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| **Model Curriculum** **NOS Name: Assaying and Hallmarking of Gold Jewellery/ Artefacts****NOS Code: G&J/N0****NOS Version: 1.0****NSQF Level: 4****Model Curriculum Version: 1.0**  |
| **­**Gem & Jewellery Skill Council of IndiaBusiness Facilitation Centre, 4rth Floor, Seepz Special Economic Zone, Andheri (E). Mumbai 400 096. |

Table of Contents

[Training Parameters 3](#_Toc28098882)

[Program Overview 4](#_Toc28098883)

[Training Outcomes 4](#_Toc28098884)

[Compulsory Modules 4](#_Toc28098885)

[Module Details 6](#_Toc28098888)

Module 1: [Introduction and orientation of job role 6](#_Toc28098888)

Module 2: Test Jewellery/Artefacts of precious metal using XRF technique ...................................7

Module 3: [Sample preparation for Assaying](#_G&J/N0403:_Prepare_sample) job...............................................................................9

Module 4: [Assay Gold in Gold Bullion, Gold Alloys and Gold Jewellery/Artefacts](#_G&J/N0404:_Assay_Gold)..........................10

Module 5: [Hallmark Gold Alloys, Silver Alloys and Jewellery/ Artefacts](#_G&J/N0405:_Hallmark_Gold).........................................12

Module 6: [Maintain health and safety at assaying](#_G&J/N9902:_Maintain_health) and hallmarking lab.........................................13

Module 7: [Follow material and energy conservation practices at workplace](#_G&J/N9906:_Follow_material).................................14

Module 8: [Work effectively with internal and external stakeholder](#_G&J/N9907:_Collaborate_with) …………………..........................15

[Annexure 1](#_Toc28098890)6

[Trainer Requirements 1](#_Toc28098891)6

[Assessor Requirements](#_Toc28098892) 17

[Assessment Strategy 18](#_Toc28098893)

References 20

Glossary 20

Acronyms and Abbreviations 22

# Training Parameters

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| --- | --- |
| **Sector**  | Gem & Jewellery |
| **Sub-Sector** | Handmade Gold and Gems-set Jewellery, Cast and diamonds-set jewellery, Silver Smithing |
| **Occupation** | Metal Alloying, Metal Alloying and Rolling |
| **Country** | India |
| **NSQF Level** | 4 |
| **Aligned to NCO/ISCO/ISIC Code** | NCO-2015/ 7313.0301 |
| **Minimum Educational Qualiﬁcation and Experience**  | 12th Class or equivalent (preferred with knowledge of science or chemistry), 6 Month relevant Experience at A&H Centre |
| **Pre-Requisite License or Training**  | NA |
| **Minimum Job Entry Age** |  |
| **Last Reviewed On**  |  |
| **Next Review Date** | // |
| **NSQC Approval Date** |   |
| **NOS Version**  | 1.0 |
| **Model Curriculum Creation Date** |  |
| **Model Curriculum Valid Up to Date** | // |
| **Model Curriculum Version** *<* | 2.0 |
| **Minimum Duration of the Course** | 45 Hours |
| **Maximum Duration of the Course** | 45 Hours |

# Program Overview

This section summarizes the end objectives of the program along with its duration.

## Training Outcomes

At the end of the program, the learner should have acquired the listed knowledge and skills.

* Prepare gold sample for assaying by following the procedure defined in the Indian Standard IS 1418:2009.
* Perform assaying of gold in the form of bullion, alloy and jewellery or artefacts by following the procedure defined in the Indian Standard IS 1418:2009.
* Perform marking on gold jewellery/artefact based on the assaying results as per the marking clause defined in the Indian Standard IS 1417:2016.

## Compulsory Modules

The table lists the modules and their duration corresponding to the NOS.

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| NOS and Module Details | TheoryDuration | PracticalDuration | On-the-Job Training Duration (Mandatory) | On-the-Job Training Duration (Recommended) | Total Duration |
| Module 1: Introduction and orientation of the Gems and Jewellery sector  | 03:00 | 00:00 |  |  | 03:00 |
| Module 2: Perform preliminary assaying   | 01:00 | 03:00 |  |  | 04:00 |
| * Module 3: Sample preparation
 | 01:00 | 01:00 |  |  | 02:00 |
| Module 4: Perform the fire assaying | 03:00 | 24:00 |  |  | 27:00 |
| Module 5: Mark or laser print Gold Alloys and Jewellery/ Artefacts | 01:00 | 02:00 |  |  | 03:00 |
| Module 6: Validity of Results, Traceability (ILC/PT, Calibration & Preventive maintenance, Uncertainty Calculation) | 3.5:00 | 00:00 |  |  | 3.5:00 |
| Module 7: Good Lab Practices | 0.5:00 | 00:00 |  |  | 0.5:00 |
| Module 8: Operating Hallmarking portal | 02:00 | 00:00 |  |  | 02:00 |
| Total Duration | **15:00** | **30:00** |  |  | **45:00** |

#

# Module Details

## Module 1: Introduction and orientation of the NOS and Gems and Jewellery sector

**Terminal Outcomes:**

* Explain the overview of the sector.
* Discuss the role and responsibilities of an Assayer and Hallmarker

|  |  |
| --- | --- |
| Duration: *03:00* | Duration: *00:00* |
| **Theory – Key Learning Outcomes**  | **Practical – Key Learning Outcomes** |
| * Explain about the course and its scope in the Gems and Jewellery industry as a career
* Explain the basics of assaying
* Describe IS 1417,1418, 15820
* Describe BIS Act 2016, Rules2018 – Provisions related to hallmarking
* Explain BIS Hallmarking scheme and regulations
* List guidelines for recognition and operation of Assaying and Hallmarking centres, jewellers and refineries.
* List activities performed in an Assaying and Hallmarking centre
* Discuss awareness about Quality Control Order on hallmarking of gold jewellery
* Discuss other regulatory requirements such as of Central Pollution Control Board (CPCB) need to follow in industry.
* Discuss the role and responsibilities of an Assayer and Hallmarker
* List job opportunities for an Assayer and Hallmarker
 |   |
| **Classroom Aids:** |
| Laptop, white board, marker, projector |
| **Tools, Equipment and Other Requirements**  |
| NIL |

## Module 2: Test Jewellery/Artefacts of precious metal using X-Ray Fluorescence (XRF) technique

##

**Terminal Outcomes:**

* Demonstrate X-Ray Fluorescence (XRF) technique for testing the fineness, elemental composition and homogeneity of precious metals or alloy.
* Apply IS 15820:2009, IS 1417 guidelines for testing and recording the fineness of Jewellery/Artefacts of precious metal.

|  |  |
| --- | --- |
| Duration: *<01:00>* | Duration: *<03:00>* |
| Theory – Key Learning Outcomes  | **Practical – Key Learning Outcomes** |
| * Discuss basic physiochemical and metallurgical properties of gold.
* List tools, equipment and chemicals required during testing process.
* Elaborate ways for preliminary examination of precious-metal products for assaying.
* Explain the guidelines covered in IS 15820:2009, Annex E, IS 1417.
* List the steps to be performed for starting and operating the XRF machine for testing the fineness of precious metal.
* Describe how to decide number of positions for XRF on each jewellery or article surface on the basis of factors i.e., uniformity observed, type of jewellery or article, number of solder positions etc.
* List parameters to be considered for finding the fineness of gold in the product.
* Discuss the need of focusing XRF on the spot and exposing it for some time for testing the fineness of precious metal.
* Elaborate ways for checking the XRF machine with standard pieces.
* Explain preventive maintenance of different equipment or machine used.
* Discuss compliance requirements in each stage of XRF process.
* List documents and records to be maintain related to the testing done, calibration and maintenance of different equipment or machine used.
* Discuss the necessary precautions to avoid any hazards and accidents while using XRF machines.
 | * Demonstrate procedure of receiving the precious-metal products for XRF from the customer.
* Apply appropriate ways for preliminary examination of the precious-metal products for further assaying as per guidelines for sampling given in IS 15820:2009, Annex E, IS 1417.
* Perform steps to start the XRF machine and warm it up to standard temperature and humidity conditions as mentioned in the manufacturer's catalogue.
* Demonstrate procedure of calibrating the XRF machine using reference samples of precious metal.
* Use mechanical fine scrapper to rub the jewellery or article surface.
* Demonstrate how to focus XRF on the spot and expose it for preferably minimum for 30 secs for testing the fineness of precious metal.
* Apply organisation recommended ways for noting the precious metal fineness and segregating the results of test based on observations and as per work instructions
* Perform steps to check the test status as per IS 1417 and send the homogenized lots in box with job card to Quality Manager.
* Perform steps for checking the XRF machine with standard pieces at regular intervals.
* Employ practices to prepare records related to testing done, calibration and maintenance of different equipment or machine used.
 |
| **Classroom Aids:** |
| White board/ black board marker / chalk, duster, computer or Laptop attached to LCD projector |
| **Tools, Equipment and Other Requirements**  |
| XRF machine, Check gold (CRM sample for XRF verification), Reference gold samples of fineness 585,750,833, 916, 958,995 ppt for calibration of XRF machine  |

## Module 3: Sample preparation for Assaying job

##

**Terminal Outcomes:**

* Demonstrate the process of preparing samples for assaying.
* Use different methods to prepare samples for assaying from gold products.

|  |  |
| --- | --- |
| Duration: *<01:00>* | Duration: *<01:00>* |
| Theory – Key Learning Outcomes  | **Practical – Key Learning Outcomes** |
| * Describe the work flow involved in Assaying and Hallmarking laboratory.
* Discuss basics of periodic table and crystal structure of gold.
* List tools, equipment and chemicals required during sampling process.
* Explain the guidelines covered in IS 1418:2009, and IS 15820:2009 (Annexure D & E).
* Explain various sampling methods like drilling, cutting, scrapping etc. of sample preparation.
* Discuss compliance requirements in each stage of sampling process.
* Explain preventive maintenance of tools and equipment used.
* List documents and records to be maintain related to sampling and maintenance tasks.
 | * Employ practices to maintain the records related to jewellery or artefacts received from the customer.
* Demonstrate the preparatory procedures for using tools and equipment used in sampling.
* Apply appropriate sampling methods to prepare samples for assaying.
* Perform steps to prepare dirt free and homogenous sample of appropriate weight as per guidelines mentioned in IS 1418:2009.
 |
| **Classroom Aids:** |
| White board/ black board marker / chalk, duster, computer or Laptop attached to LCD projector |
| **Tools, Equipment and Other Requirements**  |
| Hacksaw, drill machine, drill bit, scrapping tools, cutting tool |

## Module 4: Assay Gold in Gold Bullion, Gold Alloys and Gold Jewellery/ Artefacts

**Terminal Outcomes:**

* Apply different assaying methods to determine the gold content along with other base metals in gold products.
* Apply IS 1418:2009 and IS 15820:2009 while assaying gold products.

|  |  |
| --- | --- |
| Duration: *<03:00>* | Duration: *<24:00>* |
| **Theory – Key Learning Outcomes**  | **Practical – Key Learning Outcomes** |
| * Describe various types of assaying processes such as using XRF machine, touchstone method, AAS (Atomic absorption spectroscopy), ICP (Inductively coupled plasma spectroscopy) and fire assay.
* Plan the assay, select cupel size based on sample number, place the samples & proof gold in various size of cupels etc.
* List tools, equipment and reagents required during fire assaying process.
* Elaborate the ways for calculating weight of assaying sample or pieces for inquartation with different metals for different karatage of gold.
* Describe annealing, rolling and cleaning processes for preparing the cornets.
* List parameters required for finding the fineness of gold in the product.
* Explain the guidelines covered in IS 1418:2009 and IS 15820:2009.
* List documents and records to be maintain related to assaying and maintenance tasks.
 | * Show how to prepare the tools, equipment and machines for assaying process.
* Apply appropriate ways for calculating the weight of assaying proof sample using inquartation with different metals for different karatage of gold.
* Demonstrate procedure of cupellation process for getting button of gold and silver or button of gold and silver along with platinum group metal (PGM).
* Perform steps for preparing the cornets for parting process.
* Demonstrate multi or single parting process for separating silver and get gold cornets and preparing proof sample under identical condition.
* Apply appropriate ways for calculating the final weight of cornets to get gold content in parts per thousands.
* Compare the assaying results with the pre-defined standards in IS 1418:2009.
 |
| **Classroom Aids:** |
| White board/ black board marker / chalk, duster, computer or Laptop attached to LCD projector |
| **Tools, Equipment and Other Requirements**  |
| Cupellation furnace, Annealing furnace, Weighing balance, Air conditioner, Generator, Balling pliers, Cupels (Number of assay cycles to be confirmed by GJSC), Cleaning brush, Hammer (400 g) and anvil or power press, Scrapping tools, Magnifying glass, Emery paper, Aluminium and stainless steel tray, Thermometer, Hydrometer, Parting trays with/without removable thimbles of Pt or Pt/Ir or Pt/Rh or unglazed silica. Pure Graphite Crucibles/ Porcelain crucibles, Hot plate, Jeweller's roll or rolling mill, Scorification dishes, Tongs and forceps, Anti-vibration table for high accuracy balance, Numbering device / Number punch, Fume hood with scrubber, Furnace for melting and scrappingSilver, Copper foil/wire or disc, lead foil, nickel and palladium, nickel for white gold, palladium for white gold, Parting acid no.1 and no. 2, Distilled water, Borax for white gold containing nickel, Copper sample instock, Proof gold sample instock, Test gold sample instock, Micrometer, Calculator, Fume mask, Glass siphon, Lead foil instock, Parting flasks, Protective Medical Mask, Surgical gloves, Thermal gloves, Turned table |

## Module 5: Hallmark gold alloys and jewellery/artefacts

**Terminal Outcomes:**

* Use different ways to hallmark jewellery pieces with pre-defined symbols, logos and characters.

|  |  |
| --- | --- |
| Duration: *<01:00>* | Duration: *<02:00>* |
| **Theory – Key Learning Outcomes**  | **Practical – Key Learning Outcomes** |
| * Explain hallmarking guidelines covered in IS 1417:2016.
* List tools and machine required during hallmarking process.
* Explain methods for marking and laser printing on the jewellery or artefacts.
* List the various permissible sizes of hallmark which can be marked on a gold jewellery/artefact.
* List records and documents need to maintain related to marking, calibration and maintenance of tools and equipment used during marking process.
 | * Compare and record the results of assaying against the prescribed standards.
* Demonstrate the preparatory procedure for using the machines and tools required for marking.
* Demonstrate hallmarking on gold jewellery/artefact for all permissible sizes of marking.
* Apply appropriate methods for marking or laser printing the jewellery or artefacts as per pre-defined guidelines covered in IS 1417:2016.
 |
| **Classroom Aids:** |
| Whiteboard, Marker pen, Computer or Laptop attached to LCD projector, Scanner, Computer speakers |
| **Tools, Equipment and Other Requirements**  |
| Laser machine |

## Module 6: Validity of Results, Traceability (ILC/PT, Calibration & Preventive maintenance, Uncertainty Calculation)

**Terminal Outcomes:**

* Discuss importance and method of calibration of test equipment such as XRF, weighing balances, furnaces, micrometre etc.

|  |  |
| --- | --- |
| Duration:*<3.5:00>* | Duration:*<00:00>* |
| **Theory – Key Learning Outcomes**  | **Practical – Key Learning Outcomes** |
| * Define the metrological traceability of measurement results as per IS/ISO/IEC 17025
* Explain the importance of calibration and method of calibration of test equipment such as XRF, weighing balances, furnaces, micrometre etc.
* Explain the method of Evaluation of measurement uncertainty
* Describe the basics methods of ensuring validity of test results as per IS/ISO/IEC 17025
* Discuss the methods of intermediate checks on measuring instruments
* Define Interlaboratory comparison and proficiency testing and explain how to participate in them
* Discuss the ways of preventive maintenance of critical test equipment(s) such as XRF and microbalance
 |  |
| **Classroom Aids:** |
| Whiteboard, Marker pen, Computer or Laptop attached to LCD projector, Scanner, Computer speakers |
| **Tools, Equipment and Other Requirements:** |
| Safety hand gloves, glasses, safety shoes, mask, fire extinguisher, first aid kit |

## Module 7: Good Lab Practices, material and energy conservation practices at workplace

**Terminal Outcomes:**

* Discuss importance of government norms and policies on occupational health and safety at assaying and hallmarking lab.
* Employ appropriate ways to maintain safe and secure working environment.
* Apply appropriate waste management practices at workplace.

|  |  |
| --- | --- |
| Duration:*<0.5:00>* | Duration:*<0.5:00>* |
| **Theory – Key Learning Outcomes**  | **Practical – Key Learning Outcomes** |
| * Discuss organizational hygiene and disinfection guidelines and techniques used at the assaying and hallmarking lab.
* Describe appropriate ways to avoid contact with others during meets and attendance system.
* Explain workplace hazards and risks.
* List personal protective equipment like safety gloves, glasses, shoes and mask used at the assaying and hallmarking lab.
* Discuss various warning signs used at the assaying and hallmarking lab.
* Describe appropriate strategies to deal with emergencies and accidents at the assaying and hallmarking lab.
 | * Show how to sanitize and disinfect work area regularly.
* Demonstrate the correct way of sanitizing hands using alcohol-based hand rubs, soap and water.
* Apply appropriate ways to maintain contactless working at assaying and hallmarking lab.
* Demonstrate organisational specified procedure of reporting others about illness of self and others.
* Apply best practices to remove potential hazards at the workplace and prevent accidents.
* Display the correct way of wearing and removing PPE.
* Demonstrate the use of fire extinguisher.
* Demonstrate the first aid procedure in case of emergencies.
 |
| **Classroom Aids:** |
| Whiteboard, Marker pen, Computer or Laptop attached to LCD projector, Scanner, Computer speakers |
| **Tools, Equipment and Other Requirements:** |
| Safety hand gloves, glasses, safety shoes, mask, fire extinguisher, first aid kit |

**Module 8: Hallmarking Portal & Automation**

**Terminal Outcomes:**

* Demonstrate the functioning of AHC portal vis-à-vis the activities carried out in an assaying and hallmarking centre.

|  |  |
| --- | --- |
| Duration:*<02:00>* | Duration:*<00:00>* |
| **Theory – Key Learning Outcomes**  | **Practical – Key Learning Outcomes** |
| * Describe the creation of login credentials of the key personnel engaged in an Assaying and Hallmarking Centre (AHC) through the portal
* Demonstrate the generation of hallmarking request by the AHC on behalf of the BIS registered jewellers through the portal
* List the step-by-step activity carried out in an AHC specific to each AHC personnel through the portal
 |  |
| **Classroom Aids:** |
| Whiteboard, Marker pen, Computer or Laptop attached to LCD projector, Scanner, Computer speakers |
| **Tools, Equipment and Other Requirements:** |
| computer or Laptop having internet connectivity, link of the dummy server of the hallmarking portal, dummy user ID and password of an AHC for generation of login credentials. |

# Annexure

## Trainer Requirements

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| --- |
| Trainer Prerequisites |
| Minimum Educational Qualification *<Select the minimum educational requirements, such as 12th Pass, Graduate or NSQF certified.>* | **Specialization***<Specify the areas of specialization that are desirable.>* | **Relevant Industry Experience** | **Training/Assessment Experience** | **Remarks**  |
| ***Years*** | ***Specialization*** | ***Years*** | ***Specialization*** |  |
| Graduate in science/ Engineering | NA | 3 | Managing Assaying & Hallmarking activity and auditing experience  |  | Auditing experience of 15 mandays would be considered |  |

|  |
| --- |
| Trainer Certification |
| Domain Certification | **Platform Certification** |
| “Assayer and Hallmarker; G&J/Q0403, Version 1.0”. Minimum accepted score is 80%. | “Trainer, MEP/Q2601, Version 2.0”Minimum accepted score is 80%. |

## Assessor Requirements

|  |
| --- |
| Assessor Prerequisites |
| Minimum Educational Qualification *<Select the minimum educational requirements, such as 12th Pass, Graduate or NSQF certified.>* | **Specialization***<Specify the areas of specialization that are desirable.>* | **Relevant Industry Experience** | **Training/Assessment Experience** | **Remarks**  |
| ***Years*** | ***Specialization*** | ***Years*** | ***Specialization*** |  |
| Graduate in science/ Engineering | NA | 5 | Managing Assaying & Hallmarking activity and auditing experience  |  | Auditing experience of 20 mandays would be considered |  |

|  |
| --- |
| Assessor Certification |
| Domain Certification | **Platform Certification** |
| “Assayer and Hallmarker; G&J/Q0403, Version 1.0”. Minimum accepted score is 80%. | “Assessor; MEP/Q2701, Version 2.0”Minimum accepted score is 80%. |

## Assessment Strategy

1. Assessment System Overview:
* Batches assigned to the assessment agencies for conducting the assessment on SDSM/SIP or email
* Assessment agencies send the assessment confirmation to VTP/TC looping SSC
* Assessment agency deploys the ToA certified Assessor for executing the assessment
* SSC monitors the assessment process & records
1. Testing Environment:
* Confirm that the centre is available at the same address as mentioned on SDMS or SIP
* Check the duration of the training.
* Check the Assessment Start and End time to be as 10 a.m. and 5 p.m.
* If the batch size is more than 30 for STT and/ or 50 in RPL, then there should be 2 Assessors.
* Check that the allotted time to the candidates to complete Theory & Practical Assessment is correct.
* Check the mode of assessment—Online (TAB/Computer) or Offline (OMR/PP).
* Confirm the number of TABs on the ground are correct to execute the Assessment smoothly.
* Check the availability of the Lab Equipment for the particular Job Role.
1. Assessment Quality Assurance levels / Framework:
* Question papers created by the SME verified by the other subject Matter Experts
* Questions are mapped with NOS and PC
* Question Bank covers all performance criteria (PC) under each NOS of a QP. Each question can cover one or more PCs. Which means that every question needs to be mapped with PC.
* There are sufficient number of questions in the question bank, where multiple questions are available for each PC. Typically, the number of questions should be 3 to 4 times the number of PCs.
* Each question bank has around 150 to 200 questions.
* Each question has a difficulty level mentioned against it and the question bank has a good mix of easy, medium and difficult questions. So, for example out of 200 Questions the proportion could be 25 difficult/ hard, 75 Medium and 100 Easy level questions.
* Other than the Multiple-choice question (MCQ) few questions are created for Practical and viva too. For e.g., for 150-200 QB contains approximately 10-15 Viva & 10-15 practical questions.
* Assessor must be ToA certified & trainer must be ToT Certified
* Assessment agency must follow the assessment guidelines to conduct the assessment
1. Types of evidence or evidence-gathering protocol:
* Time-stamped & geotagged reporting of the assessor from assessment location
* Center photographs with signboards and scheme specific branding
* Biometric or manual attendance sheet (stamped by TP) of the trainees during the training period
* Time-stamped & geotagged assessment (Theory + Viva + Practical) photographs & videos
1. Method of verification or validation:
* Surprise visit to the assessment location
* Random audit of the batch
* Random audit of any candidate
1. Method for assessment documentation, archiving, and access
* Hard copies of the documents are stored
* Soft copies of the documents & photographs of the assessment are uploaded / accessed from Cloud Storage
* Soft copies of the documents & photographs of the assessment are stored in the Hard Drives

# References

## 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 organization. |
| **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 organizational speciﬁc knowledge that an individual needs in order to perform to the required standard. |
| **Organizational Context** | Organizational context includes the way the organization 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. |

## Acronyms and Abbreviations

|  |  |
| --- | --- |
| **NOS** | National Occupational Standard(s) |
| **NSQF** | National Skills Qualiﬁcations Framework |
| **QP** | Qualiﬁcations Pack |
| **TVET** | Technical and Vocational Education and Training |
| **PC** | Performance Criteria |
| **SSC** | Sector Skill Council |
| **AA** | Assessment Agency |
| **ToT** | Training of Trainers |
| **ToA** | Training of Assessors |
| **VTP** | Vocational Training Partner |
| **TC** | Training Center |
| **SME** | Subject Matter Expert |