









# Planner - Diamond Processing

Options: Marker

QP Code: G&J/Q4207

Version: 2.0

NSQF Level: 3

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# G&J/Q4207: Planner - Diamond Processing

### **Brief Job Description**

Individuals on this job use the designing software and planning and marking machines to decide where to mark the diamond rough for generating the most profitable polished diamond for the company as per its policy of maximizing value or colour and weight retention.

#### **Personal Attributes**

The job requires the individual to have: attention to details; good eyesight; ability to work for long hours in sitting position in front of the computer; high level of concentration; and a lot of patience

### **Applicable National Occupational Standards (NOS)**

### **Compulsory NOS:**

- 1. G&J/N4202: Plan the final cut of the diamond
- 2. G&I/N9902: Maintain health and safety at workplace
- 3. DGT/VSQ/N0101: Employability Skills (30 Hours)

#### **Options**(*Not mandatory*):

Option: Marker

A marker needs to use his/her experience and make precise marking as the accuracy of the following process depends on the accuracy of the marking. The marking must be made with the objective of maximizing the value, or any other as fixed by the company

1. G&J/N4102: Mark the rough Diamonds

#### **Qualification Pack (QP) Parameters**

Sector	Gem & Jewellery
Sub-Sector	Diamond Processing
Occupation	Diamond Planning
Country	India









NSQF Level	3
Credits	14
Aligned to NCO/ISCO/ISIC Code	NCO-2015/ 7313.1202
Minimum Educational Qualification & Experience	9th Class with NA of experience OR 8th Class with 1 Year of experience OR Previous relevant Qualification of NSQF Level with 1 Year of experience relevant experience
Minimum Level of Education for Training in School	
Pre-Requisite License or Training	NA
Minimum Job Entry Age	18 Years
Last Reviewed On	NA
Next Review Date	17/11/2025
NSQC Approval Date	17/11/2022
Version	2.0
Reference code on NQR	2022/GJ/GJSCI/06706
NQR Version	3









### G&J/N4202: Plan the final cut of the diamond

### **Description**

This OS unit is about deciding the final dimensions of the rough diamond, in order to maximize the return on investment for the company

### Scope

The scope covers the following:

- This unit/task covers the following:
- Preparing the rough diamond for planning
- Operating the software
- Quality of planning
- Achieving productivity
- · Controlling defects
- Multitasking

### **Elements and Performance Criteria**

### Preparing the rough diamond for planning

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

- **PC1.** analyse the rough diamond using an eye glass, draw a rough figure of the diamond and record first observations such as colour, purity, etc.
- **PC2.** mark and send the rough for windowing if required and check on receipt if the windowing is as per requirement
- **PC3.** fix the rough on a die pin with a glue meticulously and ensure it is an accord with the alignment
- **PC4.** apply whitener and place the rough in the laser mapping machine to create its image without damaging it
- **PC5.** remove from laser machine on creation of the image and clean it using cleaning agents such as acetone

#### Operating the software

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

- **PC6.** ensure the designing of the rough diamond as done by using designing software
- **PC7.** create the image of the rough using the laser machine
- **PC8.** enter the data of the parameters such as dimensions with diligence

#### Quality of planning

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

- **PC9.** decide the fate of a diamond and pick the optimum plan
- **PC10.** extract maximum value from a particular rough as compared to others
- **PC11.** ensure that no re-planning is required for any rough
- **PC12.** mark the rough for cutting with accuracy









- **PC13.** select the right method for inclusion plotting and rough cutting
- **PC14.** label and bag the roughs packet before returning

#### Achieving productivity

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

- **PC15.** achieve the productivity in terms of carats or number of pieces as set by the company
- **PC16.** ensure, delivery for further processing is not delayed

#### Controlling defects

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

- **PC17.** ensure no damage to the rough during the planning process
- **PC18.** spot and correct a faulty planning
- PC19. asses that the marking is correct for the cut required and will not damage the diamond

#### Multitasking

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

**PC20.** work on multiple roughs at the same time and switch the planning quickly depending on the type of rough

### **Knowledge and Understanding (KU)**

The individual on the job needs to know and understand:

- **KU1.** companys policies on: acceptable limits of stone loss, incentives, delivery standards, safety and hazards, integrity and personnel management
- **KU2.** non-disclosure of confidential information provided by the company either orally or in writing marked as confidential
- **KU3.** liability arising out of loss, theft, or inadvertent disclosure of confidential information
- **KU4.** work flow involved in gemstone processing of company
- KU5. importance of the individuals role in the workflow
- **KU6.** reporting structure
- **KU7.** issue return procedures followed by the company
- **KU8.** typical customer profile and market trends
- **KU9.** specialization area of the company (size, clarity, shape, quality, etc. of diamonds)
- **KU10.** diamond processing objective of the company, e.g. maximizing yield, maximizing clarity, etc.
- **KU11.** computer and laser marking machine operations
- **KU12.** using different diamond planning software
- **KU13.** different types of diamond roughs and its properties
- **KU14.** rough assortment
- **KU15.** windowing process
- **KU16.** rough cutting process (cleaving and sawing)
- **KU17.** polishing process in the factory (bruting, blocking, bottom, top, table, rounding, etc.)
- **KU18.** rough diamond shading colour wise (lb-lc-white-fancy)
- **KU19.** use of various scopes in diamond processing
- **KU20.** shape, cut, clarity, carat, colour and physical characteristics of the diamond









- **KU21.** tension in a diamond and use of tension machine
- **KU22.** fluorescence level of the diamond
- **KU23.** types of inclusions in a diamond
- KU24. inclusion planning methods (box, ig, galaxy, etc.) and its software
- **KU25.** spectrum process
- **KU26.** file sharing on companys server
- KU27. valuation of a diamond
- KU28. potential ways that may cause damage to a diamond
- KU29. potential work hazards, particularly, when using laser marking machine
- KU30. techniques of cutting a rough diamond
- **KU31.** windowing process
- KU32. bruting and polishing process
- KU33. use of various scopes in diamond processing
- **KU34.** geometry to understand the angles and symmetry
- KU35. gia diamond grading criteria
- KU36. repair work

### **Generic Skills (GS)**

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

- **GS1.** document work done for status and performance appraisal
- **GS2.** document damage to the rough while marking as per companies rules
- **GS3.** to read descriptions on the diamond packets/ bags
- **GS4.** understand the results displayed by the computer and read manuals
- **GS5.** discuss task, schedules, and work-loads with co-workers and supervisors
- **GS6.** understand instructions and report problems
- **GS7.** obtain approval from the supervisor for the final plan
- **GS8.** share work load as required
- **GS9.** assist others who require help
- **GS10.** share knowledge with co-workers
- **GS11.** decide the angles, size and shapes of the diamond
- **GS12.** make decisions pertaining to the inclusion plotting and the cutting technology to be used
- **GS13.** to decide the final plan to be selected for diamond polishing
- **GS14.** to decide on the windowing, spectrum, etc. requirements
- **GS15.** how to plan work for maximum productivity
- **GS16.** how to plan the cut on the given rough to maximize return as per companys objectives
- **GS17.** how to make various plans of the final cut diamond of different shapes, sizes, colour, clarity and value
- **GS18.** how to re plan the cut to obtain approval from supervisor









- **GS19.** refer inability to select method of inclusion plotting / cutting to reporting authority to spot process disruptions and delays
- **GS20.** refer difficulty in plan selection to reporting authority
- GS21. refer damage to the rough while marking to reporting authority
- GS22. report about machine/ software failure to reporting authority
- **GS23.** assess the accuracy of the inclusion plotting of the rough given
- GS24. analyze the options as per companys objectives before final plan selection
- **GS25.** use the knowledge/experience about similar quality of roughs in the past to predict the final outcome/quality of the current lot
- **GS26.** analyze the expected yield, clarity from the rough, while marking
- GS27. spot process disruptions and delays









# **Assessment Criteria**

Assessment Criteria for Outcomes	Theory Marks	Practical Marks	Project Marks	Viva Marks
Preparing the rough diamond for planning	4	10	-	-
<b>PC1.</b> analyse the rough diamond using an eye glass, draw a rough figure of the diamond and record first observations such as colour, purity, etc.	2	2	-	-
<b>PC2.</b> mark and send the rough for windowing if required and check on receipt if the windowing is as per requirement	1	2	-	-
<b>PC3.</b> fix the rough on a die pin with a glue meticulously and ensure it is an accord with the alignment	1	2	-	-
<b>PC4.</b> apply whitener and place the rough in the laser mapping machine to create its image without damaging it	-	2	-	-
<b>PC5.</b> remove from laser machine on creation of the image and clean it using cleaning agents such as acetone	-	2	-	-
Operating the software	-	6	-	-
<b>PC6.</b> ensure the designing of the rough diamond as done by using designing software	-	2	-	-
<b>PC7.</b> create the image of the rough using the laser machine	-	2	-	-
<b>PC8.</b> enter the data of the parameters such as dimensions with diligence	-	2	-	-
Quality of planning	8	12	-	-
<b>PC9.</b> decide the fate of a diamond and pick the optimum plan	-	2	-	-
<b>PC10.</b> extract maximum value from a particular rough as compared to others	1	3	-	-
<b>PC11.</b> ensure that no re-planning is required for any rough	1	2	-	-









Assessment Criteria for Outcomes	Theory Marks	Practical Marks	Project Marks	Viva Marks
PC12. mark the rough for cutting with accuracy	2	2	-	-
PC13. select the right method for inclusion plotting and rough cutting	2	2	-	-
PC14. label and bag the roughs packet before returning	2	1	-	-
Achieving productivity	1	6	-	-
<b>PC15.</b> achieve the productivity in terms of carats or number of pieces as set by the company	1	3	-	-
<b>PC16.</b> ensure, delivery for further processing is not delayed	-	3	-	-
Controlling defects	1	11	-	-
<b>PC17.</b> ensure no damage to the rough during the planning process	-	3	-	-
PC18. spot and correct a faulty planning	-	4	-	-
<b>PC19.</b> asses that the marking is correct for the cut required and will not damage the diamond	1	4	-	-
Multitasking	-	1	-	-
<b>PC20.</b> work on multiple roughs at the same time and switch the planning quickly depending on the type of rough	-	1	-	-
NOS Total	14	46	-	-









# **National Occupational Standards (NOS) Parameters**

NOS Code	G&J/N4202
NOS Name	Plan the final cut of the diamond
Sector	Gem & Jewellery
Sub-Sector	Diamond Processing
Occupation	Rough assorting
NSQF Level	3
Credits	7
Version	3.0
Last Reviewed Date	NA
Next Review Date	17/11/2025
NSQC Clearance Date	17/11/2022









### G&J/N9902: Maintain health and safety at workplace

### **Description**

This OS unit is about being aware of, communicating and taking steps towards minimizing potential hazards and dangers of accidents on the job and maintaining health and safety at workplace.

### Scope

The scope covers the following:

- This unit/task covers the following:
- Health and safety in work area
- Fire safety
- Emergencies, rescue and first aid procedures

#### **Elements and Performance Criteria**

#### Health and safety in work area

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

- **PC1.** identify and use appropriate protective clothing/equipment for specific tasks and work
- **PC2.** identify hazardous job activities in his/her job and communicate the possible causes of risks or accidents in the workplace
- **PC3.** carry out safe working practices while dealing with hazards to ensure safety of self and others
- **PC4.** identify and avoid doing any tasks or activities in a wrong posture
- **PC5.** practice appropriate working postures to minimise occupational health related issues

#### Fire safety

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

- **PC6.** use the appropriate fire extinguishers on different types of fire
- **PC7.** demonstrate rescue techniques applied during fire hazard
- **PC8.** demonstrate good housekeeping in order to prevent fire hazards
- PC9. demonstrate the correct use of any fire extinguisher

#### Emergencies, rescue and first aid procedures

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

- **PC10.** administer appropriate first aid procedure to victims wherever required eg.in case of bleeding, burns, choking, electric shock etc.
- **PC11.** respond promptly and appropriately to an accident or medical emergency
- **PC12.** participate in emergency procedures such as raising alarm, safe evacuation, correct means of escape, correct assembly point etc.,

### **Knowledge and Understanding (KU)**

The individual on the job needs to know and understand:









- KU1. companys policies on: safety and hazards and personnel management
- **KU2.** names and location of documents that refer to health and safety in work place
- **KU3.** reporting structure
- KU4. meaning of hazards and risks
- **KU5.** health and safety hazards commonly present in the work place and related precautions
- **KU6.** various dangers associated with use of electrical equipment
- **KU7.** preventative and remedial actions to be taken in case of exposure to toxic material
- **KU8.** methods of accident prevention
- **KU9.** how different chemicals react and the related hazards
- **KU10.** how to use machines and tools without causing any accident
- **KU11.** importance of using protective clothing/ equipment while working
- **KU12.** precautionary activities to prevent the fire accident
- KU13. various causes of fire
- **KU14.** techniques of using different fire extinguishers
- KU15. different materials used for extinguishing fire
- **KU16.** rescue techniques applied during a fire hazard
- **KU17.** various types of safety signs and their meaning
- **KU18.** appropriate basic first aid treatment relevant to different condition e.g. bleeding, minor burns, eye injuries etc.,
- **KU19.** casualty lifting in case of an accident caused to a person

#### **Generic Skills (GS)**

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

- **GS1.** read and comprehend basic content to read labels, charts, signages
- **GS2.** read and comprehend basic english to read manuals of operations
- **GS3.** communicate effectively the risk of not following safety measures
- GS4. respond to emergencies/accidents, by taking an appropriate and timely decision
- **GS5.** organize work schedule, work area, tools, equipment and material to minimize health and safety risk
- **GS6.** ensure appropriate action in case of any emergencies, accidents or fire at the work location
- **GS7.** analyze untoward incidents from the past and implement correct use of machines, tools or hazardous chemicals
- **GS8.** critically analyze the processes carried out by self and colleagues in the department to spot potential hazards and safety issues









# **Assessment Criteria**

Assessment Criteria for Outcomes	Theory Marks	Practical Marks	Project Marks	Viva Marks
Health and safety in work area	1	7	-	-
<b>PC1.</b> identify and use appropriate protective clothing/equipment for specific tasks and work	-	2	-	-
<b>PC2.</b> identify hazardous job activities in his/her job and communicate the possible causes of risks or accidents in the workplace	-	1	-	-
<b>PC3.</b> carry out safe working practices while dealing with hazards to ensure safety of self and others	-	1	-	-
<b>PC4.</b> identify and avoid doing any tasks or activities in a wrong posture	-	2	-	-
<b>PC5.</b> practice appropriate working postures to minimise occupational health related issues	1	1	-	-
Fire safety	-	6	-	-
<b>PC6.</b> use the appropriate fire extinguishers on different types of fire	-	1	-	-
<b>PC7.</b> demonstrate rescue techniques applied during fire hazard	-	2	-	-
<b>PC8.</b> demonstrate good housekeeping in order to prevent fire hazards	-	1	-	-
<b>PC9.</b> demonstrate the correct use of any fire extinguisher	-	2	-	-
Emergencies, rescue and first aid procedures	2	4	-	-
<b>PC10.</b> administer appropriate first aid procedure to victims wherever required eg.in case of bleeding, burns, choking, electric shock etc.	-	1	-	-
<b>PC11.</b> respond promptly and appropriately to an accident or medical emergency	1	2	-	-
<b>PC12.</b> participate in emergency procedures such as raising alarm, safe evacuation, correct means of escape, correct assembly point etc.,	1	1	-	-









Assessment Criteria for Outcomes	Theory	Practical	Project	Viva
	Marks	Marks	Marks	Marks
NOS Total	3	17	-	-









# **National Occupational Standards (NOS) Parameters**

NOS Code	G&J/N9902
NOS Name	Maintain health and safety at workplace
Sector	Gem & Jewellery
Sub-Sector	Jewellery Retail, Cast and diamonds-set jewellery
Occupation	Generic
NSQF Level	3
Credits	1
Version	4.0
Last Reviewed Date	31/08/2023
Next Review Date	31/08/2026
NSQC Clearance Date	31/08/2023









### **DGT/VSQ/N0101: Employability Skills (30 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
- 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. understand the significance of employability skills in meeting the job requirements

#### Constitutional values - Citizenship

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

**PC2.** identify constitutional values, civic rights, duties, personal values and ethics and environmentally sustainable practices

#### Becoming a Professional in the 21st Century

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

**PC3.** explain 21st Century Skills such as Self-Awareness, Behavior Skills, Positive attitude, self-motivation, problem-solving, creative thinking, time management, social and cultural awareness, emotional awareness, continuous learning mindset etc.

#### Basic English Skills

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

**PC4.** speak with others using some basic English phrases or sentences

#### Communication Skills

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

**PC5.** follow good manners while communicating with others

**PC6.** work with others in a team









#### **Diversity & Inclusion**

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

- PC7. communicate and behave appropriately with all genders and PwD
- **PC8.** report any issues related to sexual harassment

#### Financial and Legal Literacy

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

- **PC9.** use various financial products and services safely and securely
- PC10. calculate income, expenses, savings etc.
- **PC11.** approach the concerned authorities for any exploitation as per legal rights and laws

### Essential Digital Skills

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

- PC12. operate digital devices and use its features and applications securely and safely
- **PC13.** use internet and social media platforms securely and safely

#### Entrepreneurship

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

- PC14. identify and assess opportunities for potential business
- PC15. identify sources for arranging money and associated financial and legal challenges

#### **Customer Service**

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

- **PC16.** identify different types of customers
- **PC17.** identify customer needs and address them appropriately
- **PC18.** follow appropriate hygiene and grooming standards

#### Getting ready for apprenticeship & Jobs

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

- PC19. create a basic biodata
- **PC20.** search for suitable jobs and apply
- PC21. identify and register apprenticeship opportunities as per requirement

### **Knowledge and Understanding (KU)**

The individual on the job needs to know and understand:

- **KU1.** need for employability skills
- **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 basic spoken English language
- **KU6.** Do and dont of effective communication
- **KU7.** inclusivity and its importance
- KU8. different types of disabilities and appropriate communication and behaviour towards PwD
- **KU9.** different types of financial products and services









- **KU10.** how to compute income and expenses
- KU11. importance of maintaining safety and security in financial transactions
- KU12. different legal rights and laws
- **KU13.** how to operate digital devices and applications safely and securely
- KU14. ways to identify business opportunities
- KU15. types of customers and their needs
- **KU16.** how to apply for a job and prepare for an interview
- **KU17.** apprenticeship scheme and the process of registering on apprenticeship portal

### **Generic Skills (GS)**

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

- **GS1.** communicate effectively using appropriate language
- GS2. behave politely and appropriately with all
- **GS3.** perform basic calculations
- **GS4.** solve problems effectively
- **GS5.** be careful and attentive at work
- **GS6.** use time effectively
- **GS7.** maintain hygiene and sanitisation to avoid infection









# **Assessment Criteria**

Assessment Criteria for Outcomes	Theory Marks	Practical Marks	Project Marks	Viva Marks
Introduction to Employability Skills	1	1	-	-
<b>PC1.</b> understand the significance of employability skills in meeting the job requirements	-	-	-	-
Constitutional values - Citizenship	1	1	-	-
<b>PC2.</b> identify constitutional values, civic rights, duties, personal values and ethics and environmentally sustainable practices	-	-	-	-
Becoming a Professional in the 21st Century	1	3	-	-
<b>PC3.</b> explain 21st Century Skills such as Self-Awareness, Behavior Skills, Positive attitude, self-motivation, problem-solving, creative thinking, time management, social and cultural awareness, emotional awareness, continuous learning mindset etc.	-	-	-	-
Basic English Skills	2	3	-	-
<b>PC4.</b> speak with others using some basic English phrases or sentences	-	-	-	-
Communication Skills	1	1	-	-
<b>PC5.</b> follow good manners while communicating with others	-	-	-	-
PC6. work with others in a team	-	-	-	-
Diversity & Inclusion	1	1	-	-
<b>PC7.</b> communicate and behave appropriately with all genders and PwD	-	-	-	-
PC8. report any issues related to sexual harassment	-	-	-	-
Financial and Legal Literacy	3	4	-	-
<b>PC9.</b> use various financial products and services safely and securely	-	-	-	-









Assessment Criteria for Outcomes	Theory Marks	Practical Marks	Project Marks	Viva Marks
PC10. calculate income, expenses, savings etc.	-	-	-	-
<b>PC11.</b> approach the concerned authorities for any exploitation as per legal rights and laws	-	-	-	-
Essential Digital Skills	4	6	-	-
<b>PC12.</b> operate digital devices and use its features and applications securely and safely	-	-	-	-
<b>PC13.</b> use internet and social media platforms securely and safely	-	-	-	-
Entrepreneurship	3	5	-	-
<b>PC14.</b> identify and assess opportunities for potential business	-	-	-	-
<b>PC15.</b> identify sources for arranging money and associated financial and legal challenges	-	-	-	-
Customer Service	2	2	-	-
PC16. identify different types of customers	-	-	-	-
<b>PC17.</b> identify customer needs and address them appropriately	-	-	-	-
<b>PC18.</b> follow appropriate hygiene and grooming standards	-	-	-	-
Getting ready for apprenticeship & Jobs	1	3	-	-
PC19. create a basic biodata	-	-	-	-
PC20. search for suitable jobs and apply	-	-	-	-
PC21. identify and register apprenticeship opportunities as per requirement	-	-	-	-
NOS Total	20	30	-	-









# **National Occupational Standards (NOS) Parameters**

NOS Code	DGT/VSQ/N0101
NOS Name	Employability Skills (30 Hours)
Sector	Cross Sectoral
Sub-Sector	Professional Skills
Occupation	Employability
NSQF Level	2
Credits	1
Version	1.0
Last Reviewed Date	27/05/2021
Next Review Date	27/05/2024
NSQC Clearance Date	27/05/2021









### G&J/N4102: Mark the rough Diamonds

### **Description**

This OS unit is about marking the rough diamonds for providing a line of action to further processing like windowing, sawing, cleaving, etc. or for the purpose of identification. A marker must make precise marking as the accuracy of the following process depends on the accuracy of the marking. The marking must be made with the objective of maximizing the value, or any other as fixed by the company.

### Scope

The scope covers the following:

- This unit/task covers the following:
- · Inspect and mark each rough diamond
- Perform quality check
- Achieve productivity

#### **Elements and Performance Criteria**

#### Inspect and mark each rough diamond

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

- **PC1.** scrutinize each rough individually through an eye glass and make the required markings as per its classification, e.g. windowing mark, cleavable mark, sawable mark, makeable mark
- **PC2.** ensure that the marking is precise and the further process on the marking should not damage the diamond

#### Perform quality check

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

- **PC3.** mark the roughs as per the companys policies
- PC4. detect and correct/repair a faulty marking
- **PC5.** ensure no damage to the stone due to faulty marking
- **PC6.** complete work with no loss of roughs

#### Achieve productivity

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

- **PC7.** achieve the productivity in terms of carats or number of pieces as set by the company
- **PC8.** deliver in time to next process

#### **Knowledge and Understanding (KU)**

The individual on the job needs to know and understand:

- **KU1.** companys policies on: acceptable limits of weight loss; incentives; delivery standards; safety practices and hazards; security and performance measurement
- **KU2.** work flow involved in companys diamond processing process
- **KU3.** importance of the individuals role in the workflow









- **KU4.** reporting structure
- **KU5.** issue return procedures followed by the company
- **KU6.** typical customer profile and market trends
- **KU7.** specialization area of the company (size, clarity, shape, quality, etc. of diamonds)
- KU8. diamond processing objective of the company, e.g. maximizing yield, maximizing clarity, etc.
- **KU9.** different types of diamond roughs and its properties
- **KU10.** rough assortment
- **KU11.** windowing process
- **KU12.** rough cutting process (cleaving and sawing)
- **KU13.** polishing process in the factory (bruting, blocking, bottom, top, table, rounding, etc.)
- **KU14.** 4cs of diamond (colour, cut, clarity and carat)
- **KU15.** rough diamond shading colour wise (lb-lc-white-fancy)
- **KU16.** use of various scopes in diamond processing
- KU17. stress (tension) of the diamond
- KU18. types of diamond inclusions
- KU19. valuation as per market practice
- **KU20.** windowing process to look inside a rough
- KU21. repair work

### **Generic Skills (GS)**

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

- **GS1.** document work done for status and performance appraisal
- **GS2.** report diamond losses via documentation as per company policy
- **GS3.** to read descriptions on the rough packets/ bags
- **GS4.** receive the packet of roughs from the supervisor along with instructions
- **GS5.** discuss task lists, schedules, and work-loads with co-workers and supervisor
- **GS6.** understand instructions and report problems
- **GS7.** decide which plane to mark in order to achieve the companys objective of maximizing value and minimizing the damage to the rough
- **GS8.** decide the size of marking and the number of markings required
- **GS9.** make markings as per requirement on the rough
- **GS10.** plan and organize work in order to ensure maximum productivity
- **GS11.** detect and correct / repair a faulty marking
- **GS12.** suggest improvements in order to reduce loss
- **GS13.** use the knowledge/experience about similar quality of roughs in the past to predict the final outcome/quality of the current lot
- **GS14.** analyze the expected yield, clarity from the rough, while marking
- **GS15.** judge the planes, angles and other dimensions of the rough, to make appropriate markings









- **GS16.** judge the extent of marking required for a particular type of rough (size of the groove, cut, etc.)
- **GS17.** approximately estimate the value of the diamond
- **GS18.** spot process disruptions and delays









# **Assessment Criteria**

Assessment Criteria for Outcomes	Theory Marks	Practical Marks	Project Marks	Viva Marks
Inspect and mark each rough diamond	4	16	-	-
<b>PC1.</b> scrutinize each rough individually through an eye glass and make the required markings as per its classification, e.g. windowing mark, cleavable mark, sawable mark, makeable mark	2	8	-	-
<b>PC2.</b> ensure that the marking is precise and the further process on the marking should not damage the diamond	2	8	-	-
Perform quality check	8	26	-	-
<b>PC3.</b> mark the roughs as per the companys policies	2	8	-	-
<b>PC4.</b> detect and correct/repair a faulty marking	2	8	-	-
<b>PC5.</b> ensure no damage to the stone due to faulty marking	3	7	-	-
PC6. complete work with no loss of roughs	1	3	-	-
Achieve productivity	2	4	-	-
<b>PC7.</b> achieve the productivity in terms of carats or number of pieces as set by the company	2	2	-	-
PC8. deliver in time to next process	-	2	-	-
NOS Total	14	46	-	-









### **National Occupational Standards (NOS) Parameters**

NOS Code	G&J/N4102
NOS Name	Mark the rough Diamonds
Sector	Gem & Jewellery
Sub-Sector	Diamond Processing
Occupation	Rough assorting
NSQF Level	3
Credits	5
Version	3.0
Last Reviewed Date	NA
Next Review Date	17/11/2025
NSQC Clearance Date	17/11/2022

# 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: 50

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

# **Assessment Weightage**

# Compulsory NOS

National Occupational Standards	Theory Marks	Practical Marks	Project Marks	Viva Marks	Total Marks	Weightage
G&J/N4202.Plan the final cut of the diamond	14	46	-	-	60	80
G&J/N9902.Maintain health and safety at workplace	3	17	-	-	20	10
DGT/VSQ/N0101.Employability Skills (30 Hours)	20	30	0	0	50	10
Total	37	93	0	0	130	100

### Optional: 1 Marker

National Occupational Standards	Theory Marks	Practical Marks	Project Marks	Viva Marks	Total Marks	Weightage
G&J/N4102.Mark the rough Diamonds	14	46	-	-	60	50
Total	14	46	-	-	60	50









# **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.