemicals
- PC15.** interpret chemical reactions visible through sight glasses or on television monitors, and review laboratory test reports for process adjustment
- PC16.** record operating data, such as process conditions, test results, or instrument readings

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PC17. adjust the machine parameters, if required

PC18. notify maintenance, stationary engineering, and other auxiliary personnel to correct equipment malfunctions and to adjust power, steam, water, or air supplies, if required

Knowledge and Understanding (KU)

The individual on the job needs to know and understand:

KU1. methods to interpret production schedule, other relevant detail related

KU2. types of raw material, equipment and machinery used for chemical production

KU3. fundamentals of the chemical manufacturing process

KU4. chemical composition, structure and properties of substances

KU5. operating procedure of chemical manufacturing machinery and equipment

KU6. procedure to inspect machinery

KU7. methods to collect samples for quality inspection

KU8. correct measurement, weightage of chemical ingredients required as per the formulation cards

KU9. type of records to be maintained and applicable format used for the same

KU10. SOP to inform maintenance, stationary engineering, and other auxiliary personnel

Generic Skills (GS)

User/individual on the job needs to know how to:

GS1. read job requirements from the job specification document

GS2. interact and communicate with supervisor or other organizational personnel as per requirement

GS3. write log sheets, forms, information, and details communicated by senior

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Assessment Criteria

Assessment Criteria for Outcomes	Theory Marks	Practical Marks	Project Marks	Viva Marks
<i>Prepare for chemical production</i>	18	27	-	-
PC1. obtain and interpret the production schedule from the supervisor	2	3	-	-
PC2. identify raw material, equipment, and machine requirements as per the production plan and chemical formula	2	4	-	-
PC3. ensure availability of appropriate chemicals and other raw material	2	4	-	-
PC4. inspect the equipment and machinery for proper functioning	3	4	-	-
PC5. repair or replace the damaged equipment, if required	3	4	-	-
PC6. ensure the equipment, machinery and work area are clean at all times	3	4	-	-
PC7. start pumps to wash and rinse reactor vessels, to exhaust gases and vapors, to regulate the flow of oil, steam, air, and perfume to towers, and to add products to converter or blending vessels	3	4	-	-
<i>Perform chemical manufacturing operations</i>	22	33	-	-
PC8. start the machines and set the parameters	2	3	-	-
PC9. monitor reaction processes and transfer of products in conformance with safety procedures	2	3	-	-
PC10. monitor meters, gauges, and electronic instrumentation on one or more chemical or formulation units, such as mixers, kettles, blenders, dryers, tableting, encapsulation, granulation, and coating machines	2	3	-	-
PC11. measure, weigh and load chemical ingredients as per the formulation cards	2	3	-	-

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Assessment Criteria for Outcomes	Theory Marks	Practical Marks	Project Marks	Viva Marks
PC12. control and operate chemical processes or systems of machines, using panel boards, control boards, or semi-automatic equipment	2	3	-	-
PC13. adjust control settings to make necessary adjustments on equipment units affecting speeds of chemical reactions, quality, or yields	2	3	-	-
PC14. draw samples and perform routine chemical and physical tests of chemicals	2	3	-	-
PC15. interpret chemical reactions visible through sight glasses or on television monitors, and review laboratory test reports for process adjustment	2	3	-	-
PC16. record operating data, such as process conditions, test results, or instrument readings	2	3	-	-
PC17. adjust the machine parameters, if required	2	3	-	-
PC18. notify maintenance, stationary engineering, and other auxiliary personnel to correct equipment malfunctions and to adjust power, steam, water, or air supplies, if required	2	3	-	-
NOS Total	40	60	-	-

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National Occupational Standards (NOS) Parameters

NOS Code	RSC/N7401
NOS Name	Perform chemical manufacturing operations
Sector	Rubber
Sub-Sector	Chemical & Petrochemical
Occupation	Manufacturing/utilities
NSQF Level	4
Credits	9
Version	1.0
Last Reviewed Date	NA
Next Review Date	29/03/2026
NSQC Clearance Date	29/03/2023

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RSC/N5610: Coordinate and communicate effectively at the workplace

Description

This OS unit is about communicating effectively with seniors, colleagues and others, coordinating with cross-functional teams at workplace as per standards.

Scope

The scope covers the following :

- Communicate effectively with colleagues and seniors
- Coordinate with cross-functional teams

Elements and Performance Criteria

Communicate effectively with colleagues and seniors

To be competent, the user/individual on the job must be able to:

- PC1.** interact with colleagues and senior in a polite and professional manner
- PC2.** listen actively to the issues or requirements of colleagues and respond timely and appropriately
- PC3.** exhibit trust, support and respect to all colleagues and seniors
- PC4.** pass on essential information to the colleagues timely
- PC5.** maintain clarity, honesty and transparency while communicating with the seniors and colleagues
- PC6.** coordinate with seniors on work-related and behavioral feedback
- PC7.** comply with organization's policies and procedures for team work
- PC8.** seek clarification on the information provided by seniors, if needed
- PC9.** respect the personal and professional space of colleagues and superiors
- PC10.** report status of work as per the schedule to seniors and inform about any deviations or anomalies
- PC11.** provide information in the desired format and frequency

Coordinate with cross-functional teams

To be competent, the user/individual on the job must be able to:

- PC12.** support colleagues of other departments for smooth work process, as required
- PC13.** coordinate with maintenance/engineering team for preventive and corrective maintenance, break down and calibration errors
- PC14.** provide inputs to the concerned stakeholders in periodic fence line review to detect non-compliance
- PC15.** coordinate with health and safety team for incident or authorized personnel, accident and emergency, if any

Knowledge and Understanding (KU)

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The individual on the job needs to know and understand:

- KU1.** organizational policies on behavioural etiquette and professionalism
- KU2.** organizational policies on gender sensitive service practices at workplace
- KU3.** organizational hierarchy and reporting structure
- KU4.** importance of communicating clearly with other
- KU5.** effective ways of team coordination
- KU6.** key helpline numbers

Generic Skills (GS)

User/individual on the job needs to know how to:

- GS1.** note down instructions received from the seniors
- GS2.** read and interpret written instructions

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Assessment Criteria

Assessment Criteria for Outcomes	Theory Marks	Practical Marks	Project Marks	Viva Marks
<i>Communicate effectively with colleagues and seniors</i>	28	44	-	-
PC1. interact with colleagues and senior in a polite and professional manner	2	4	-	-
PC2. listen actively to the issues or requirements of colleagues and respond timely and appropriately	2	4	-	-
PC3. exhibit trust, support and respect to all colleagues and seniors	2	4	-	-
PC4. pass on essential information to the colleagues timely	2	4	-	-
PC5. maintain clarity, honesty and transparency while communicating with the seniors and colleagues	2	4	-	-
PC6. coordinate with seniors on work-related and behavioral feedback	3	4	-	-
PC7. comply with organization's policies and procedures for team work	3	4	-	-
PC8. seek clarification on the information provided by seniors, if needed	3	4	-	-
PC9. respect the personal and professional space of colleagues and superiors	3	4	-	-
PC10. report status of work as per the schedule to seniors and inform about any deviations or anomalies	3	4	-	-
PC11. provide information in the desired format and frequency	3	4	-	-
<i>Coordinate with cross-functional teams</i>	12	16	-	-
PC12. support colleagues of other departments for smooth work process, as required	3	4	-	-

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Assessment Criteria for Outcomes	Theory Marks	Practical Marks	Project Marks	Viva Marks
PC13. coordinate with maintenance/engineering team for preventive and corrective maintenance, break down and calibration errors	3	4	-	-
PC14. provide inputs to the concerned stakeholders in periodic fence line review to detect non-compliance	3	4	-	-
PC15. coordinate with health and safety team for incident or authorized personnel, accident and emergency, if any	3	4	-	-
NOS Total	40	60	-	-

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National Occupational Standards (NOS) Parameters

NOS Code	RSC/N5610
NOS Name	Coordinate and communicate effectively at the workplace
Sector	Rubber
Sub-Sector	Generic
Occupation	Generic
NSQF Level	4
Credits	TBD
Version	1.0
Last Reviewed Date	31/03/2022
Next Review Date	29/03/2026
NSQC Clearance Date	29/03/2023

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RSC/N5001: Carry out housekeeping

Description

This unit is about carrying out housekeeping activities.

Elements and Performance Criteria

Pre housekeeping activities

To be competent, the user/individual on the job must be able to:

- PC1.** inspect the area while taking into account various surfaces
- PC2.** identify the material requirements for cleaning the areas inspected, by considering risk, time, efficiency and type of stain
- PC3.** ensure that the cleaning equipment is in proper working condition
- PC4.** select the suitable alternatives for cleaning the areas in case the appropriate equipment and materials are not available and inform the appropriate person
- PC5.** plan the sequence for cleaning the area to avoid re-soiling clean areas and surfaces
- PC6.** inform the affected people about the cleaning activity
- PC7.** display the appropriate signage for the work being conducted
- PC8.** ensure that there is adequate ventilation for the work being carried out
- PC9.** wear the personal protective equipment required for the cleaning method and materials being used

Carry out housekeeping activities

To be competent, the user/individual on the job must be able to:

- PC10.** use the correct cleaning method for the work area, type of soiling and surface
- PC11.** carry out cleaning activity without disturbing others
- PC12.** deal with accidental damage, if any, caused while carrying out the work
- PC13.** report to the appropriate person any difficulties in carrying out your work
- PC14.** identify and report to the appropriate person if any additional cleaning required that is outside one's responsibility or skill

Post housekeeping activities

To be competent, the user/individual on the job must be able to:

- PC15.** ensure that there is no oily substance on the floor to avoid slippage
- PC16.** ensure that no scrap material is lying around
- PC17.** maintain and store housekeeping equipment and supplies
- PC18.** follow workplace procedures to deal with any accidental damage caused during the cleaning process
- PC19.** ensure that, on completion of the work, the area is left clean and dry and meets requirements
- PC20.** return the equipment, materials and personal protective equipment that were used to the right places making sure they are clean, safe and securely stored
- PC21.** dispose the waste garnered from the activity in an appropriate manner

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- PC22.** dispose of used and un-used solutions according to manufacturer's instructions, and clean the equipment thoroughly
- PC23.** maintain schedules and records for housekeeping duty
- PC24.** replenish any necessary supplies or consumables

Knowledge and Understanding (KU)

The individual on the job needs to know and understand:

- KU1.** importance of learning proper procedures and techniques
- KU2.** implications of not following the organizational requirement for approval for undertaking the specific task
- KU3.** importance of completing the activities as per the schedule
- KU4.** implications of not following the defined procedures/work instructions
- KU5.** importance of team work
- KU6.** health, safety and environment guidelines, legislation and regulations as applicable
- KU7.** actions to be taken in case of non-conformity to behavioral standards of the organization
- KU8.** impact of poor practices on the individual's and organization's performance
- KU9.** importance of optimal utilization of resources
- KU10.** importance of providing feedback for improvement
- KU11.** importance of indigenous knowledge for evolving/adopting operation specific practices
- KU12.** rectification/solution of problems/conflicts for the smooth functioning of the organization
- KU13.** importance of documentation/reporting as per guidelines and procedures
- KU14.** knowledge of do's and don'ts (company's hr instructions)
- KU15.** importance of attending trouble shooting
- KU16.** importance of subject learning/ training
- KU17.** importance of product and its application
- KU18.** the levels of hygiene required by workplace and why it is important to maintain them during your work
- KU19.** how to inspect a work area to decide what cleaning it needs
- KU20.** methods and materials that used for cleaning variety of surfaces
- KU21.** the types of cleansing agents that are not to be mixed together
- KU22.** the correct method for cleaning equipment and/or machinery used during your work
- KU23.** the importance of personal protective equipment
- KU24.** appropriate personal protective equipment for the work area, cleaning equipment, tools, materials and chemicals used
- KU25.** the correct sequence for cleaning the work area
- KU26.** the time taken by the treatment to work
- KU27.** the importance of following manufacturer's instructions on cleaning agents
- KU28.** the most appropriate place to carry out test cleans and why this should be done before applying treatments
- KU29.** the importance of applying treatments evenly and the effect of not doing this

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- KU30.** process of cleaning the surfaces without causing injury or damage
- KU31.** the method to check the treated surface and equipment on completion of cleaning
- KU32.** procedures for reporting any unidentified soiling
- KU33.** procedures for disposing off waste
- KU34.** procedures for disposing off or storing personal protective equipment
- KU35.** escalation procedures for soils or stains that could not be removed

Generic Skills (GS)

User/individual on the job needs to know how to:

- GS1.** construct simple sentences and express ideas clearly through written communication
- GS2.** fill up appropriate technical forms, process charts, activity logs in required format of the company
- GS3.** write simple letters, mails, etc
- GS4.** perform functional mathematical operations, including apply basic mathematical principles, such as numbers and space, and techniques such as estimation and approximation, for practical purposes
- GS5.** read and understand manuals, health and safety instructions, memos, reports, job cards etc
- GS6.** read images, graphs, diagrams
- GS7.** understand the various coding systems as per company norms
- GS8.** express statements, opinions or information clearly so that others can hear and understand
- GS9.** respond appropriately to any queries
- GS10.** communicate with supervisor
- GS11.** communicate with upstream and downstream teams
- GS12.** communicate with people in a form and manner and using language that is open and respectful
- GS13.** practice honesty with respect to company property and time
- GS14.** resolve any difficulties in relationships with colleagues , or get help from an appropriate person, in a way that preserves goodwill and trust
- GS15.** take responsibility for completing ones own work assignment
- GS16.** take initiative to enhance/learn skills in oness area of work
- GS17.** the capacity to learn from experience in a range of settings and scenarios and the capacity to reflect on and analyse ones learning.
- GS18.** is open to new ways of doing things
- GS19.** the capacity to envisage and articulate personal goals; to develop strategies and take action to achieve them.
- GS20.** avoid absenteeism
- GS21.** act objectively , rather than impulsively or emotionally when faced with difficult/stressful or emotional situations
- GS22.** work in disciplined factory environment
- GS23.** be punctual

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- GS24.** take a decision for any change/issue based on earlier successes (documented previous history) on similar issues
- GS25.** work out changes in case a new improved machine/equipment is added in the process or any new material /chemical is developed replacing existing one.
- GS26.** make changes in cycle time due to improved process.
- GS27.** use the standard operating procedure or trouble shooting manuals for trouble shooting and other reference documents approved by plant management
- GS28.** consult the peer group and superiors to arrive at a favourable decision.
- GS29.** use of standard available problem solving techniques for decision making
- GS30.** review and analyze the process steps to check on system non adherence and non conformity
- GS31.** review the current sop and other standards for continuous improvement to facilitate decision making
- GS32.** take a calculated risk with minimum losses
- GS33.** plan and organize the factors of production to execute the business plan
- GS34.** fix up tasks and allotment of the same
- GS35.** assign tasks to suitable persons
- GS36.** motivate them for better output and time bound completion of tasks
- GS37.** match customer needs/specification by adjusting the processing conditions (interact with customer in case any clarification required)
- GS38.** ensure that performance of his action/operation/activity does not lead to any divergence from the specified quality of the final product as required by the customer.
- GS39.** complete the assigned task in timely manner so that the final product is delivered in the timeline given by the customer.
- GS40.** communicate effectively to the superior/customer for any delay in supplies to the clients.
- GS41.** work towards fulfilling the customers requirement as per their demand.
- GS42.** in case of any complaint, ensure its timely resolution if the problem is emanating at his level
- GS43.** communicate effectively to the superior/customer for any delay in resolving the problem faced by the customer.
- GS44.** maintain good/cordial relation with customers.
- GS45.** work on the feedback received from customer regarding the product.
- GS46.** interpret quality for sheet
- GS47.** suggest improvements(if any) in process/product/materials based on results and experience
- GS48.** proper collection of waste material
- GS49.** identify defects in the material and communicate it at the earliest and suggest improvements(if any) in process/material based on experience
- GS50.** seek clarification on problems from others
- GS51.** apply problem-solving approaches in different situations
- GS52.** refer anomalies to the line manager

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Assessment Criteria

Assessment Criteria for Outcomes	Theory Marks	Practical Marks	Project Marks	Viva Marks
<i>Pre housekeeping activities</i>	14	20	-	-
PC1. inspect the area while taking into account various surfaces	2	2	-	-
PC2. identify the material requirements for cleaning the areas inspected, by considering risk, time, efficiency and type of stain	2	3	-	-
PC3. ensure that the cleaning equipment is in proper working condition	2	2	-	-
PC4. select the suitable alternatives for cleaning the areas in case the appropriate equipment and materials are not available and inform the appropriate person	2	2	-	-
PC5. plan the sequence for cleaning the area to avoid re-soiling clean areas and surfaces	2	2	-	-
PC6. inform the affected people about the cleaning activity	-	2	-	-
PC7. display the appropriate signage for the work being conducted	1	5	-	-
PC8. ensure that there is adequate ventilation for the work being carried out	1	-	-	-
PC9. wear the personal protective equipment required for the cleaning method and materials being used	2	2	-	-
<i>Carry out housekeeping activities</i>	6	15	-	-
PC10. use the correct cleaning method for the work area, type of soiling and surface	2	-	-	-
PC11. carry out cleaning activity without disturbing others	-	5	-	-
PC12. deal with accidental damage, if any, caused while carrying out the work	-	10	-	-

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Assessment Criteria for Outcomes	Theory Marks	Practical Marks	Project Marks	Viva Marks
PC13. report to the appropriate person any difficulties in carrying out your work	2	-	-	-
PC14. identify and report to the appropriate person if any additional cleaning required that is outside one's responsibility or skill	2	-	-	-
<i>Post housekeeping activities</i>	20	25	-	-
PC15. ensure that there is no oily substance on the floor to avoid slippage	2	5	-	-
PC16. ensure that no scrap material is lying around	2	5	-	-
PC17. maintain and store housekeeping equipment and supplies	2	5	-	-
PC18. follow workplace procedures to deal with any accidental damage caused during the cleaning process	2	2	-	-
PC19. ensure that, on completion of the work, the area is left clean and dry and meets requirements	2	2	-	-
PC20. return the equipment, materials and personal protective equipment that were used to the right places making sure they are clean, safe and securely stored	2	2	-	-
PC21. dispose the waste garnered from the activity in an appropriate manner	2	2	-	-
PC22. dispose of used and un-used solutions according to manufacturer's instructions, and clean the equipment thoroughly	2	2	-	-
PC23. maintain schedules and records for housekeeping duty	2	-	-	-
PC24. replenish any necessary supplies or consumables	2	-	-	-
NOS Total	40	60	-	-

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National Occupational Standards (NOS) Parameters

NOS Code	RSC/N5001
NOS Name	Carry out housekeeping
Sector	Rubber
Sub-Sector	Generic
Occupation	Generic
NSQF Level	4
Credits	TBD
Version	1.0
Last Reviewed Date	26/05/2022
Next Review Date	29/03/2026
NSQC Clearance Date	29/03/2023

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RSC/N5002: Carry out reporting and documentation

Description

This unit is about carrying out reporting and documentation.

Elements and Performance Criteria

Reporting

To be competent, the user/individual on the job must be able to:

- PC1.** report data/problems/incidents as applicable in a timely manner
- PC2.** report to the appropriate authority as laid down by the company
- PC3.** follow reporting procedures as prescribed by the company

Documentation

To be competent, the user/individual on the job must be able to:

- PC4.** identify documentation to be completed relating to ones role
- PC5.** record details accurately in an appropriate format
- PC6.** complete all documentation within stipulated time, according to company procedure
- PC7.** ensure that the final document meets with the requirements of the person who requested it or make any amendments accordingly
- PC8.** make sure documents are available to all appropriate authorities to inspect

Information Security

To be competent, the user/individual on the job must be able to:

- PC9.** respond to requests for information, in an appropriate manner whilst following organizational procedures
- PC10.** inform the appropriate authority of the requests for information received

Knowledge and Understanding (KU)

The individual on the job needs to know and understand:

- KU1.** importance of learning proper procedures and techniques
- KU2.** implications of not following the organizational requirement for approval for undertaking the specific task
- KU3.** importance of completing the activities as per the schedule
- KU4.** implications of not following the defined procedures/work instructions
- KU5.** importance of team work
- KU6.** health, safety and environment guidelines, legislation and regulations as applicable
- KU7.** actions to be taken in case of non-conformity to behavioral standards of the organization
- KU8.** impact of poor practices on the individual's and organization's performance
- KU9.** importance of optimal utilization of resources
- KU10.** importance of providing feedback for improvement

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- KU11.** importance of indigenous knowledge for evolving/adopting operation specific practices
- KU12.** rectification/solution of problems/conflicts for the smooth functioning of the organization
- KU13.** importance of documentation/reporting as per guidelines and procedures
- KU14.** knowledge of do's and don'ts (company's hr instructions)
- KU15.** importance of attending trouble shooting
- KU16.** importance of subject learning/ training
- KU17.** importance of product and its application
- KU18.** different methods of recording information
- KU19.** various documents that need to be maintained
- KU20.** company procedure for filling/maintaining up the documents
- KU21.** procedures for reporting to the appropriate authority
- KU22.** procedures for recording damage, breakages etc
- KU23.** reporting incidents where standard operating procedures are not followed
- KU24.** the importance of complete and accurate documentation
- KU25.** how to maintain complete documentation accurately and within agreed timescales
- KU26.** the importance of ensuring that the documents are correct
- KU27.** the actions to be taken if the documents are not correct
- KU28.** the importance of maintaining the security and confidentiality of recorded information
- KU29.** procedures to maintain confidentiality of information
- KU30.** the appropriate method for responding to requests for information
- KU31.** the reporting procedures to followed before disclosing information to any outside party

Generic Skills (GS)

User/individual on the job needs to know how to:

- GS1.** construct simple sentences and express ideas clearly through written communication
- GS2.** fill up appropriate technical forms, process charts, activity logs in required format of the company
- GS3.** write simple letters, mails, etc
- GS4.** perform functional mathematical operations, including apply basic mathematical principles, such as numbers and space, and techniques such as estimation and approximation, for practical purposes
- GS5.** read and understand manuals, health and safety instructions, memos, reports, job cards etc
- GS6.** read images, graphs, diagrams
- GS7.** understand the various coding systems as per company norms
- GS8.** express statements, opinions or information clearly so that others can hear and understand
- GS9.** respond appropriately to any queries
- GS10.** communicate with supervisor
- GS11.** communicate with upstream and downstream teams
- GS12.** communicate with people in a form and manner and using language that is open and respectful

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- GS13.** practice honesty with respect to company property and time
- GS14.** resolve any difficulties in relationships with colleagues , or get help from an appropriate person, in a way that preserves goodwill and trust
- GS15.** take responsibility for completing ones own work assignment
- GS16.** take initiative to enhance/learn skills in oness area of work
- GS17.** the capacity to learn from experience in a range of settings and scenarios and the capacity to reflect on and analyse ones learning.
- GS18.** is open to new ways of doing things
- GS19.** the capacity to envisage and articulate personal goals; to develop strategies and take action to achieve them.
- GS20.** avoid absenteeism
- GS21.** act objectively , rather than impulsively or emotionally when faced with difficult/stressful or emotional situations
- GS22.** work in disciplined factory environment
- GS23.** be punctual
- GS24.** take a decision for any change/issue based on earlier successes (documented previous history) on similar issues
- GS25.** work out changes in case a new improved machine/equipment is added in the process or any new material /chemical is developed replacing existing one.
- GS26.** make changes in cycle time due to improved process.
- GS27.** use the standard operating procedure or trouble shooting manuals for trouble shooting and other reference documents approved by plant management
- GS28.** consult the peer group and superiors to arrive at a favourable decision.
- GS29.** use of standard available problem solving techniques for decision making
- GS30.** review and analyze the process steps to check on system non adherence and non conformity
- GS31.** review the current sop and other standards for continuous improvement to facilitate decision making
- GS32.** take a calculated risk with minimum losses
- GS33.** plan and organize the factors of production to execute the business plan
- GS34.** fix up tasks and allotment of the same
- GS35.** assign tasks to suitable persons
- GS36.** motivate them for better output and time bound completion of tasks
- GS37.** match customer needs/specification by adjusting the processing conditions (interact with customer in case any clarification required)
- GS38.** ensure that performance of his action/operation/activity does not lead to any divergence from the specified quality of the final product as required by the customer.
- GS39.** complete the assigned task in timely manner so that the final product is delivered in the timeline given by the customer.
- GS40.** communicate effectively to the superior/customer for any delay in supplies to the clients.
- GS41.** work towards fulfilling the customers requirement as per their demand.
- GS42.** in case of any complaint, ensure its timely resolution if the problem is emanating at his level

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- GS43.** communicate effectively to the superior/customer for any delay in resolving the problem faced by the customer.
- GS44.** maintain good/cordial relation with customers.
- GS45.** work on the feedback received from customer regarding the product.
- GS46.** interpret quality for sheet
- GS47.** suggest improvements(if any) in process/product/materials based on results and experience
- GS48.** proper collection of waste material
- GS49.** identify defects in the material and communicate it at the earliest and suggest improvements(if any) in process/material based on experience
- GS50.** seek clarification on problems from others
- GS51.** apply problem-solving approaches in different situations
- GS52.** refer anomalies to the line manager

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Assessment Criteria

Assessment Criteria for Outcomes	Theory Marks	Practical Marks	Project Marks	Viva Marks
<i>Reporting</i>	15	30	-	-
PC1. report data/problems/incidents as applicable in a timely manner	5	10	-	-
PC2. report to the appropriate authority as laid down by the company	5	10	-	-
PC3. follow reporting procedures as prescribed by the company	5	10	-	-
<i>Documentation</i>	20	20	-	-
PC4. identify documentation to be completed relating to ones role	5	5	-	-
PC5. record details accurately in an appropriate format	5	-	-	-
PC6. complete all documentation within stipulated time, according to company procedure	5	10	-	-
PC7. ensure that the final document meets with the requirements of the person who requested it or make any amendments accordingly	3	5	-	-
PC8. make sure documents are available to all appropriate authorities to inspect	2	-	-	-
<i>Information Security</i>	5	10	-	-
PC9. respond to requests for information, in an appropriate manner whilst following organizational procedures	5	5	-	-
PC10. inform the appropriate authority of the requests for information received	-	5	-	-
NOS Total	40	60	-	-

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National Occupational Standards (NOS) Parameters

NOS Code	RSC/N5002
NOS Name	Carry out reporting and documentation
Sector	Rubber
Sub-Sector	Generic
Occupation	Generic
NSQF Level	4
Credits	TBD
Version	1.0
Last Reviewed Date	26/05/2022
Next Review Date	29/03/2026
NSQC Clearance Date	29/03/2023

Qualification Pack

RSC/N5007: Carry Out Health & Safety

Description

This unit is about maintaining health and safety of self and others at workplace.

Elements and Performance Criteria

Maintain a clean and efficient workplace

To be competent, the user/individual on the job must be able to:

- PC1.** undertake basic safety checks before operation of all machinery and equipment and report hazards to the appropriate supervisor
- PC2.** work for which protective clothing or equipment is required is identified and the appropriate protective clothing or equipment is used in performing these duties in accordance with workplace policy
- PC3.** read and understand the hazards of use and contamination mentioned on the labels of chemicals, utilities etc
- PC4.** prior to performing manual handling jobs, risk is assessed and work is carried out according to currently recommended safe practices.
- PC5.** use equipment and materials safely and correctly and return the same to designated storage when not in use
- PC6.** dispose off waste safely and correctly in a designated area
- PC7.** risks to bystanders are recognized and action taken to reduce risk associated with jobs in the workplace
- PC8.** perform work in a manner which minimizes environmental damage
- PC9.** all procedures and work instructions for controlling risk are followed closely
- PC10.** report any accidents, incidents or problems without delay to an appropriate person and take immediate necessary action to reduce further danger

Render appropriate emergency procedures

To be competent, the user/individual on the job must be able to:

- PC11.** follow procedures for dealing with accidents, fires and emergencies, including communicating location and directions to emergency.
- PC12.** follow emergency procedures as per company standards and workplace requirements
- PC13.** use emergency equipment in accordance with manufacturers' specifications and workplace requirements
- PC14.** provide treatment appropriate to the patient's injuries in accordance with recognized first aid techniques.
- PC15.** recover (if practical), clean, inspect/test, refurbish, replace and store the first aid equipment as appropriate
- PC16.** dispose off medical waste in accordance with workplace requirements
- PC17.** report details of first aid administered in accordance with work place procedures

Maintain standard safety procedures at the workplace

To be competent, the user/individual on the job must be able to:

- PC18.** comply with general safety procedures

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- PC19.** follow standard safety procedures while handling equipment, hazardous material or tool
- PC20.** check parts of the workplace and take preventive actions like spraying and other steps to protect from leakages, water logging, pests, fire, pollution, etc.
- PC21.** ensure no accidents and damages at the workplace, reporting of any breach of company safety procedure
- PC22.** keep the workplace organized, swept, clean and hazard free

Participate in safety awareness campaigns

To be competent, the user/individual on the job must be able to:

- PC23.** attend fire drills and other safety related workshops organized at the workplace
- PC24.** be aware of first aid, evacuation and emergency procedures
- PC25.** be alert of any events and do not be negligent to any safety procedures to be followed

Understand potential sources of accidents

To be competent, the user/individual on the job must be able to:

- PC26.** avoid accidents while using hazardous chemicals, machines, sharp tools and equipment

Use safety gears to avoid accidents

To be competent, the user/individual on the job must be able to:

- PC27.** use safety materials such as protective gear, goggles, caps, shoes, etc.(as applicable with workplace)
- PC28.** handle heavy and hazardous materials with care and using appropriate tools and handling equipment such as trolleys, ladders

Knowledge and Understanding (KU)

The individual on the job needs to know and understand:

- KU1.** policies on incentives, delivery standards, and personnel management.
- KU2.** occupational safety and health policy followed
- KU3.** emergency evacuation procedure
- KU4.** medical policy
- KU5.** company laws and acts
- KU6.** the risks to health and safety and the measures to be taken to control those risks in the area of work
- KU7.** workplace procedures and requirements for the handling of workplace injuries/illnesses.
- KU8.** basic emergency first aid procedure
- KU9.** local emergency services
- KU10.** reporting on accidents, incidents and problems to appropriate authorities.
- KU11.** how to use machines as per standard operating procedure
- KU12.** how to maintain work area safe and secure
- KU13.** use of hazardous materials, tools and equipments
- KU14.** emergency evacuation and first aid procedures to be followed
- KU15.** personal hygiene and fitness requirements
- KU16.** general duties under the relevant health and safety legislation

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- KU17.** what personal protective equipment and clothing should be worn and how it is cared for
- KU18.** the correct and safe way to use materials and equipment required for work
- KU19.** the importance of good housekeeping in the workplace
- KU20.** safe disposal methods for waste
- KU21.** methods for minimizing environmental damage during work

Generic Skills (GS)

User/individual on the job needs to know how to:

- GS1.** record data which are required for record keeping purpose
- GS2.** report problems to the appropriate person in a timely manner
- GS3.** write descriptions and details about incidents in reports
- GS4.** read instruction manuals for hand tools and equipment
- GS5.** read instructions on work orders and procedures
- GS6.** receive instructions and seek advice from superiors
- GS7.** communicate clearly and effectively with others
- GS8.** take a decision for any change/issue based on earlier successes(documented previous history)on similar issues
- GS9.** work out changes in case a new improved machine/equipment is added in the process or any new material/chemical is developed replacing existing one.
- GS10.** make changes in cycle time due to improved process.
- GS11.** use the standard operating procedure or trouble shooting manuals for trouble shooting and other reference documents approved by plant management
- GS12.** consult the peer group and superiors to arrive at a favourable decision.
- GS13.** use of standard available problem solving techniques for decision making
- GS14.** review and analyze the process steps to check on system non adherence andnon conformity
- GS15.** review the current sop and other standards for continuous improvement to facilitate decision making
- GS16.** take a calculated risk with minimum losses
- GS17.** schedule daily activities and drawing up priorities; allocate start times, estimation of completion times and materials, equipment and assistance required for completion.
- GS18.** match customer needs/specification by adjusting the processing conditions (interact with customer in case any clarification required)
- GS19.** ensure that performance of his action/operation/activity does not lead to any divergence from the specified quality of the final product as required by the customer.
- GS20.** complete the assigned task in timely manner so that the final product is delivered in the timeline given by the customer.
- GS21.** communicate effectively to the superior/customer for any delay in supplies to the clients.
- GS22.** work towards fulfilling the customers requirement as per their demand.
- GS23.** in case of any complaint, ensure its timely resolution if the problem is emanating at his level
- GS24.** communicate effectively to the superior/customer for any delay in resolving the problem faced by the customer.

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- GS25.** maintain good/cordial relation with customers.
- GS26.** work on the feedback received from customer regarding the product.
- GS27.** use first aid treatment in case of any injury/accident.
- GS28.** monitor and maintain the condition of tools and equipment
- GS29.** assess situation & identify appropriate control measures
- GS30.** act, communicate and report in emergency situation

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Assessment Criteria

Assessment Criteria for Outcomes	Theory Marks	Practical Marks	Project Marks	Viva Marks
<i>Maintain a clean and efficient workplace</i>	9	21	-	-
PC1. undertake basic safety checks before operation of all machinery and equipment and report hazards to the appropriate supervisor	2	2	-	-
PC2. work for which protective clothing or equipment is required is identified and the appropriate protective clothing or equipment is used in performing these duties in accordance with workplace policy	2	2	-	-
PC3. read and understand the hazards of use and contamination mentioned on the labels of chemicals, utilities etc	-	2	-	-
PC4. prior to performing manual handling jobs, risk is assessed and work is carried out according to currently recommended safe practices.	2	2	-	-
PC5. use equipment and materials safely and correctly and return the same to designated storage when not in use	1	2	-	-
PC6. dispose off waste safely and correctly in a designated area	2	4	-	-
PC7. risks to bystanders are recognized and action taken to reduce risk associated with jobs in the workplace	-	2	-	-
PC8. perform work in a manner which minimizes environmental damage	-	2	-	-
PC9. all procedures and work instructions for controlling risk are followed closely	-	1	-	-
PC10. report any accidents, incidents or problems without delay to an appropriate person and take immediate necessary action to reduce further danger	-	2	-	-
<i>Render appropriate emergency procedures</i>	9	18	-	-

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Assessment Criteria for Outcomes	Theory Marks	Practical Marks	Project Marks	Viva Marks
PC11. follow procedures for dealing with accidents, fires and emergencies, including communicating location and directions to emergency.	2	4	-	-
PC12. follow emergency procedures as per company standards and workplace requirements	2	4	-	-
PC13. use emergency equipment in accordance with manufacturers' specifications and workplace requirements	2	4	-	-
PC14. provide treatment appropriate to the patient's injuries in accordance with recognized first aid techniques.	-	1	-	-
PC15. recover (if practical), clean, inspect/test, refurbish, replace and store the first aid equipment as appropriate	-	2	-	-
PC16. dispose off medical waste in accordance with workplace requirements	-	1	-	-
PC17. report details of first aid administered in accordance with work place procedures	3	2	-	-
<i>Maintain standard safety procedures at the workplace</i>	6	15	-	-
PC18. comply with general safety procedures	2	4	-	-
PC19. follow standard safety procedures while handling equipment, hazardous material or tool	-	2	-	-
PC20. check parts of the workplace and take preventive actions like spraying and other steps to protect from leakages, water logging, pests, fire, pollution, etc.	2	4	-	-
PC21. ensure no accidents and damages at the workplace, reporting of any breach of company safety procedure	-	1	-	-
PC22. keep the workplace organized, swept, clean and hazard free	2	4	-	-
<i>Participate in safety awareness campaigns</i>	2	8	-	-

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Assessment Criteria for Outcomes	Theory Marks	Practical Marks	Project Marks	Viva Marks
PC23. attend fire drills and other safety related workshops organized at the workplace	1	3	-	-
PC24. be aware of first aid, evacuation and emergency procedures	1	3	-	-
PC25. be alert of any events and do not be negligent to any safety procedures to be followed	-	2	-	-
<i>Understand potential sources of accidents</i>	1	3	-	-
PC26. avoid accidents while using hazardous chemicals, machines, sharp tools and equipment	1	3	-	-
<i>Use safety gears to avoid accidents</i>	3	5	-	-
PC27. use safety materials such as protective gear, goggles, caps, shoes, etc.(as applicable with workplace)	2	2	-	-
PC28. handle heavy and hazardous materials with care and using appropriate tools and handling equipment such as trolleys, ladders	1	3	-	-
NOS Total	30	70	-	-

Qualification Pack

National Occupational Standards (NOS) Parameters

NOS Code	RSC/N5007
NOS Name	Carry Out Health & Safety
Sector	Rubber
Sub-Sector	Generic
Occupation	Generic
NSQF Level	4
Credits	TBD
Version	1.0
Last Reviewed Date	26/05/2022
Next Review Date	29/03/2026
NSQC Clearance Date	29/03/2023

Qualification Pack

RSC/N5614: Manage chemical hazards in the workplace

Description

This unit is about following the correct procedures to prevent, control, minimise and deal with chemical hazards.

Scope

The scope covers the following :

- Follow safety measures while handling chemicals

Elements and Performance Criteria

Follow safety measures while handling chemicals

To be competent, the user/individual on the job must be able to:

- PC1.** identify the hazards and risks associated with chemicals with the help of safety data sheet
- PC2.** use appropriate Personal Protective Equipment (PPE) as per work requirements
- PC3.** recognise the labels on the chemical containers
- PC4.** carryout risk assessment and work according to the recommended safe practices
- PC5.** follow hierarchical control measures to mitigate risks
- PC6.** follow guidelines to handle chemicals
- PC7.** ensure workplace has well-ventilated and safe chemical storage areas with safety cabinets suited to each substance
- PC8.** isolate hazardous substances in separate storage areas
- PC9.** follow guidelines to collect, segregate and dispose chemicals waste into appropriate containers based on their toxicity or hazardous nature
- PC10.** follow organisational guidelines to protect self and others from chemical hazards
- PC11.** follow safe evacuation and emergency procedure in the event of chemical accidents/emergencies
- PC12.** identify and report any chemical hazards, risks or breaches in site safety to the appropriate authority

Knowledge and Understanding (KU)

The individual on the job needs to know and understand:

- KU1.** organisation guidelines to handle chemicals
- KU2.** safety data sheet
- KU3.** types of chemicals hazards and levels of risks
- KU4.** risk assessment procedure and principle of risk control hierarchy
- KU5.** types of PPE like overalls and aprons, gloves, chemical resistant glasses, respiratory protection, boots etc.

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- KU6.** different types of labels, like dangerous to the environment, explosive, toxic, flammable, corrosive etc.
- KU7.** importance of safe chemical storage areas
- KU8.** safe disposal of chemical wastes
- KU9.** reporting procedures in cases of breaches or hazards, accidents, and emergency situations as per guidelines
- KU10.** procedure for responding to chemical accidents and other emergencies at workplace

Generic Skills (GS)

User/individual on the job needs to know how to:

- GS1.** read and understand documentation clearly
- GS2.** adopt problem-solving approach
- GS3.** suggest solutions to improve work processes
- GS4.** write in English/regional language
- GS5.** seek clarification as and when required

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Assessment Criteria

Assessment Criteria for Outcomes	Theory Marks	Practical Marks	Project Marks	Viva Marks
<i>Follow safety measures while handling chemicals</i>	40	60	-	-
PC1. identify the hazards and risks associated with chemicals with the help of safety data sheet	4	5	-	-
PC2. use appropriate Personal Protective Equipment (PPE) as per work requirements	4	5	-	-
PC3. recognise the labels on the chemical containers	4	5	-	-
PC4. carryout risk assessment and work according to the recommended safe practices	4	5	-	-
PC5. follow hierarchical control measures to mitigate risks	3	5	-	-
PC6. follow guidelines to handle chemicals	3	5	-	-
PC7. ensure workplace has well-ventilated and safe chemical storage areas with safety cabinets suited to each substance	3	5	-	-
PC8. isolate hazardous substances in separate storage areas	3	5	-	-
PC9. follow guidelines to collect, segregate and dispose chemicals waste into appropriate containers based on their toxicity or hazardous nature	3	5	-	-
PC10. follow organisational guidelines to protect self and others from chemical hazards	3	5	-	-
PC11. follow safe evacuation and emergency procedure in the event of chemical accidents/emergencies	3	5	-	-
PC12. identify and report any chemical hazards, risks or breaches in site safety to the appropriate authority	3	5	-	-
NOS Total	40	60	-	-

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National Occupational Standards (NOS) Parameters

NOS Code	RSC/N5614
NOS Name	Manage chemical hazards in the workplace
Sector	Rubber
Sub-Sector	Chemical & Petrochemical
Occupation	Generic
NSQF Level	4
Credits	1
Version	1.0
Last Reviewed Date	NA
Next Review Date	29/03/2026
NSQC Clearance Date	29/03/2023

Qualification Pack

RSC/N5603: Follow ethical and sustainable practices at the workplace

Description

This unit is about Greening of Jobs, PwD, and Behavioural Skills

Scope

The scope covers the following :

- Adopt resource conservation practices (Greening)
- Follow effective waste management practices
- Display behavioural Skills at workplace
- Adopt workplace practices and policies respecting gender and ability differences

Elements and Performance Criteria

Adopt resource conservation practices (Greening)

To be competent, the user/individual on the job must be able to:

- PC1.** follow organizational policies for usage of alternate energy source, such as solar energy, for the site
- PC2.** ensure proper usage of fuels (such as diesel) to minimise pollution and conserve energy
- PC3.** use resources in a responsible manner
- PC4.** ensure water conservation practices at the workplace
- PC5.** carry out processes to prevent soil erosion during plantation and other related activities

Follow effective waste management practices

To be competent, the user/individual on the job must be able to:

- PC6.** identify and segregate different types of waste such as recyclable, non-recyclable, and hazardous waste generated
- PC7.** store waste into different types of bins/containers or appropriate areas based on their categorisation
- PC8.** undertake disposal of non-recyclable waste appropriately as per the prescribed procedure
- PC9.** organise storage of recyclable and reusable material at identified location
- PC10.** ensure proper disposal of hazardous waste as per specified processes

Display behavioural Skills at workplace

To be competent, the user/individual on the job must be able to:

- PC11.** ensure timely execution of the assigned tasks.
- PC12.** exhibit proper etiquette and emotional behaviour at workplace and among team members

Adopt workplace practices and policies respecting gender and ability differences

To be competent, the user/individual on the job must be able to:

- PC13.** follow appropriate non verbal communications taking gender and disability of the person into consideration
- PC14.** communicate in a polite and appropriate manner irrespective of the ability and gender of the person

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- PC15.** ensure to provide work assistance/support to PwD team members and coordinate with them if needed or requested

Knowledge and Understanding (KU)

The individual on the job needs to know and understand:

- KU1.** alternate energy sources (such as solar and wind energy) and their advantages
- KU2.** alternate fuels (such as bio-fuel), their production and consumption for cluster sites
- KU3.** harmful effect (such as pollution) of using fuel such as diesel on the environment and ways to prevent it
- KU4.** efficient utilisation of resources
- KU5.** water harvesting techniques and common practices of conserving water
- KU6.** what is soil erosion and how to prevent it
- KU7.** different types of waste and the ways to categorize waste into dry, wet, recyclable, non-recyclable and items of single-use plastics
- KU8.** usage of different colours of dustbins for proper waste management and waste disposal methods
- KU9.** feedback from supervisor and deal in constructive manner
- KU10.** gender based and PwD concepts, issues and legislation and statutory laws, acts, and provisions defined for PwD
- KU11.** various medical conditions associated with PwD and rights and duties at the workplace with respect to PwD

Generic Skills (GS)

User/individual on the job needs to know how to:

- GS1.** make timely decisions for efficient utilization of resources
- GS2.** write in English/regional language and complete written work with attention to detail
- GS3.** communicate effectively with colleagues
- GS4.** identify cause and effect of greening of jobs
- GS5.** maintain data on waste disposal at workplace
- GS6.** ensure punctuality, proper utilization of time and management workload efficiently
- GS7.** interact with all stakeholders in a polite and courteous manner
- GS8.** provide support in dealing with stress and anxiety help colleagues to work efficiently
- GS9.** create awareness about maintaining hygiene at workplace

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Assessment Criteria

Assessment Criteria for Outcomes	Theory Marks	Practical Marks	Project Marks	Viva Marks
<i>Adopt resource conservation practices (Greening)</i>	11	26	-	-
PC1. follow organizational policies for usage of alternate energy source, such as solar energy, for the site	3	3	-	-
PC2. ensure proper usage of fuels (such as diesel) to minimise pollution and conserve energy	2	6	-	-
PC3. use resources in a responsible manner	2	6	-	-
PC4. ensure water conservation practices at the workplace	2	5	-	-
PC5. carry out processes to prevent soil erosion during plantation and other related activities	2	6	-	-
<i>Follow effective waste management practices</i>	13	17	-	-
PC6. identify and segregate different types of waste such as recyclable, non-recyclable, and hazardous waste generated	3	4	-	-
PC7. store waste into different types of bins/containers or appropriate areas based on their categorisation	3	4	-	-
PC8. undertake disposal of non-recyclable waste appropriately as per the prescribed procedure	3	4	-	-
PC9. organise storage of recyclable and reusable material at identified location	2	3	-	-
PC10. ensure proper disposal of hazardous waste as per specified processes	2	2	-	-
<i>Display behavioural Skills at workplace</i>	5	5	-	-
PC11. ensure timely execution of the assigned tasks.	4	2	-	-
PC12. exhibit proper etiquette and emotional behaviour at workplace and among team members	1	3	-	-

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Assessment Criteria for Outcomes	Theory Marks	Practical Marks	Project Marks	Viva Marks
<i>Adopt workplace practices and policies respecting gender and ability differences</i>	11	12	-	-
PC13. follow appropriate non verbal communications taking gender and disability of the person into consideration	4	4	-	-
PC14. communicate in a polite and appropriate manner irrespective of the ability and gender of the person	3	4	-	-
PC15. ensure to provide work assistance/support to PwD team members and coordinate with them if needed or requested	4	4	-	-
NOS Total	40	60	-	-

Qualification Pack

National Occupational Standards (NOS) Parameters

NOS Code	RSC/N5603
NOS Name	Follow ethical and sustainable practices at the workplace
Sector	Rubber
Sub-Sector	Generic
Occupation	Generic
NSQF Level	4
Credits	TBD
Version	1.0
Last Reviewed Date	31/03/2022
Next Review Date	29/03/2026
NSQC Clearance Date	29/03/2023

Qualification Pack

DGT/VSQ/N0102: Employability Skills (60 Hours)

Description

This unit is about employability skills, Constitutional values, becoming a professional in the 21st Century, digital, financial, and legal literacy, diversity and Inclusion, English and communication skills, customer service, entrepreneurship, and apprenticeship, getting ready for jobs and career development.

Scope

The scope covers the following :

- Introduction to Employability Skills
- Constitutional values - Citizenship
- Becoming a Professional in the 21st Century
- Basic English Skills
- Career Development & Goal Setting
- Communication Skills
- Diversity & Inclusion
- Financial and Legal Literacy
- Essential Digital Skills
- Entrepreneurship
- Customer Service
- Getting ready for Apprenticeship & Jobs

Elements and Performance Criteria

Introduction to Employability Skills

To be competent, the user/individual on the job must be able to:

- PC1.** identify employability skills required for jobs in various industries
- PC2.** identify and explore learning and employability portals

Constitutional values – Citizenship

To be competent, the user/individual on the job must be able to:

- 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

Becoming a Professional in the 21st Century

To be competent, the user/individual on the job must be able to:

- PC5.** recognize the significance of 21st Century Skills for employment
- PC6.** practice the 21st Century Skills such as Self-Awareness, Behaviour 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

Basic English Skills

To be competent, the user/individual on the job must be able to:

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- 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

Career Development & Goal Setting

To be competent, the user/individual on the job must be able to:

- PC10.** understand the difference between job and career
- PC11.** prepare a career development plan with short- and long-term goals, based on aptitude

Communication Skills

To be competent, the user/individual on the job must be able to:

- PC12.** follow verbal and non-verbal communication etiquette and active listening techniques in various settings
- PC13.** work collaboratively with others in a team

Diversity & Inclusion

To be competent, the user/individual on the job must be able to:

- PC14.** communicate and behave appropriately with all genders and PwD
- PC15.** escalate any issues related to sexual harassment at workplace according to POSH Act

Financial and Legal Literacy

To be competent, the user/individual on the job must be able to:

- 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 compute income, expenses, taxes, investments etc
- PC19.** identify relevant rights and laws and use legal aids to fight against legal exploitation

Essential Digital Skills

To be competent, the user/individual on the job must be able to:

- PC20.** operate digital devices and carry out basic internet operations securely and safely
- 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

Entrepreneurship

To be competent, the user/individual on the job must be able to:

- 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

Customer Service

To be competent, the user/individual on the job must be able to:

- PC26.** identify different types of customers
- PC27.** identify and respond to customer requests and needs in a professional manner.

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PC28. follow appropriate hygiene and grooming standards

Getting ready for apprenticeship & Jobs

To be competent, the user/individual on the job must be able to:

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

PC32. answer questions politely, with clarity and confidence, during recruitment and selection

PC33. identify apprenticeship opportunities and register for it as per guidelines and requirements

Knowledge and Understanding (KU)

The individual on the job needs to know and understand:

KU1. need for employability skills and different learning and employability related portals

KU2. various constitutional and personal values

KU3. different environmentally sustainable practices and their importance

KU4. Twenty first (21st) century skills and their importance

KU5. how to use English language for effective verbal (face to face and telephonic) and written communication in formal and informal set up

KU6. importance of career development and setting long- and short-term goals

KU7. about effective communication

KU8. POSH Act

KU9. Gender sensitivity and inclusivity

KU10. different types of financial institutes, products, and services

KU11. how to compute income and expenditure

KU12. importance of maintaining safety and security in offline and online financial transactions

KU13. different legal rights and laws

KU14. different types of digital devices and the procedure to operate them safely and securely

KU15. how to create and operate an e- mail account and use applications such as word processors, spreadsheets etc.

KU16. how to identify business opportunities

KU17. types and needs of customers

KU18. how to apply for a job and prepare for an interview

KU19. apprenticeship scheme and the process of registering on apprenticeship portal

Generic Skills (GS)

User/individual on the job needs to know how to:

GS1. read and write different types of documents/instructions/correspondence

GS2. communicate effectively using appropriate language in formal and informal settings

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- GS3.** behave politely and appropriately with all
- GS4.** how to work in a virtual mode
- GS5.** perform calculations efficiently
- GS6.** solve problems effectively
- GS7.** pay attention to details
- GS8.** manage time efficiently
- GS9.** maintain hygiene and sanitization to avoid infection

Qualification Pack

Assessment Criteria

Assessment Criteria for Outcomes	Theory Marks	Practical Marks	Project Marks	Viva Marks
<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, Behaviour 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	-	-

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Assessment Criteria for Outcomes	Theory Marks	Practical Marks	Project Marks	Viva Marks
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>	2	2	-	-
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 compute income, expenses, taxes, investments etc	-	-	-	-
PC19. identify relevant rights and laws and use legal aids to fight against legal exploitation	-	-	-	-
<i>Essential Digital Skills</i>	3	4	-	-
PC20. operate digital devices and carry out basic internet operations securely and safely	-	-	-	-
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	-	-	-	-

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Assessment Criteria for Outcomes	Theory Marks	Practical Marks	Project Marks	Viva Marks
<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 and respond to customer requests and needs in a professional manner.	-	-	-	-
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	-	-	-	-
PC32. answer questions politely, with clarity and confidence, during recruitment and selection	-	-	-	-
PC33. identify apprenticeship opportunities and register for it as per guidelines and requirements	-	-	-	-
NOS Total	20	30	-	-

Qualification Pack

National Occupational Standards (NOS) Parameters

NOS Code	DGT/VSQ/N0102
NOS Name	Employability Skills (60 Hours)
Sector	Cross Sectoral
Sub-Sector	Professional Skills
Occupation	Employability
NSQF Level	4
Credits	2
Version	1.0
Last Reviewed Date	NA
Next Review Date	28/02/2026
NSQC Clearance Date	28/02/2023

Assessment Guidelines and Assessment Weightage

Assessment Guidelines

1. Criteria for assessment for each Qualification Pack will be created by the Sector Skill Council. Each Element/ Performance Criteria (PC) will be assigned marks proportional to its importance in NOS. SSC will also lay down proportion of marks for Theory and Skills Practical for each Element/ PC.
2. The assessment for the theory part will be based on knowledge bank of questions created by the SSC.
3. Assessment will be conducted for all compulsory NOS, and where applicable, on the selected elective/option NOS/set of NOS.
4. Individual assessment agencies will create unique question papers for theory part for each candidate at each examination/training center (as per assessment criteria below).
5. Individual assessment agencies will create unique evaluations for skill practical for every student at each examination/ training center based on these criteria.
6. To pass the Qualification Pack assessment, every trainee should score the Recommended Pass 70% aggregate for the QP.
7. In case of unsuccessful completion, the trainee may seek reassessment on the Qualification Pack.

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Minimum Aggregate Passing % at QP Level : 70

(Please note: Every Trainee should score a minimum aggregate passing percentage as specified above, to successfully clear the Qualification Pack assessment.)

Assessment Weightage

Compulsory NOS

National Occupational Standards	Theory Marks	Practical Marks	Project Marks	Viva Marks	Total Marks	Weightage
RSC/N7401.Perform chemical manufacturing operations	40	60	0	0	100	30
RSC/N5610.Coordinate and communicate effectively at the workplace	40	60	-	-	100	10
RSC/N5001.Carry out housekeeping	40	60	-	-	100	10
RSC/N5002.Carry out reporting and documentation	40	60	-	-	100	10
RSC/N5007.Carry Out Health & Safety	30	70	-	-	100	10
RSC/N5614.Manage chemical hazards in the workplace	40	60	-	-	100	10
RSC/N5603.Follow ethical and sustainable practices at the workplace	40	60	-	-	100	10
DGT/VSQ/N0102.Employability Skills (60 Hours)	20	30	-	-	50	10
Total	290	460	-	-	750	100

Qualification Pack

Acronyms

NOS	National Occupational Standard(s)
NSQF	National Skills Qualifications Framework
QP	Qualifications Pack
TVET	Technical and Vocational Education and Training
SOP	Standard operating procedure

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Glossary

Sector	Sector is a conglomeration of different business operations having similar business and interests. It may also be defined as a distinct subset of the economy whose components share similar characteristics and interests.
Sub-sector	Sub-sector is derived from a further breakdown based on the characteristics and interests of its components.
Occupation	Occupation is a set of job roles, which perform similar/ related set of functions in an industry.
Job role	Job role defines a unique set of functions that together form a unique employment opportunity in an organisation.
Occupational Standards (OS)	OS specify the standards of performance an individual must achieve when carrying out a function in the workplace, together with the Knowledge and Understanding (KU) they need to meet that standard consistently. Occupational Standards are applicable both in the Indian and global contexts.
Performance Criteria (PC)	Performance Criteria (PC) are statements that together specify the standard of performance required when carrying out a task.
National Occupational Standards (NOS)	NOS are occupational standards which apply uniquely in the Indian context.
Qualifications Pack (QP)	QP comprises the set of OS, together with the educational, training and other criteria required to perform a job role. A QP is assigned a unique qualifications pack code.
Unit Code	Unit code is a unique identifier for an Occupational Standard, which is denoted by an 'N'
Unit Title	Unit title gives a clear overall statement about what the incumbent should be able to do.
Description	Description gives a short summary of the unit content. This would be helpful to anyone searching on a database to verify that this is the appropriate OS they are looking for.
Scope	Scope is a set of statements specifying the range of variables that an individual may have to deal with in carrying out the function which have a critical impact on quality of performance required.

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Knowledge and Understanding (KU)	Knowledge and Understanding (KU) are statements which together specify the technical, generic, professional and organisational specific knowledge that an individual needs in order to perform to the required standard.
Organisational Context	Organisational context includes the way the organisation is structured and how it operates, including the extent of operative knowledge managers have of their relevant areas of responsibility.
Technical Knowledge	Technical knowledge is the specific knowledge needed to accomplish specific designated responsibilities.
Core Skills/ Generic Skills (GS)	Core skills or Generic Skills (GS) are a group of skills that are the key to learning and working in today's world. These skills are typically needed in any work environment in today's world. These skills are typically needed in any work environment. In the context of the OS, these include communication related skills that are applicable to most job roles.
Electives	Electives are NOS/set of NOS that are identified by the sector as contributive to specialization in a job role. There may be multiple electives within a QP for each specialized job role. Trainees must select at least one elective for the successful completion of a QP with Electives.
Options	Options are NOS/set of NOS that are identified by the sector as additional skills. There may be multiple options within a QP. It is not mandatory to select any of the options to complete a QP with Options.