



Lab assistant - Ceramics

QP Code: HCS/Q1002

Version: 3.0

NSQF Level: 3.5

Handicrafts and Carpet Sector Skill Council || OCF, Plot No. 2, Pocket 9, Sector B, Vasant Kunj
New Delhi - 110070 || email:project.cen@hcsc.in

Contents

HCS/Q1002: Lab assistant - Ceramics	3
<i>Brief Job Description</i>	3
Applicable National Occupational Standards (NOS)	3
<i>Compulsory NOS</i>	3
<i>Qualification Pack (QP) Parameters</i>	3
HCS/N1005: Receive and Understand the associated procedures	5
HCS/N1006: Perform the Tests	11
HCS/N1009: Clean Up and Equipment Maintenance	17
HCS/N1010: Recordkeeping and Documentation	23
HCS/N9929: Working in a team	32
HCS/N9931: Maintain health and safety at workplace	38
HCS/N9934: Managing Personal Sanitation	43
DGT/VSQ/N0102: Employability Skills (60 Hours)	47
Assessment Guidelines and Weightage	54
<i>Assessment Guidelines</i>	54
<i>Assessment Weightage</i>	55
Acronyms	56
Glossary	57

HCS/Q1002: Lab assistant - Ceramics

Brief Job Description

A Ceramics Lab Assistant supports the production and testing of ceramic materials by preparing samples, assisting with experiments, and maintaining equipment, ensuring a safe and efficient working environment.

Personal Attributes

A Ceramics Lab Assistant is careful and pays close attention to detail to make sure the ceramics are made and tested correctly. They work well with others, helping to create a friendly team atmosphere to reach common goals in the lab.

Applicable National Occupational Standards (NOS)

Compulsory NOS:

1. [HCS/N1005: Receive and Understand the associated procedures](#)
2. [HCS/N1006: Perform the Tests](#)
3. [HCS/N1009: Clean Up and Equipment Maintenance](#)
4. [HCS/N1010: Recordkeeping and Documentation](#)
5. [HCS/N9929: Working in a team](#)
6. [HCS/N9931: Maintain health and safety at workplace](#)
7. [HCS/N9934: Managing Personal Sanitation](#)
8. [DGT/VSQ/N0102: Employability Skills \(60 Hours\)](#)

Qualification Pack (QP) Parameters

Sector	Handicrafts and Carpet
Sub-Sector	Ceramics
Occupation	Quality Control & Testing-Ceramics
Country	India
NSQF Level	3.5

Credits	14
Aligned to NCO/ISCO/ISIC Code	NCO-2015/3116.10
Minimum Educational Qualification & Experience	11th grade pass with NA of experience OR 8th grade pass with 1 Year of experience Relevant experience OR 5th grade pass with 2.5 years of experience Relevant experience OR Ability to read and write with 5 Years of experience Relevant experience OR Previous relevant Qualification of NSQF Level (3) with 1.5 years of experience Relevant experience
Minimum Level of Education for Training in School	
Pre-Requisite License or Training	NA
Minimum Job Entry Age	21 Years
Last Reviewed On	NA
Next Review Date	NA
NSQC Approval Date	
Version	3.0

HCS/N1005: Receive and Understand the associated procedures

Description

This OS unit is about receiving and understanding the various associated procedures like the tests, defects and acceptance criteria for the various materials.

Scope

The scope covers the following :

- receive the appropriate parameters
- understand the various defects
- understand the various tests
- understand the acceptance criteria
- understand the sampling plan
- understand reporting and recording

Elements and Performance Criteria

Receive the appropriate parameters

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

- PC1.** communicate with the technical director
- PC2.** receive the defects, tests, acceptance criteria and sampling plan list from the technical director and understand the same
- PC3.** discuss the above parameters with the lab team
- PC4.** clarify any doubts on the above parameters with the technical director
- PC5.** highlight any discrepancies are observed

Understand the various defects

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

- PC6.** understand material-wise list of defects
- PC7.** map defects like the difference in residue, colour changes, variation in melting point, litre weight, flow per second for various materials
- PC8.** understand when typically these defects will be displayed
- PC9.** analyze the causes of defects
- PC10.** map the effects of the defects
- PC11.** assess the impact of the defects in the production

Understand the various tests

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

- PC12.** understand material-wise list of tests
- PC13.** map tests like %residue colour, %residue mesh, setting time find, initial residue, etc for various materials
- PC14.** understand when the tests have to be performed
- PC15.** understand what the tests are supposed to reveal keeping in mind the end product and its usage

PC16. analyze the test results

PC17. map the impact of the test on the overall material quality

Understand the acceptance criteria

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

PC18. understand material-wise list of acceptance criteria

PC19. comprehend the rationale behind the determination of the acceptance criteria

Understand the sampling plan

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

PC20. make note of the typical sampling quantities

PC21. understand how to handle the samples

PC22. deduce how to access the samples

PC23. comprehend how to dispose of the samples

Understand reporting and recording

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

PC24. understand the manner in which test data has to be recorded

PC25. analyze the implications of test reporting

PC26. help in creation of the appropriate templates

PC27. fill the template with correct data and interpretation

Knowledge and Understanding (KU)

The individual on the job needs to know and understand:

KU1. companys policies on: personnel management, relevant legislation, standards, policies, and procedures followed in the company

KU2. organizations history and culture

KU3. organization structure

KU4. companys policies related to dress code and etiquette

KU5. the locations where the materials are typically stored

KU6. the key product lines of the company

KU7. the usually used test parameters

KU8. past test analyses

KU9. past formats for recording and reporting

KU10. importance of testing

KU11. the testing parameters in the ceramics industry

KU12. reporting formats

KU13. effective inter-team communication

KU14. applying basic arithmetic in the testing process

KU15. applying percentages and other associated analyses

KU16. managing his/her time to understand the procedures

KU17. managing his/her time to understand the reporting and recording templates

KU18. handling the samples appropriately

- KU19.** ensuring that there is no mal handling/accidents due to improper handling of the materials
- KU20.** different materials and associated tests
- KU21.** recurring challenges in testing
- KU22.** typical acceptance criteria
- KU23.** typical defects observed
- KU24.** the chemistry knowledge behind the tests
- KU25.** material properties
- KU26.** typical sampling quantities

Generic Skills (GS)

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

- GS1.** write basic process notes
- GS2.** write information on analysis
- GS3.** read about various testing related information
- GS4.** read about industry practices in testing
- GS5.** interact with employees to work efficiently
- GS6.** interact with the supervisor
- GS7.** communicate the gaps in the process, if any to relevant colleagues
- GS8.** apply the test parameters
- GS9.** make recording templates
- GS10.** schedule the testing appropriately
- GS11.** to prioritize and organise to achieve the daily targets
- GS12.** the customer preference, taste, etc and accordingly make crafts
- GS13.** to solve work related problems
- GS14.** how to analyse the material requirement
- GS15.** spot process disruptions and delays
- GS16.** report on any concerns to superiors without delay

Assessment Criteria

Assessment Criteria for Outcomes	Theory Marks	Practical Marks	Project Marks	Viva Marks
<i>Receive the appropriate parameters</i>	5	15	-	-
PC1. communicate with the technical director	1	3	-	-
PC2. receive the defects, tests, acceptance criteria and sampling plan list from the technical director and understand the same	1	3	-	-
PC3. discuss the above parameters with the lab team	1	3	-	-
PC4. clarify any doubts on the above parameters with the technical director	1	3	-	-
PC5. highlight any discrepancies are observed	1	3	-	-
<i>Understand the various defects</i>	6	18	-	-
PC6. understand material-wise list of defects	1	3	-	-
PC7. map defects like the difference in residue, colour changes, variation in melting point, litre weight, flow per second for various materials	1	3	-	-
PC8. understand when typically these defects will be displayed	1	3	-	-
PC9. analyze the causes of defects	1	3	-	-
PC10. map the effects of the defects	1	3	-	-
PC11. assess the impact of the defects in the production	1	3	-	-
<i>Understand the various tests</i>	6	18	-	-
PC12. understand material-wise list of tests	1	3	-	-
PC13. map tests like %residue colour, %residue mesh, setting time find, initial residue, etc for various materials	1	3	-	-
PC14. understand when the tests have to be performed	1	3	-	-

Assessment Criteria for Outcomes	Theory Marks	Practical Marks	Project Marks	Viva Marks
PC15. understand what the tests are supposed to reveal keeping in mind the end product and its usage	1	3	-	-
PC16. analyze the test results	1	3	-	-
PC17. map the impact of the test on the overall material quality	1	3	-	-
<i>Understand the acceptance criteria</i>	2	6	-	-
PC18. understand material-wise list of acceptance criteria	1	3	-	-
PC19. comprehend the rationale behind the determination of the acceptance criteria	1	3	-	-
<i>Understand the sampling plan</i>	4	8	-	-
PC20. make note of the typical sampling quantities	1	2	-	-
PC21. understand how to handle the samples	1	2	-	-
PC22. deduce how to access the samples	1	2	-	-
PC23. comprehend how to dispose of the samples	1	2	-	-
<i>Understand reporting and recording</i>	4	8	-	-
PC24. understand the manner in which test data has to be recorded	1	2	-	-
PC25. analyze the implications of test reporting	1	2	-	-
PC26. help in creation of the appropriate templates	1	2	-	-
PC27. fill the template with correct data and interpretation	1	2	-	-
NOS Total	27	73	-	-

National Occupational Standards (NOS) Parameters

NOS Code	HCS/N1005
NOS Name	Receive and Understand the associated procedures
Sector	Handicrafts and Carpet
Sub-Sector	Handicrafts (Ceramics)
Occupation	Quality Control & Testing-Ceramics
NSQF Level	3.5
Credits	3
Version	1.0
Next Review Date	NA

HCS/N1006: Perform the Tests

Description

This OS unit is about performing the tests in line with the recommended procedures and schedule.

Scope

The scope covers the following :

- taking the appropriate samples
- testing the samples
- documentation of the testing process and findings
- ensure quality and productivity standards

Elements and Performance Criteria

Taking the appropriate samples

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

- PC1.** understand the reason for the sampling
- PC2.** recall the sample amount for the respective materials
- PC3.** apply the appropriate sampling methodology
- PC4.** take the appropriate amount of sample after weighing
- PC5.** handle the samples carefully
- PC6.** replace the materials in location after taking the samples

Testing the samples

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

- PC7.** correlate the testing methodology according to the material and test
- PC8.** place the samples appropriately on the equipment
- PC9.** perform the appropriate tests on the samples
- PC10.** use the various testing equipment appropriately
- PC11.** observe the test process
- PC12.** observe the defects and know what defects can be observed in the test process
- PC13.** understand why the defects arise
- PC14.** make notes during the process
- PC15.** retire the equipment after the test
- PC16.** remove the samples and clean the equipment after the test

Documentation of the testing process and findings

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

- PC17.** record details of the batch
- PC18.** record the details of the samples
- PC19.** record the details on the product lines
- PC20.** compute the percentages and any other details required
- PC21.** compute details for achieving the acceptance criteria

- PC22.** note the same appropriately
 - PC23.** interpret the results when required
 - PC24.** ensure all results recorded are in line with the template
- Ensure quality and productivity standards*
- To be competent, the user/individual on the job must be able to:
- PC25.** alert about any recurrent issue
 - PC26.** avoid overall production losses due to quality
 - PC27.** communicate where rework is required
 - PC28.** perform testing on the targeted number per day
 - PC29.** complete all activities as per internal standards

Knowledge and Understanding (KU)

The individual on the job needs to know and understand:

- KU1.** companys policies on: personnel management, relevant legislation, standards, policies, and procedures followed in the company
- KU2.** organizations history and culture
- KU3.** organisation structure
- KU4.** companys policies related to dress code and etiquette
- KU5.** the locations where the materials are typically stored
- KU6.** the key product lines of the company
- KU7.** the usually used testing parameters
- KU8.** importance of testing on materials
- KU9.** the testing techniques in ceramics industry
- KU10.** reporting formats
- KU11.** effective inter-team communication
- KU12.** applying basic arithmetic in the testing process
- KU13.** managing his/her time to test the products
- KU14.** appropriately scheduling test so that there is sufficient time for recording the data
- KU15.** handling the material samples appropriately
- KU16.** ensuring that there is no mal handling/accidents due to improper handling of the samples
- KU17.** different product lines and associated tests
- KU18.** various stages of production
- KU19.** recurring challenges in testing
- KU20.** acceptance criteria
- KU21.** typical defects
- KU22.** typical stage of defects
- KU23.** chemistry basics
- KU24.** material properties
- KU25.** various sampling techniques

Generic Skills (GS)

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

- GS1.** write basic process notes.
- GS2.** write information on analysis.
- GS3.** read about various testing related information.
- GS4.** read about industry practices in testing.
- GS5.** interact with employees to work efficiently.
- GS6.** interact with the supervisor.
- GS7.** communicate the gaps in process, if any to relevant colleagues.
- GS8.** apply the test parameters.
- GS9.** make recording templates.
- GS10.** schedule the testing appropriately.
- GS11.** to prioritize and organise to achieve the daily targets.
- GS12.** the customer preference, taste, etc and accordingly make crafts.
- GS13.** to solve work related problems.
- GS14.** how to analyse the material requirement.
- GS15.** spot process disruptions and delays.
- GS16.** report on any concerns to superiors without delay.

Assessment Criteria

Assessment Criteria for Outcomes	Theory Marks	Practical Marks	Project Marks	Viva Marks
<i>Taking the appropriate samples</i>	6	18	-	-
PC1. understand the reason for the sampling	1	3	-	-
PC2. recall the sample amount for the respective materials	1	3	-	-
PC3. apply the appropriate sampling methodology	1	3	-	-
PC4. take the appropriate amount of sample after weighing	1	3	-	-
PC5. handle the samples carefully	1	3	-	-
PC6. replace the materials in location after taking the samples	1	3	-	-
<i>Testing the samples</i>	10	27	-	-
PC7. correlate the testing methodology according to the material and test	1	3	-	-
PC8. place the samples appropriately on the equipment	1	3	-	-
PC9. perform the appropriate tests on the samples	1	3	-	-
PC10. use the various testing equipment appropriately	1	3	-	-
PC11. observe the test process	1	3	-	-
PC12. observe the defects and know what defects can be observed in the test process	1	3	-	-
PC13. understand why the defects arise	1	3	-	-
PC14. make notes during the process	1	2	-	-
PC15. retire the equipment after the test	1	2	-	-
PC16. remove the samples and clean the equipment after the test	1	2	-	-

Assessment Criteria for Outcomes	Theory Marks	Practical Marks	Project Marks	Viva Marks
<i>Documentation of the testing process and findings</i>	8	16	-	-
PC17. record details of the batch	1	2	-	-
PC18. record the details of the samples	1	2	-	-
PC19. record the details on the product lines	1	2	-	-
PC20. compute the percentages and any other details required	1	2	-	-
PC21. compute details for achieving the acceptance criteria	1	2	-	-
PC22. note the same appropriately	1	2	-	-
PC23. interpret the results when required	1	2	-	-
PC24. ensure all results recorded are in line with the template	1	2	-	-
<i>Ensure quality and productivity standards</i>	5	10	-	-
PC25. alert about any recurrent issue	1	2	-	-
PC26. avoid overall production losses due to quality	1	2	-	-
PC27. communicate where rework is required	1	2	-	-
PC28. perform testing on the targeted number per day	1	2	-	-
PC29. complete all activities as per internal standards	1	2	-	-
NOS Total	29	71	-	-

National Occupational Standards (NOS) Parameters

NOS Code	HCS/N1006
NOS Name	Perform the Tests
Sector	Handicrafts and Carpet
Sub-Sector	Handicrafts (Ceramics)
Occupation	Quality Control & Testing-Ceramics
NSQF Level	3.5
Credits	4
Version	1.0
Next Review Date	NA

HCS/N1009: Clean Up and Equipment Maintenance

Description

In the role of a Lab Assistant in Ceramics, maintaining a clean and organized workspace is crucial. Responsibilities such as clean-up and equipment maintenance play a vital role in preventing contamination and ensuring the longevity of laboratory tools. These tasks contribute significantly to creating a productive and safe environment for all users of the lab, fostering efficiency and safety in the overall workspace.

Scope

The scope covers the following :

- clean-up tasks
- equipment maintenance
- general lab cleanliness and organization

Elements and Performance Criteria

Clean up Tasks

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

- PC1.** ensure the cleanliness of the surfaces like tables and counters to remove clay, glaze, and dust after each use. Use damp cloths or sponges, and dry surfaces thoroughly to prevent residue hardening and mold growth.
- PC2.** to wash all tools (carving tools, rolling pins, brushes, etc.) after use to remove clay and glaze. Store them properly and ensure they are completely dry before storage to prevent damage.
- PC3.** to wash all tools (carving tools, rolling pins, brushes, etc.) after use to remove clay and glaze. Store them properly and ensure they are completely dry before storage to prevent damage.
- PC4.** dispose of ceramics waste safely by emptying bins regularly and allowing clay scraps to dry before disposing or recycling. Follow safety protocols for glaze residue and chemicals to avoid contamination.

2. Equipment Maintenance

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

- PC5.** regularly inspect all equipment, including pottery wheels, slab rollers, and hand tools, for wear and tear. Check for loose parts, lubrication, and dust build-up. Report any damage or malfunction to a supervisor immediately
- PC6.** regularly check kilns for wear, ensuring elements, temperature gauges, and insulation are in good condition. Test temperature controls for accuracy, and ensure electrical components are safe.
- PC7.** ensure the cleanliness of pottery wheels after each use to prevent clay build-up. Check for wobbling or noise, ensuring foot pedals function properly. Clean slab rollers and lubricate them periodically.
- PC8.** regularly clean and maintain dust collection systems to protect against harmful ceramic dust. Replace clogged filters and empty dust bins often.

General Lab Cleanliness and Organization

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

- PC9.** regularly check the inventory of clay, glazes, and other materials. Monitor stock levels, restock as necessary, and dispose of expired items safely. Clearly label and organize materials for easy access.
- PC10.** ensure all safety equipment, such as fire extinguishers and emergency eyewash stations, is functional and accessible. Safety signs should be visible and well-maintained.

Knowledge and Understanding (KU)

The individual on the job needs to know and understand:

- KU1.** about lab safety procedures, including personal protective equipment (PPE), emergency protocols (for fire, chemical spills, and electrical hazards), and the locations of safety equipment like fire extinguishers, first-aid kits, and eyewash stations.
- KU2.** about various ceramics materials, including types of clay (stoneware, earthenware, porcelain), glazes, and supplies. Understanding their properties and handling is essential for safety and successful pottery-making.
- KU3.** how to operate ceramics equipment like pottery wheels, kilns, slab rollers, extruders, and mixers safely. They should also understand machine maintenance, including lubrication, cleaning, and basic troubleshooting.
- KU4.** regular cleaning, upkeep, and minor repairs of lab equipment are essential, including maintaining pottery wheels, kilns, and glaze stations, and ensuring tools are cleaned and stored properly after use.
- KU5.** proper waste disposal for ceramic materials, including clay scraps and glaze chemicals. They should be familiar with environmental regulations and lab policies for hazardous materials
- KU6.** kiln operations, including loading/unloading, temperature management, and identifying common firing issues. The Lab Assistant should monitor the kiln and assist safely in firing processes
- KU7.** basic skills like measuring materials, mixing solutions, and following instructions. They must maintain an organized and systematic approach for consistency and precision.
- KU8.** the, maintenance of accurate inventories and ensuring proper labeling and storage of materials to minimize confusion and ensure safe handling.
- KU9.** equipment malfunctions or material issues (like glaze or clay consistency), the Lab Assistant should troubleshoot basic problems and either resolve them or report them to a supervisor or technician.

Generic Skills (GS)

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

- GS1.** handle materials and equipment meticulously. Small errors, like mislabeling or failing to clean tools, can cause larger issues.
- GS2.** identify equipment or process issues and finding solutions is essential for maintaining smooth lab operations.
- GS3.** juggle tasks such as cleaning, organizing, and assisting users. Effective time management keeps the lab operational without delays.
- GS4.** communicate clearly for assisting users and explaining safety protocols, ensuring smooth interactions.

- GS5.** have excellent organization to keep the lab clean, stocked, and efficiently set up for easy access to materials
- GS6.** have good hand-eye coordination is important for tasks like operating pottery wheels.
- GS7.** manage the team for collaboration with staff and students is key for a smoothly functioning lab
- GS8.** be flexible to changes, such as unexpected student rushes or equipment issues, is important.
- GS9.** proactively maintaining the lab, restocking supplies, and identifying improvements without waiting for direction is essential

Assessment Criteria

Assessment Criteria for Outcomes	Theory Marks	Practical Marks	Project Marks	Viva Marks
<i>Clean up Tasks</i>	8	32	-	-
PC1. ensure the cleanliness of the surfaces like tables and counters to remove clay, glaze, and dust after each use. Use damp cloths or sponges, and dry surfaces thoroughly to prevent residue hardening and mold growth.	2	8	-	-
PC2. to wash all tools (carving tools, rolling pins, brushes, etc.) after use to remove clay and glaze. Store them properly and ensure they are completely dry before storage to prevent damage.	2	8	-	-
PC3. to wash all tools (carving tools, rolling pins, brushes, etc.) after use to remove clay and glaze. Store them properly and ensure they are completely dry before storage to prevent damage.	2	8	-	-
PC4. dispose of ceramics waste safely by emptying bins regularly and allowing clay scraps to dry before disposing or recycling. Follow safety protocols for glaze residue and chemicals to avoid contamination.	2	8	-	-
<i>2. Equipment Maintenance</i>	8	32	-	-
PC5. regularly inspect all equipment, including pottery wheels, slab rollers, and hand tools, for wear and tear. Check for loose parts, lubrication, and dust build-up. Report any damage or malfunction to a supervisor immediately	2	8	-	-
PC6. regularly check kilns for wear, ensuring elements, temperature gauges, and insulation are in good condition. Test temperature controls for accuracy, and ensure electrical components are safe.	2	8	-	-
PC7. ensure the cleanliness of pottery wheels after each use to prevent clay build-up. Check for wobbling or noise, ensuring foot pedals function properly. Clean slab rollers and lubricate them periodically.	2	8	-	-
PC8. regularly clean and maintain dust collection systems to protect against harmful ceramic dust. Replace clogged filters and empty dust bins often.	2	8	-	-

Assessment Criteria for Outcomes	Theory Marks	Practical Marks	Project Marks	Viva Marks
<i>General Lab Cleanliness and Organization</i>	4	16	-	-
PC9. regularly check the inventory of clay, glazes, and other materials. Monitor stock levels, restock as necessary, and dispose of expired items safely. Clearly label and organize materials for easy access.	2	8	-	-
PC10. ensure all safety equipment, such as fire extinguishers and emergency eyewash stations, is functional and accessible. Safety signs should be visible and well-maintained.	2	8	-	-
NOS Total	20	80	-	-

National Occupational Standards (NOS) Parameters

NOS Code	HCS/N1009
NOS Name	Clean Up and Equipment Maintenance
Sector	Handicrafts and Carpet
Sub-Sector	
Occupation	Quality Control & Testing-Ceramics
NSQF Level	3.5
Credits	1
Version	1.0
Next Review Date	NA

HCS/N1010: Recordkeeping and Documentation

Description

As a Lab Assistant in Ceramics, I recognize that maintaining accurate and comprehensive records is vital for the efficient operation of the lab. Recordkeeping encompasses tracking key aspects such as materials, equipment, inventory, safety protocols, and incidents. Effective documentation is essential for robust lab management and ensuring compliance with safety standards. It enhances the lab's operational efficiency and provides invaluable information for future projects, audits, and troubleshooting. These records are not only critical for meeting legal and regulatory requirements but also for upholding best practices consistently across all lab activities.

Scope

The scope covers the following :

- maintain detailed inventory records
- replenishment, stock rotation and equipment maintenance logs
- problem diagnosis and repair documentation
- kiln firing records and troubleshooting
- attendance and activity logs
- feedback and instruction logs
- regulatory and safety compliance
- document storage and labelling

Elements and Performance Criteria

Maintain Detailed Inventory Records

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

- PC1.** accurately track all ceramic materials, including but not limited to various types of clay (such as stoneware, earthenware, and porcelain), glazes, oxides, underglazes, and other consumables.
- PC2.** log all incoming materials with precision, noting the supplier information, delivery dates, and specific storage conditions.
- PC3.** monitor daily logs of clay, glaze mixtures, and other consumables utilized by lab users, including students and artists, and update the inventory records accordingly to mitigate the risk of overuse or waste.
- PC4.** vigilantly track the expiration dates and shelf lives of materials, such as glazes or chemicals, and proactively reorder them to ensure uninterrupted availability before stock depletion occurs.

Replenishment, Stock Rotation and Equipment Maintenance Logs

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

- PC5.** implement a systematic approach for inventory management by prioritizing the use of older materials before newer supplies.
- PC6.** conduct regular inspections to ensure that all materials are stored under the appropriate conditions, such as temperature-controlled environments for specific glazes and clay types.

- PC7.** maintain a thorough log of all maintenance activities related to laboratory equipment, including pottery wheels, kilns, slab rollers, extruders, and mixing machines.
- PC8.** schedule regular inspections of the equipment to ensure optimal performance and to extend their operational lifespan.

Problem Diagnosis and Repair Documentation

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

- PC9.** document any equipment malfunctions or breakdowns, noting the exact nature of the issue, corrective measures taken, and timeframes for resolution.
- PC10.** maintain a service history for each piece of equipment, which is essential for diagnosing recurring problems and ensuring compliance with safety standards.

Kiln Firing Records and Troubleshooting

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

- PC11.** meticulously record specific firing details, including the type and quantity of materials placed in the kiln, the complete firing schedule—encompassing temperature settings, ramping rates, and hold durations—and the firing atmosphere, whether oxidizing or reducing.
- PC12.** log the kiln's temperature at each stage, such as preheat, ramp-up, soak, and cooling phases.
- PC13.** document the outcomes of each firing, noting both successful results and any issues encountered, such as glaze defects or cracking, along with potential causes. record any kiln failures should be including instances of over-firings, under-firings, or material-specific concerns.

Attendance and Activity Logs

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

- PC14.** to maintain accurate records of laboratory users, including students, artists, and technicians.
- PC15.** to record any special requirements or accommodations made for users, such as specific material preferences, safety considerations, or instructions provided.

Feedback and Instruction Logs

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

- PC16.** record any feedback received from users concerning the laboratory's facilities, equipment, or materials.
- PC17.** to document any specific instructions or safety guidelines provided to users, particularly pertaining to equipment usage (e.g., kiln operation, pottery wheels) and the handling of hazardous materials (e.g., glazes that may contain lead or other toxic substances).

Regulatory and Safety Compliance

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

- PC18.** ensure that all laboratory operations adhere to local, institutional, and environmental regulations.
- PC19.** document compliance with safety standards, maintain valid equipment certifications, and prepare regulatory reports, including environmental impact assessments related to waste disposal. kiln emissions.
- PC20.** keep up-to-date records of safety training sessions attended by lab users or staff, ensuring that training aligns with current safety practices and lab standards.

8. Document Storage and Labelling:

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

- PC21.** store all records, whether physical or digital, in an organized and secure system.

- PC22.** ensure that digital records are backed up regularly and that physical records are stored in safe, climate-controlled areas to prevent deterioration or loss.
- PC23.** develop a system that allows quick retrieval of any document when needed. For example, an inventory discrepancy might require fast access to material usage logs, or a safety audit might require quick access to recent inspection records
- PC24.** prepare and submit regular reports on key aspects of lab operations, such as inventory levels, equipment status, maintenance activities, and safety inspection outcomes.
- PC25.** create detailed reports following significant events, such as equipment failures, safety incidents, or changes in procedures.
- PC26.** ensure that all materials used in the ceramics lab, including clays, glazes, chemicals, and tools, are correctly labelled with information such as material name, content, hazards, usage instructions, and expiration dates (for glazes or chemicals).
- PC27.** maintain a clear record of material sources, suppliers, and batch numbers to facilitate traceability for quality control and safety.
- PC28.** index and categorize archived records, ensuring that they are easily accessible for future use, audits, or compliance checks.

Knowledge and Understanding (KU)

The individual on the job needs to know and understand:

- KU1.** establish clear procedures for record-keeping, which includes maintaining, organizing, and storing documents related to lab activities, inventory, safety protocols, and equipment maintenance.
- KU2.** learn how to effectively track materials used in the ceramics lab. This involves the proper categorization of various types of clay, glazes, tools, and consumables.
- KU3.** understand the process for documenting kiln firings. Key data to record includes temperature settings, firing duration, and the results of each firing.
- KU4.** recognize the importance of adhering to safety and regulatory standards in the ceramics lab. Compliance is crucial for ensuring a safe working environment.
- KU5.** maintain detailed equipment logs that document routine maintenance, repairs, and inspections of all tools and machinery, including pottery wheels, kilns, slab rollers, and dust collection systems.
- KU6.** familiarize yourself with the procedures for generating and submitting reports based on collected records. This includes updates on inventory, maintenance status, safety inspections, and kiln firings.
- KU7.** use software programs to track inventory, generate reports, and maintain safety documentation. Additionally, learn how to properly organize and store paper records in a manner that is easily retrievable and secure.
- KU8.** understand the process for properly archiving records that are no longer actively used. This ensures that important information is preserved while keeping the workspace organized.

Generic Skills (GS)

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

- GS1.** ensure accuracy in data entry, including material usage, inventory counts, and equipment maintenance logs.
- GS2.** systematically categorize and store documents to facilitate easy information retrieval when needed.
- GS3.** balance the documentation of activities with other responsibilities, such as equipment maintenance, inventory checks, and assisting lab users.
- GS4.** record details of incidents, maintenance, and inventory, and communicate these records effectively to supervisors and colleagues.

Assessment Criteria

Assessment Criteria for Outcomes	Theory Marks	Practical Marks	Project Marks	Viva Marks
<i>Maintain Detailed Inventory Records</i>	4	10	-	-
PC1. accurately track all ceramic materials, including but not limited to various types of clay (such as stoneware, earthenware, and porcelain), glazes, oxides, underglazes, and other consumables.	1	3	-	-
PC2. log all incoming materials with precision, noting the supplier information, delivery dates, and specific storage conditions.	1	3	-	-
PC3. monitor daily logs of clay, glaze mixtures, and other consumables utilized by lab users, including students and artists, and update the inventory records accordingly to mitigate the risk of overuse or waste.	1	2	-	-
PC4. vigilantly track the expiration dates and shelf lives of materials, such as glazes or chemicals, and proactively reorder them to ensure uninterrupted availability before stock depletion occurs.	1	2	-	-
<i>Replenishment, Stock Rotation and Equipment Maintenance Logs</i>	4	8	-	-
PC5. implement a systematic approach for inventory management by prioritizing the use of older materials before newer supplies.	1	2	-	-
PC6. conduct regular inspections to ensure that all materials are stored under the appropriate conditions, such as temperature-controlled environments for specific glazes and clay types.	1	2	-	-
PC7. maintain a thorough log of all maintenance activities related to laboratory equipment, including pottery wheels, kilns, slab rollers, extruders, and mixing machines.	1	2	-	-
PC8. schedule regular inspections of the equipment to ensure optimal performance and to extend their operational lifespan.	1	2	-	-
<i>Problem Diagnosis and Repair Documentation</i>	2	6	-	-

Assessment Criteria for Outcomes	Theory Marks	Practical Marks	Project Marks	Viva Marks
PC9. document any equipment malfunctions or breakdowns, noting the exact nature of the issue, corrective measures taken, and timeframes for resolution.	1	3	-	-
PC10. maintain a service history for each piece of equipment, which is essential for diagnosing recurring problems and ensuring compliance with safety standards.	1	3	-	-
<i>Kiln Firing Records and Troubleshooting</i>	3	9	-	-
PC11. meticulously record specific firing details, including the type and quantity of materials placed in the kiln, the complete firing schedule—encompassing temperature settings, ramping rates, and hold durations—and the firing atmosphere, whether oxidizing or reducing.	1	3	-	-
PC12. log the kiln's temperature at each stage, such as preheat, ramp-up, soak, and cooling phases.	1	3	-	-
PC13. document the outcomes of each firing, noting both successful results and any issues encountered, such as glaze defects or cracking, along with potential causes. record any kiln failures should be including instances of over-firings, under-firings, or material-specific concerns.	1	3	-	-
<i>Attendance and Activity Logs</i>	2	6	-	-
PC14. to maintain accurate records of laboratory users, including students, artists, and technicians.	1	3	-	-
PC15. to record any special requirements or accommodations made for users, such as specific material preferences, safety considerations, or instructions provided.	1	3	-	-
<i>Feedback and Instruction Logs</i>	2	6	-	-
PC16. record any feedback received from users concerning the laboratory's facilities, equipment, or materials.	1	3	-	-

Assessment Criteria for Outcomes	Theory Marks	Practical Marks	Project Marks	Viva Marks
PC17. to document any specific instructions or safety guidelines provided to users, particularly pertaining to equipment usage (e.g., kiln operation, pottery wheels) and the handling of hazardous materials (e.g., glazes that may contain lead or other toxic substances).	1	3	-	-
<i>Regulatory and Safety Compliance</i>	3	9	-	-
PC18. ensure that all laboratory operations adhere to local, institutional, and environmental regulations.	1	3	-	-
PC19. document compliance with safety standards, maintain valid equipment certifications, and prepare regulatory reports, including environmental impact assessments related to waste disposal. kiln emissions.	1	3	-	-
PC20. keep up-to-date records of safety training sessions attended by lab users or staff, ensuring that training aligns with current safety practices and lab standards.	1	3	-	-
<i>8. Document Storage and Labelling:</i>	10	16	-	-
PC21. store all records, whether physical or digital, in an organized and secure system.	1	2	-	-
PC22. ensure that digital records are backed up regularly and that physical records are stored in safe, climate-controlled areas to prevent deterioration or loss.	2	2	-	-
PC23. develop a system that allows quick retrieval of any document when needed. For example, an inventory discrepancy might require fast access to material usage logs, or a safety audit might require quick access to recent inspection records	2	2	-	-
PC24. prepare and submit regular reports on key aspects of lab operations, such as inventory levels, equipment status, maintenance activities, and safety inspection outcomes.	1	2	-	-
PC25. create detailed reports following significant events, such as equipment failures, safety incidents, or changes in procedures.	1	2	-	-

Assessment Criteria for Outcomes	Theory Marks	Practical Marks	Project Marks	Viva Marks
PC26. ensure that all materials used in the ceramics lab, including clays, glazes, chemicals, and tools, are correctly labelled with information such as material name, content, hazards, usage instructions, and expiration dates (for glazes or chemicals).	1	2	-	-
PC27. maintain a clear record of material sources, suppliers, and batch numbers to facilitate traceability for quality control and safety.	1	2	-	-
PC28. index and categorize archived records, ensuring that they are easily accessible for future use, audits, or compliance checks.	1	2	-	-
NOS Total	30	70	-	-

National Occupational Standards (NOS) Parameters

NOS Code	HCS/N1010
NOS Name	Recordkeeping and Documentation
Sector	Handicrafts and Carpet
Sub-Sector	
Occupation	Quality Control & Testing-Ceramics
NSQF Level	3.5
Credits	1
Version	1.0
Next Review Date	NA

HCS/N9929: Working in a team

Description

This NOS describes the communication and coordination skills and knowledge to work with colleagues and supervisor to achieve a smooth and hazard-free workflow.

Scope

The scope covers the following :

- interact with supervisor or superior
- work as a team by coordinating with colleagues within and outside the department and include
- inputs on PwD & Gender Sensitisation
- report and Document

Elements and Performance Criteria

Interact with supervisor or superior

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

- PC1.** comply with health, safety gender, and PwD (People with disability) related instructions applicable to the workplace
- PC2.** actively participate in mock drills/ evacuation procedures; group discussions, training sensitization programs for gender, and PwD awareness organized at the workplace.
- PC3.** receive job orders and instructions from reporting supervisor and receive feedback on work standards.
- PC4.** understand the work output requirements, targets, performance indicators and incentives.
- PC5.** deliver quality work on time and report any anticipated reasons for delays and handover completed work to supervisor
- PC6.** report on any grievances, production defects and any potential hazards.

Work as a team by coordinating with colleagues within and outside the department and include inputs on PwD & Gender Sensitisation

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

- PC7.** communicate maintenance and repair schedule proactively to the supervisor
- PC8.** interact and clarify doubts on design, usage of materials & tools, quality & standards compliance, etc.

Report and Document

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

- PC9.** report in time for shortage or need of raw materials
- PC10.** communicate with colleagues from within and other departments, clearly and effectively on all aspects to carry out the work among the team
- PC11.** maintain the etiquette, use polite language, demonstrate responsible and disciplined behavior towards colleagues.
- PC12.** put team over individual goals and multi-task or share work where necessary supporting the colleagues.
- PC13.** document all the details accurately relating to ones role as required.

Knowledge and Understanding (KU)

The individual on the job needs to know and understand:

- KU1.** knowledge about the importance of gender equality being followed in the organization and policies for reporting any harassment or inappropriate behavior
- KU2.** knowledge about how to accommodate employees with disabilities etiquette to adhere to and proper language and terminology
- KU3.** knowledge about how to communicate, offer help, respecting space, parking etc. for people with disabilities or special needs
- KU4.** knowledge about promoting a safe, accessible and healthy workplace for disabled employees
- KU5.** company's policies on preferred language of communication, incentives, quality standards, personnel management, reporting and escalation matrix policy.
- KU6.** company's standard operating procedure (sop) and the risk and impact of not following them.
- KU7.** procedures for working with colleagues, his/her role and responsibilities in relation to this
- KU8.** organizational hierarchy and the line of reporting structure and work target and review mechanism
- KU9.** procedures to report employment related issues and to deal with conflicts
- KU10.** importance of the individuals role in the organizational workflow and details of the individual responsibilities
- KU11.** tools and equipment handling procedure and common potential hazards in the work place and the procedures to deal with them
- KU12.** effective communication with various categories of people and the different departments in the organization
- KU13.** to document the job activity as required like the check sheets, history sheets, etc
- KU14.** expressing and addressing grievances appropriately, deal with difficult work relationships and manage the internal conflicts effectively

Generic Skills (GS)

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

- GS1.** create a positive and inclusive workplace atmosphere without any kind of bias/discrimination towards any employee
- GS2.** actively take part in any discussion/workshop organized for gender sensitization training
- GS3.** read and comprehend written instructions related to gender equality issues in the organization
- GS4.** identify and report any harassment or inappropriate behavior towards any employee
- GS5.** create a positive and inclusive workplace atmosphere without any kind of bias/discrimination towards any employee with disability or special needs
- GS6.** actively take part in any discussion/workshop organized for disability sensitization training.
- GS7.** read and comprehend written instructions related to equality issues in the organization related to disabled persons
- GS8.** read job sheets, design sheet and information displayed at the workplace

- GS9.** read and understand manuals, health and safety instructions, memos etc
- GS10.** fill up documentation to ones role
- GS11.** communicate effectively with supervisor
- GS12.** contribute to quality of team work and achieve smooth workflow
- GS13.** improve work processes by interacting with others and adopting best practices

Assessment Criteria

Assessment Criteria for Outcomes	Theory Marks	Practical Marks	Project Marks	Viva Marks
<i>Interact with supervisor or superior</i>	14	30	-	-
PC1. comply with health, safety gender, and PwD (People with disability) related instructions applicable to the workplace	2	5	-	-
PC2. actively participate in mock drills/ evacuation procedures; group discussions, training sensitization programs for gender, and PwD awareness organized at the workplace.	2	5	-	-
PC3. receive job orders and instructions from reporting supervisor and receive feedback on work standards.	2	5	-	-
PC4. understand the work output requirements, targets, performance indicators and incentives.	2	5	-	-
PC5. deliver quality work on time and report any anticipated reasons for delays and handover completed work to supervisor	3	5	-	-
PC6. report on any grievances, production defects and any potential hazards.	3	5	-	-
<i>Work as a team by coordinating with colleagues within and outside the department and include inputs on PwD & Gender Sensitisation</i>	6	10	-	-
PC7. communicate maintenance and repair schedule proactively to the supervisor	3	5	-	-
PC8. interact and clarify doubts on design, usage of materials & tools, quality & standards compliance, etc.	3	5	-	-
<i>Report and Document</i>	15	25	-	-
PC9. report in time for shortage or need of raw materials	3	5	-	-
PC10. communicate with colleagues from within and other departments, clearly and effectively on all aspects to carry out the work among the team	3	5	-	-

Assessment Criteria for Outcomes	Theory Marks	Practical Marks	Project Marks	Viva Marks
PC11. maintain the etiquette, use polite language, demonstrate responsible and disciplined behavior towards colleagues.	3	5	-	-
PC12. put team over individual goals and multi-task or share work where necessary supporting the colleagues.	3	5	-	-
PC13. document all the details accurately relating to ones role as required.	3	5	-	-
NOS Total	35	65	-	-

National Occupational Standards (NOS) Parameters

NOS Code	HCS/N9929
NOS Name	Working in a team
Sector	Handicrafts and Carpet
Sub-Sector	
Occupation	Generic Handicrafts and Carpet
NSQF Level	3.5
Credits	1
Version	1.0
Last Reviewed Date	18/02/2025
Next Review Date	18/02/2028
NSQC Clearance Date	18/02/2025

HCS/N9931: Maintain health and safety at workplace

Description

This unit provides Performance Criteria, Knowledge & Understanding, and Skills & Abilities required to comply with health, safety, and security requirements at the workplace and covers procedures to prevent, control, and minimize risk to self and others.

Scope

The scope covers the following :

- Comply with health, safety, and security requirements at work

Elements and Performance Criteria

Comply with health, safety, and security requirements at work

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

- PC1.** comply with health and safety related instructions applicable to the workplace.
- PC2.** use and maintain personal protective equipment as per protocol.
- PC3.** carry out own activities in line with approved guidelines and procedures
- PC4.** maintain a healthy lifestyle and guard against dependency on intoxicants.
- PC5.** follow environment management system related procedures
- PC6.** store materials and tools in line with manufacturers and organisational requirements
- PC7.** safely handle and move waste and debris.
- PC8.** minimize health and safety risks to self and others due to own actions
- PC9.** seek clarifications, from supervisors or other authorized personnel in case of perceived risks
- PC10.** monitor the workplace and work processes for potential risks and threats.
- PC11.** carry out periodic walk-through to keep work area free from hazards and obstructions, if assigned
- PC12.** report hazards and potential risks/ threats to supervisors or other authorized personnel
- PC13.** participate in mock drills/ evacuation procedures organized at the workplace
- PC14.** undertake first aid, fire-fighting and emergency response training, if asked to do so
- PC15.** take action based on instructions in the event of fire, emergencies or accidents
- PC16.** follow organisation procedures for evacuation when required

Knowledge and Understanding (KU)

The individual on the job needs to know and understand:

- KU1.** health and safety related practices applicable at the workplace
- KU2.** potential hazards, risks and threats based on nature of operations
- KU3.** organizational procedures for safe handling of tools
- KU4.** potential risks due to own actions and methods to minimize these

- KU5.** environmental management system related procedures at the workplace.
- KU6.** layout of the plant and details of emergency exits, escape routes, emergency equipment and assembly points
- KU7.** potential accidents and emergencies and response to these scenarios
- KU8.** reporting protocol and documentation required
- KU9.** details of personnel trained in first aid, fire-fighting and emergency response
- KU10.** actions to take in the event of a mock drills/ evacuation procedures or actual accident, emergency or fire.
- KU11.** occupational health and safety risks and methods
- KU12.** personal protective equipment and method of use
- KU13.** identification, handling and storage of hazardous substances
- KU14.** proper disposal system for waste and by-products
- KU15.** signage related to health and safety and their meaning
- KU16.** importance of sound health, hygiene and good habits
- KU17.** ill-effects of alcohol, tobacco and drugs

Generic Skills (GS)

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

- GS1.** write in local language.
- GS2.** read measurement instructions
- GS3.** communicate orally with colleagues
- GS4.** follow organization rule-based decision making process
- GS5.** take decision with systematic course of actions and/or response
- GS6.** plan and organize your work to achieve targets and deadlines
- GS7.** manage relationships with customers
- GS8.** build customer relationships and use customer centric approach.
- GS9.** think through the problem, evaluate the possible solution(s) and suggest an optimum /best possible solutions
- GS10.** identify immediate or temporary solutions to resolve delays
- GS11.** analyze data and activities.
- GS12.** pass on relevant information to others
- GS13.** apply, analyze, and evaluate the information gathered from observation, experience, reasoning, or communication, as a guide to thought and action

Assessment Criteria

Assessment Criteria for Outcomes	Theory Marks	Practical Marks	Project Marks	Viva Marks
<i>Comply with health, safety, and security requirements at work</i>	30	70	-	-
PC1. comply with health and safety related instructions applicable to the workplace.	2	6	-	-
PC2. use and maintain personal protective equipment as per protocol.	2	6	-	-
PC3. carry out own activities in line with approved guidelines and procedures	2	6	-	-
PC4. maintain a healthy lifestyle and guard against dependency on intoxicants.	2	6	-	-
PC5. follow environment management system related procedures	2	4	-	-
PC6. store materials and tools in line with manufacturers and organisational requirements	2	3	-	-
PC7. safely handle and move waste and debris.	1	3	-	-
PC8. minimize health and safety risks to self and others due to own actions	2	4	-	-
PC9. seek clarifications, from supervisors or other authorized personnel in case of perceived risks	1	3	-	-
PC10. monitor the workplace and work processes for potential risks and threats.	1	3	-	-
PC11. carry out periodic walk-through to keep work area free from hazards and obstructions, if assigned	2	3	-	-
PC12. report hazards and potential risks/ threats to supervisors or other authorized personnel	3	4	-	-
PC13. participate in mock drills/ evacuation procedures organized at the workplace	2	3	-	-
PC14. undertake first aid, fire-fighting and emergency response training, if asked to do so	2	4	-	-

Assessment Criteria for Outcomes	Theory Marks	Practical Marks	Project Marks	Viva Marks
PC15. take action based on instructions in the event of fire, emergencies or accidents	2	6	-	-
PC16. follow organisation procedures for evacuation when required	2	6	-	-
NOS Total	30	70	-	-

National Occupational Standards (NOS) Parameters

NOS Code	HCS/N9931
NOS Name	Maintain health and safety at workplace
Sector	Handicrafts and Carpet
Sub-Sector	
Occupation	Generic Handicrafts and Carpet
NSQF Level	3.5
Credits	1
Version	1.0
Last Reviewed Date	18/02/2025
Next Review Date	18/02/2028
NSQC Clearance Date	18/02/2025

HCS/N9934: Managing Personal Sanitation

Description

This NOS provides the abilities required for taking responsibility for their own health at the workplace and is about using the correct procedures to prevent, control and minimize risk to them and others at the workplace.

Scope

The scope covers the following :

- adopt healthy work practices
- achieve work productivity while maintaining health

Elements and Performance Criteria

Adopt healthy work practices

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

- PC1.** always cover the mouth and nose with a dust mask while working and keep on changing when it gets blocked with dust
- PC2.** follow work instructions strictly to reduce the amount of pollution at the work place e.g. wet the rock / craft material before working on it
- PC3.** wear protective goggles over eyes and replace them when scratches on it obscure the vision
- PC4.** wear gloves as per the materials used for making handicraft to avoid blisters; scratches and cuts
- PC5.** undergo preventive health checkups at regular intervals
- PC6.** take prompt treatment from the doctor in case of illness

Achieve work productivity while maintaining health

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

- PC7.** follow SOPs for dealing with blisters; scratches; accidental fires or any other type of emergencies at work
- PC8.** ensure the absence of no productivity loss or absenteeism from work due to illness
- PC9.** ensure no long term ill effect on the personal health

Knowledge and Understanding (KU)

The individual on the job needs to know and understand:

- KU1.** companys policies on personal health and occupational hazard management
- KU2.** companys hr policies
- KU3.** companys reporting structure
- KU4.** companys emergency evacuation procedure
- KU5.** health risks to the worker at the work place
- KU6.** healthy work practices

- KU7.** how to perform the duties in a way to minimize pollution at the work place
- KU8.** what personal protective equipments should be worn and how it is cared for
- KU9.** safe disposal methods for waste
- KU10.** how to provide the first aid treatment at workplace
- KU11.** emergency procedures to be followed in case of an mishap such as fire accidents etc.

Generic Skills (GS)

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

- GS1.** read personal health instructions and manual
- GS2.** read the usage of various hand tools and personal protection equipments
- GS3.** take notes on descriptions and details of various personal health maintenance procedures
- GS4.** communicate with supervisor about the physical symptoms
- GS5.** receive instructions from doctor and supervisor on medical care
- GS6.** how to select appropriate hand tools and personal protection equipment
- GS7.** when to change personal protection equipment during work
- GS8.** how to identify first aid needs in case and of an injury
- GS9.** how to select appropriate hand tools and personal protection equipment
- GS10.** when to change personal protection equipment during work
- GS11.** how to use materials that does not affect customer health / make injury
- GS12.** improve work processes by adopting best safety practices
- GS13.** analyze the usage of appropriate tools and consumables
- GS14.** spot errors and any other disruptions and communicate with solutions

Assessment Criteria

Assessment Criteria for Outcomes	Theory Marks	Practical Marks	Project Marks	Viva Marks
<i>Adopt healthy work practices</i>	18	48	-	-
PC1. always cover the mouth and nose with a dust mask while working and keep on changing when it gets blocked with dust	3	8	-	-
PC2. follow work instructions strictly to reduce the amount of pollution at the work place e.g. wet the rock / craft material before working on it	3	8	-	-
PC3. wear protective goggles over eyes and replace them when scratches on it obscure the vision	3	8	-	-
PC4. wear gloves as per the materials used for making handicraft to avoid blisters; scratches and cuts	3	8	-	-
PC5. undergo preventive health checkups at regular intervals	3	8	-	-
PC6. take prompt treatment from the doctor in case of illness	3	8	-	-
<i>Achieve work productivity while maintaining health</i>	12	22	-	-
PC7. follow SOPs for dealing with blisters; scratches; accidental fires or any other type of emergencies at work	4	7	-	-
PC8. ensure the absence of no productivity loss or absenteeism from work due to illness	4	7	-	-
PC9. ensure no long term ill effect on the personal health	4	8	-	-
NOS Total	30	70	-	-

National Occupational Standards (NOS) Parameters

NOS Code	HCS/N9934
NOS Name	Managing Personal Sanitation
Sector	Handicrafts and Carpet
Sub-Sector	Handicrafts (Ceramics), Handicrafts (Fashion Jewellery), Handicrafts (Stonecraft), Glassware, Metalware
Occupation	Generic Handicrafts and Carpet
NSQF Level	3.5
Credits	1
Version	1.0
Last Reviewed Date	18/02/2025
Next Review Date	18/02/2028
NSQC Clearance Date	18/02/2025

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:

- 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.
- 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
- 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

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	-	-

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	-	-	-	-
<i>Entrepreneurship</i>	2	3	-	-

Assessment Criteria for Outcomes	Theory Marks	Practical Marks	Project Marks	Viva Marks
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	-	-

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	18/02/2025
Next Review Date	18/02/2028
NSQC Clearance Date	18/02/2025

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 % aggregate for the QP.
7. In case of unsuccessful completion, the trainee may seek reassessment on the Qualification Pack.

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.)

Minimum Passing % at NOS Level: 50

(**Please note:** A Trainee must score the minimum percentage for each NOS separately as well as on the QP as a whole.)

Assessment Weightage

Compulsory NOS

National Occupational Standards	Theory Marks	Practical Marks	Project Marks	Viva Marks	Total Marks	Weightage
HCS/N1005.Receive and Understand the associated procedures	27	73	-	-	100	10
HCS/N1006.Perform the Tests	29	71	-	-	100	20
HCS/N1009.Clean Up and Equipment Maintenance	20	80	-	-	100	20
HCS/N1010.Recordkeeping and Documentation	30	70	-	-	100	10
HCS/N9929.Working in a team	35	65	-	-	100	10
HCS/N9931.Maintain health and safety at workplace	30	70	-	-	100	10
HCS/N9934.Managing Personal Sanitation	30	70	-	-	100	10
DGT/VSQ/N0102.Employability Skills (60 Hours)	20	30	-	-	50	10
Total	221	529	-	-	750	100

Acronyms

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

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.
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.