



QUALIFICATIONS PACK - OCCUPATIONAL STANDARDS FOR GEMS AND JEWELLERY INDUSTRY

What are Occupational Standards(OS)?

- OS describe what individuals need to do, know and understand in order to carry out a particular job role or function
- OS are performance standards that individuals must achieve when carrying out functions in the workplace, together with specifications of the underpinning knowledge and understanding

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Introduction

Qualifications Pack - Gemstone Polisher

(Electives: Facet Maker / Facet Polisher/ Girdle Polisher)

SECTOR: GEMS & JEWELLERY

SUB-SECTOR: Gemstone Processing

OCCUPATION: Faceting and Polishing

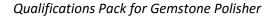
REFERENCE ID: G&J/Q6706

ALIGNED TO: NCO-2015/7313.1303,1505,1506

Brief Job Description: The individual works with high-speed rotating machines with metal placed and buffs also with angle-indexed rotating scaife machines with diamond or steel laps. He/she grinds the facets on pre-shaped stone or faceted gemstone to produce a fully finished stone.

Elective 1 - Facet Making:

The polisher creates facets on stones in order to give the final look to the roughcut and pre-shaped stone.







Elective 2 – Facet Polishing:

The polisher provides final polish/finish to the pre-shaped or faceted stone and brings out the stone's colour and lustre.

Elective 3 - Girdle Polishing:

The girdle polisher provides finish to the girdle of the faceted and polished stone to enhance the colour and lustre of the girdle.

Personal Attributes:

The job requires the individual to have: attention to details; good eyesight; steady grip; ability to work in a process driven team, for prolonged hours in noisy environment and in seated position with patience. The individual must avert machine failures, errors and avoid safety hazards.





Qualifications Pack Code	G&J/Q6706		
Job Role	Gemstone Polisher		
Credits (NSQF)	TBD	Version number	1.0
Sector	Gems & Jewellery	Drafted on	28/08/2016
Sub-sector	Gemstone Processing	Last reviewed on	17/01/2018
Occupation	Gemstone Faceting & Polishing	Next review date	17/01/2022
NSQC Clearance on*	DD/MM/YYYY		

^{*}only after clearance from NSQC

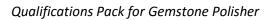
Job Role	Gemstone Polisher		
Role Description	Grinding the rough cut gemstone into a multi-faceted stone, polishing the girdle and facets in order to get finish, shine and luster		
NSQF level	3		
Minimum Educational Qualifications*	8th Standard		
Maximum Educational Qualifications*	Not applicable		
Training (Suggested but not mandatory)	Not applicable		
Minimum job entry age	18 years		
Experience	Not applicable		
Applicable National Occupational Standards (NOS)	Compulsory: 1. G&J/N6601 Dop the gemstone 2. G&J/N9901 Coordinate with others 3. G&J/N9902 Maintain health and safety at workplace Electives (mandatory to select at least one): Elective 1. Facet Making 1.1 G&J/N6701 Make facets on gemstone Elective 2. Facet Polishing 2.1 G&J/N6703 Polish faceted or cabochon gemstone Elective 3. Girdle Polishing 3.1 G&J/N6704 Polish the girdle of faceted gemstone		
Performance Criteria	As described in the relevant OS units		





Keywords /Terms	Description			
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			
O	employment opportunity in an organisation.			
Occupational Standards	OS specify the standards of performance an individual must achieve when			
(OS)	carrying out a function in the workplace, together with the knowledge and understanding they need to meet that standard consistently. Occupational			
	Standards are applicable both in the Indian and global contexts.			
Performance Criteria	Performance criteria are statements that together specify the standard of			
T CHOMIUNCE CITETIA	performance required when carrying out a task.			
National Occupational	NOS are occupational standards which apply uniquely in the Indian context.			
Standards (OS)	, , , , , , , , , , , , , , , , , , ,			
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			
Coope	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	Knowledge and understanding are statements which together specify the			
Understanding	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	Core skills or generic skills are a group of skills that are the key to learning and			
Skills	working 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.			







Acronyms

Keywords /Terms	Description		
NOS	National Occupational Standard(s)		
NSQF	National Skills Qualifications Framework		
QP	Qualifications Pack		







Dop the gemstone

National Occupational Standard



Overview

This unit is about fixing the stone securely on a dop stick, metal or wooden, in order to prepare it for pre-shaping, faceting or polishing.







Dop the gemstone

Unit Code	G&J/N6601		
Unit Title (Task)	Dop the gemstone		
Description	This OS unit is about fixing the rough-cut or pre-shaped gemstone securely on the dop for pre-shaping, faceting or polishing.		
Scope	This unit/task covers the following: • Fixing the gemstone on dop • Ensuring Productivity		
Performance Criteria(PC)	w.r.t. the Scope		
Element	Performance Criteria		
Fixing the gemstone on dop	To be competent, the user/individual on the job must be able to: PC1. match the stone type, weight and number as mentioned on the bag received from supervisor PC2. check the assortment of stones for shape, size and softness PC3. interpret the plan for the stone as per job sheet for stone to be aligned align the stone with accuracy PC5. make correct selection of dop and material for fixing PC6. maintain appropriate level of heating so that stone does not change colour PC7. achieve scratch-free doping PC8. achieve secure setting		
Ensuring Productivity	PC9. ensure timely delivery to facet maker or shaper PC10. achieve number of dop prepared per day as per target given PC11. deliver damage-free output with minimum hazards		
Knowledge and Understa	nding (K)		
A. Organizational Context (knowledge of the company/organisation and its process)	The user/individual on the job needs to know and understand: KA1. company's policies on: acceptable limits of stone loss, incentives, delivery standards, safety and hazards, integrity and personnel management KA2. non-disclosure of "confidential information" provided by the company either orally or in writing marked as confidential KA3. liability arising out of loss, theft or inadvertent disclosure of confidential information KA4. work flow involved in gemstone processing of company KA5. importance of the individual's role in the workflow KA6. reporting structure KA7. the issuing and returning procedures of the gemstones to be polished, followed by the company KA8. gemstone processing objective of the company, e.g. maximizing yield,		

maximizing clarity, etc.







Dop the gemstone

B. Technical Knowledge	The user/individual on the job needs to know and understand: KB1. different types of stones, the family of stone and their properties, particularly, with respect to heat and pressure sensitivity KB2. the assortment of stones for shape, size, softness KB3. how to fix the stone on dop as per job sheet KB4. different types of dop used as per gemstone type KB5. uses of different qualities of wax and lac for fixing, their merits and			
	demerits KB6. potential work hazards, particularly, when using heating lamps			
Skills (S)				
A. Core Skills/ Generic	Writing Skills			
Skills	The user/ individual on the job needs to know and understand how to: SA1. document reports, and loss of gemstones			
	Reading Skills			
	SA2. read the stone type, the family it belongs to and its properties SA3. read notes, signs and instructions on job sheet SA4. read company rules and compliance documents			
	Oral Communication (Listening and Speaking skills)			
	SA5. receive instructions and materials from reporting supervisor SA6. discuss task lists, schedules, and work-loads with co-workers SA7. share work load when multiple deliverables are required			
B. Professional Skills	Decision Making			
	The user/ individual on the job needs to know and understand how to: SB1. make decisions pertaining to the concerned area of work SB2. make decisions on the use of type of dop, e.g., metal or wooden for the process involved Plan and Organize			
	SB3. plan and organize the doping process			
	Customer Centricity			
	N.A.			
	Problem Solving			
	SB4. report about dop and tools shortage to supervisor SB5. resolve problems about alignment and work process with facet maker, polisher or preshaper			
	Analytical Thinking			

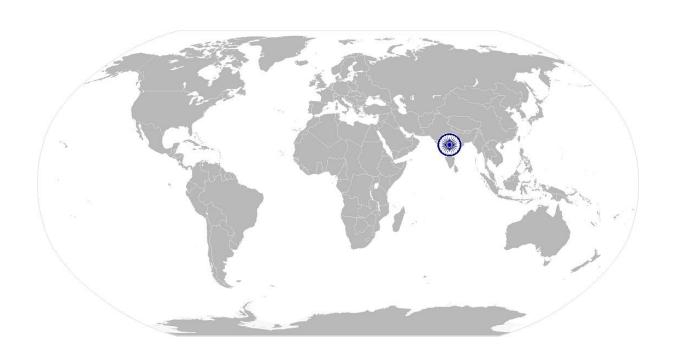






Dop the gemstone

SB6. visualize and map the final form of the stone		
Critical Thinking		
SB7. anticipate process disruption and reasons for delay		





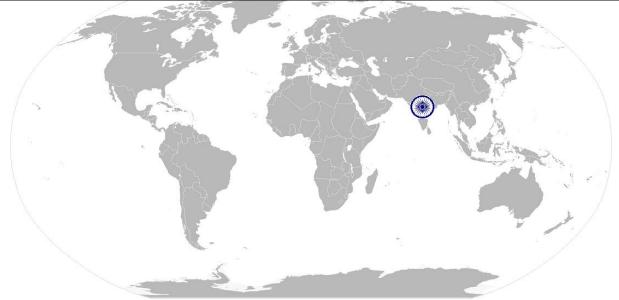




Dop the gemstone

NOS Version Control

NOS Code	G&J/N6601		
Credits (NSQF)	TBD	Version number	1.0
Industry	Gems & Jewellery	Drafted on	28/08/2016
Industry Sub-sector	Gemstone Processing	Last reviewed on	17/01/2018
Occupation	Gemstone Faceting & Polishing	Next review date	17/01/2022



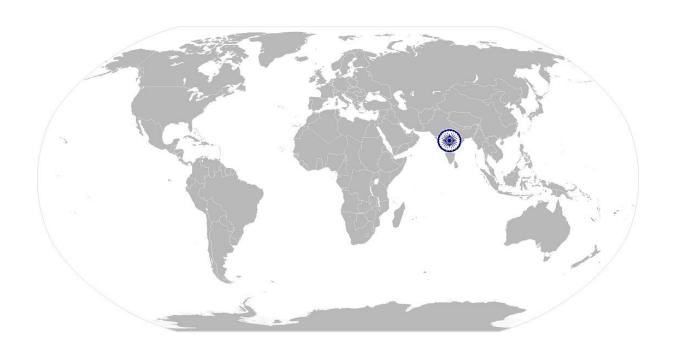






Coordinate with others

National Occupational Standard



Overview

This unit is about team work and communication with colleagues or clients. It determines the coordination capability of an individual to work as a team member, share work and multitask in order to achieve the deliverables as per schedule.







Coordinate with others

Unit Code	G&J/N9901		
Unit Title (Task)	Coordinate with others		
Description	This OS unit is about communicating with colleagues, seniors and outside parties in order to achieve the deliverables as per schedule		
Scope	This unit/task covers the following: Interacting with supervisor Interacting with colleagues within and outside the department Interacting with outside parties		
Performance Criteria	PC) w.r.t. the Scope		
Element	Performance Criteria		
Interacting with supervisor	To be competent, the user/individual on the job must be able to: PC1. coordinate for receiving work instructions and raw materials from reporting supervisor PC2. communicate to the reporting supervisor about process flow improvements, product defects received from previous process, repairs and maintenance of tools and machinery as required PC3. communicate to reporting supervious about operation details and hazards PC4. interact with supervisor regarding compliance of company policy and rules		
Interacting with colleagues within and outside the department	PC5. coordinate with colleagues to share work, as per the workload in order to achieve tem goals PC6. communicate and discuss work flow related difficulties in order to find solutions with mutual agreement PC7. coordinate and receive feedback from quality control department PC8. resolve conflicts by communicating with colleagues and other departments PC9. coordinate with colleagues regarding multitasking in other departments with requirements		
Interacting with outside parties	PC10. adhere to nondisclosure policy of the company in all outside coordination		
Knowledge and Unde	rstanding (K)		
A. Organizational Context (knowledge of the company/organisation and its process)	The user/individual on the job needs to know and understand: KA1. company's policies on: preferred language of communication, reporting and escalation policy, quality delivery standards, and personnel management KA2. company's policies on non-disclosure of "confidential information" provided by the company either orally or in writing marked as confidential KA3. liability arising out of loss, theft or inadvertent disclosure of confidential information		

KA4. reporting structure







Coordinate with others

B. Technical	The user/individual on the job needs to know and understand:			
Knowledge	KB1. various categories of people that one is required to communicate and			
	coordinate within the organization			
	KB2. importance of effective communication in the workplace like expressing and			
	addressing grievances appropriately and effectively			
	KB3. importance of teamwork in organizational and individual success			
	KB4. various components of effective communication			
	KB5. barriers to effective communication			
	KB6. common reasons for interpersonal conflict			
	KB7. what constitutes disciplined behavior for a working professional			
Skills (S) [Optional]				
A. Core Skills/	Writing Skills			
Generic Skills	The user/ individual on the job needs to know and understand how to:			
	SA1. write instructions, remarks, job sheets, basic information, technical details			
	etc. in preferred local language of communication and English			
	Reading Skills			
	SA2. read preferred language of communication as prescribed by the company			
	SA3. read job sheets and interpret technical details mentioned in the job sheet			
	Oral Communication (Listening and Speaking skills)			
	SA4. discuss task lists, schedules, and work-loads with co-workers			
	SA5. be a good listener			
	SA6. be effective in communicating the issues faced to the supervisor			
	SA7. avoid using jargon, slang or acronyms when communicating			
B. Professional Skills	Decision Making			
	the user/ individual on the job needs to know and understand how to:			
	SB1. spot and communicate potential areas of disruptions to work process and			
	report the same			
	SB2. report to supervisor or deal with a colleague individually, depending on the			
	type of concern			
	Plan and organize			
	SB3. to plan work for maximum productivity			
	SB4. to plan and organize the schedules for maintenance of tools and machines			
	Customer Centricity			
	SB5. convey accurate information to all internal as well as external customers			
	Problem Solving			
	SB6. to handle critical situations caused due to communication issues at workplace			
	and solve problems without blaming others			







Coordinate with others

Analytical Thinking		
SB7.	analyse the work processes by interacting with others and adopting best practices	
SB8.	use prior experience to observe and reflect for development of ideas	
Critical	Thinking	
SB9.	think through the problem, evaluate the possible solution(s) and suggest an optimum /best possible solution(s)	
SB10.	deal with clients lacking the technical background to solve the problem on their own	
SB11.	spot process disruptions and delays and report and communicate with solutions	
SB12.	identify immediate or temporary solutions to resolve delays	
SB13.	apply, analyze, and evaluate the information gathered from observation, experience, reasoning or communication, as a guide to thought and action	









Coordinate with others

NOS Version Control

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Industry	Gems & Jewellery	Drafted on	28/08/2016
Industry Sub-sector	Gemstone Processing	Last reviewed on	17/01/2018
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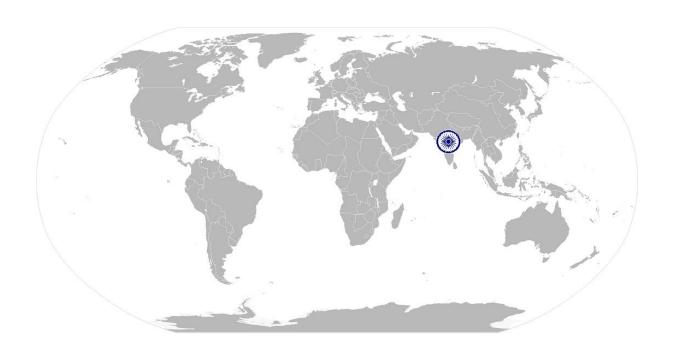






Maintain health and safety at workplace

National Occupational Standard



Overview

This unit is about commitment towards reporting potential hazards, taking preventive measures to avoid accidents at work place, to maintain health and safety of self and colleagues







and its process)

Maintain health and safety at workplace

Unit Code	G&J/N9902		
Unit Title (Task)	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	This unit/task covers the following: • Health and safety in work area • Fire safety • Emergencies, rescue and first aid procedures		
Performance Criteria(PC)	w.r.t. the Scope		
Element	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 practice appropriate working postures to minimise occupational health related issues		
Fire safety	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	PC10. provide 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, etc.,		
Knowledge and Understar	- 11		
A. Organizational Context (knowledge of the company/organisation and its process)	The user/individual on the job needs to know and understand: KA1. company's policies on: safety and hazards and personnel management KA2. names and location of documents that refer to health and safety in work place KA3. reporting structure		







G&J/N9902 Maintain health and safety at workplace

B. Technical Knowledge	The user/individual on the job needs to know and understand:				
	KB1. meaning of "hazards" and risks				
	KB2. health and safety hazards commonly present in the work place and related precautions				
	KB3. various dangers associated with use of electrical equipment				
	KB4. preventative and remedial actions to be taken in case of exposure to toxic material				
	KB5. methods of accident prevention				
	KB6. how different chemicals react and the related hazards				
	KB7. how to use machines and tools without causing any accident				
	KB8. importance of using protective clothing/ equipment while working				
	KB9. precautionary activities to prevent the fire accident				
	KB10. various causes of fire				
	KB11. techniques of using different fire extinguishers				
	KB12. different materials used for extinguishing fire				
	KB13. rescue techniques applied during a fire hazard				
	KB14. various types of safety signs and what they mean				
	KB15. appropriate basic first aid treatment relevant to condition e.g. bleeding,				
	minor burns, eye injuries etc.				
	KB16. casualty lifting in case of an accident caused to a person				
Skills (S) [Optional]					
A. Core Skills/ Generic	Writing Skills				
Skills	The individual on the job needs to know and understand how to:				
	N.A.				
	Reading Skills				
	SA1. read and comprehend basic content to read labels, charts, signage				
	SA2. read and comprehend basic English to read manuals of operations				
	Oral Communication (Listening and Speaking skills)				
	SA3. communicate effectively the risk of not following safety measures				
B. Professional Skills	Decision Making				
	The individual on the job needs to know and understand how to:				
	SB1. respond to emergencies/accidents, by taking an apt and timely decision				
	Plan and Organize				
	SB2. organize work schedule, work area, tools, equipment and material to minimize health and safety risk				
	Customer Centricity				
	N. A.				
	Problem Solving				
	SB3. ensure apt action in case of any emergencies, accidents or fire at the work				

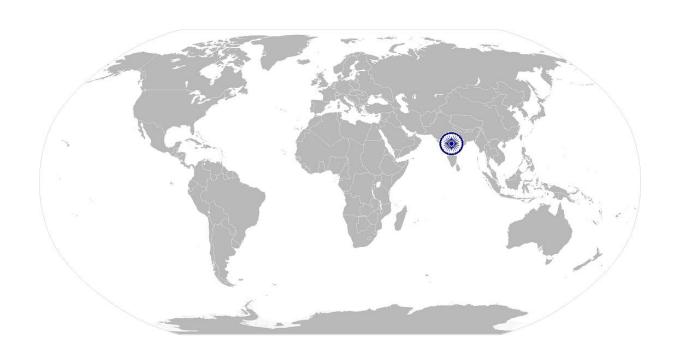






Maintain health and safety at workplace

Analytical Thinking
SB4. analyse untoward incidents from the past and implement correct use of machines, tools or hazardous chemicals
Critical Thinking
SB5. critically analyse the processes carried out by self and by colleagues in the department to spot potential hazards and safety issues









Maintain health and safety at workplace

NOS Version Control

NOS Code	G&J/N9902		
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Industry	Gems & Jewellery	Drafted on	28/08/2016
Industry Sub-sector	Gemstone Processing	Last reviewed on	17/01/2018
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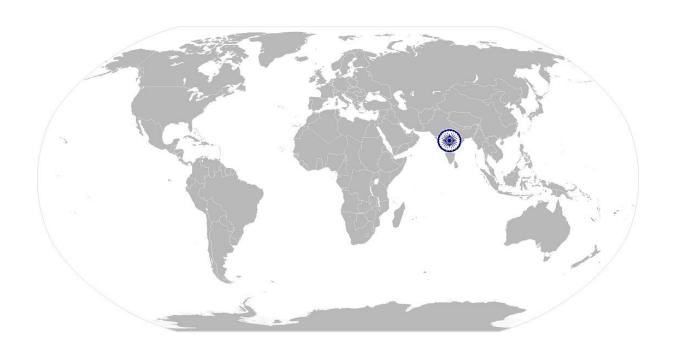






Make facets on gemstones

National Occupational Standard



Overview

This unit is about grinding multiple numbers and shapes of facets on a transparent gemstone in order to enhance its lustre and colour, after pre-shaping it.







Make facets on gemstones

Unit Code	G&J/N6701		
Unit Title (Task)	Make facets on gemstones		
Description	This unit is about grinding different numbers and shapes of facets on a transparent gemstone in order to enhance its lustre and colour, after pre-shaping it.		
Scope	This unit/task covers the following: • Making facets on the gemstones • Maintaining productivity • Handling problems		
Performance Criteria(PC)	w.r.t. the Scope		
Element	Performance Criteria		
Making facets on the gemstones Maintaining productivity	To be competent, the user/individual on the job must be able to: PC1. match the stone type, weight, number as mentioned on the bag with gemstones received from supervisor PC2. identify faceting requirement as per plan such as how many facets and shape of facet to be created PC3. achieve maximum number of facets to be created per stone PC4. cut facets according to the shape olour, brilliance and metered edges PC5. make accurate use of angle-indexing PC6. use correct lap and powder for the stone PC7. ensure there is no window in facets PC8. achieve accurate calibration PC9. achieve maximum number of QC approved stones		
	PC11. achieve scratch-less facets PC12. maintain stone loss within prescribed limits, particularly, in precious stones		
Handling problems	PC13. deliver faceted stone in time by reporting problems faced or anticipated well in advanced		
Knowledge and Understar	nding (K)		
A. Organizational Context (knowledge of the company/organisation and its process)	The user/individual on the job needs to know and understand: KA1. company's policies on: acceptable limits of stone loss, incentives, delivery standards, safety and hazards, integrity and personnel management KA2. non-disclosure of "confidential information" provided by the company either orally or in writing marked as confidential KA3. liability arising out of loss, theft or inadvertent disclosure of confidential information KA4. work flow involved in gemstone processing of company KA5. importance of the individual's role in the workflow		
	KA6. reporting structure		







Make facets on gemstones

B. Technical Knowledge	The user/individual on the job needs to know and understand:		
b. Technical Knowledge	KB1. basic gemology and properties of different types of stones		
	KB2. different types of stones such as precious, semi-precious, synthetic		
	KB3. market value of stone to understand the rationale for different acceptable		
	levels of stone loss		
	KB4. origin of the stone, i.e., which mine, particularly, precious stones to read the softness/ hardness as developed from precedence of use		
	KB5. maximum number of facets that can be created on a stone, e.g., garnet becomes dark with more number of facets, which is not desirable; the		
	more transparent the stone, the more facets to be created		
	KB6. treatment of inclusions depending on the value of stone		
	KB7. use of tools and machines such as e.g., faceting mill, scaifes, different types of laps that are available in terms of material such as diamond or		
	steel or the grits		
	KB8. how to level the scaife or faceting mill		
	KB9. how to select the scaife i.e steel or diamond, and powdered lap to be used for the stone type		
	KB10. the angles at which the doped stones have to be faceted to achieve the		
	type of shape such as round brilliant, marquise, square, princess oval,		
	heart, baguette, emerald, briolette, pear, trilliant, octagon etc.,		
	KB11. use angle indexing to cut a face the stone		
	KB12. how to use water jet and keep the stone cool		
	KB13. control of losses during operations		
Chille (C)	KB14. how to work in a safe environment, i.e., without injuries		
Skills (S)	Westing Skills		
A. Core Skills/ Generic	Writing Skills		
Skills	The user/ individual on the job needs to know and understand how to:		
	SA1. report stone losses via documentation as per company policy		
	SA2. fill the requisition slip for ordering tools and consumables		
	Reading Skills		
	SA3. read height, weight, dimensions of the stones facets as given on job sheets		
	SA4. convert shape on paper into faceted stone		
	SA5. read company rules and compliance documents required to complete the		
	work		
	Oral Communication (Listening and Speaking skills)		
	SA6. receive instructions and materials from reporting supervisor		
	SA7. give feedback to supervisor or polisher on any specific stone handling		
	requirement		
	SA8. share work load when multiple deliverables are required		
B. Professional Skills	Decision Making		







Make facets on gemstones

Th	e user/ individual on the job needs to know and understand how to:
S	B1. make decisions pertaining to the concerned area of work
Pla	an and Organize
S	B2. plan and organize laying facets on gemstones
Cu	stomer Centricity
N.	Α.
Pro	oblem Solving
S	B3. resolve difficulties with respect to practicality of plan or facets to be created
An	alytical Thinking
	B4. assess the angles at which the doped stones have to be faceted to achieve the type of shape such as round brilliant, marquise, square, princess oval, heart, baguette, emerald, briolette, pear, trilliant, octagon improve work processes for greater productivity by analyzing current working methods
Cri	tical Thinking
S	B6. spot process disruption and reasons for delay







Make facets on gemstones

NOS Version Control

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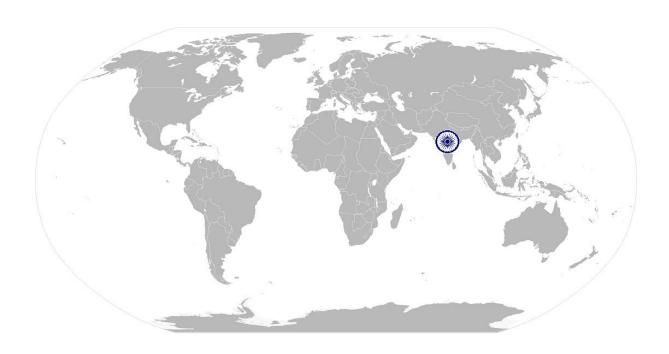






Polish the faceted or cabochon gemstone

National Occupational Standard



Overview

This unit is about providing final finish, shine and lustre by polishing to pre-shaped cabochon or faceted gemstone.







Polish the faceted or cabochon gemstone

Unit Code	G&J/N6703		
Unit Title (Task)	Polish the faceted or cabochon gemstone		
Description	This OS unit is about providing final finish to the pre-shaped, cabochon or faceted gemstone by polishing		
Scope	This unit/task covers the following: Preparing to polish gemstone Polishing Gemstone Maintaining productivity Handling problems		
Performance Criteria(PC)	w.r.t. the Scope		
Element	Performance Criteria		
Preparing to polish gemstone	PC1. match the stone type, weight, number as mentioned on the bag with gemstone received from supervisor PC2. check shape, size and facet or cabochon of stone for polishing as per job sheet for symmetry and colour defects and potential problems in polishing process PC3. understand the type of stone to polished such as soft or hard, transparent or translucent or opaque PC4. level the scaife or faceting mill PC5. set the correct pressure on water jet to reduce adverse effect of overheating of stone, such as change of colour or breakage		
Polishing gemstone Maintaining productivity	PC6. ensure that no window is seen on the surface of the stone and facets are polished completely PC7. achieve appropriate angle- indexing PC8. use correct lap, powder and buff PC9. calibrate the gemstone PC10. achieve maximum number of QC approved polished gemstones PC11. deliver the number of stones polished per day against target given		
	PC12. achieve scratch-less facets or cabochon with brilliance level as defined in job sheet PC13. maintain stone loss within prescribed limits, particularly, in precious stones		
Handling problems	PC14. deliver polished stone in time by reporting problems faced or anticipated well in advanced		
Knowledge and Understa	nding (K)		
A. Organizational Context (knowledge of the	The user/individual on the job needs to know and understand: KA1. company's policies on: acceptable limits of stone loss, incentives, delivery standards, safety and hazards, integrity and personnel management		







Polish the faceted or cabochon gemstone

company/organisation	KA2. non-disclosure of "confidential information" provided by the company
and its process)	either orally or in writing marked as confidential
	KA3. liability arising out of loss, theft or inadvertent disclosure of confidential information
	KA4. work flow involved in gemstone processing of company
	KA5. importance of the individual's role in the workflow
	KA6. reporting structure
B. Technical Knowledge	The user/individual on the job needs to know and understand:
	KB1. the process of faceting
	KB2. the machines and tools used in the faceting operation such as faceting
	mill, various types of suitable scaife, angle indexing tool to polish the
	stone
	KB3. how to level the scaife or faceting mill
	KB4. permitted level of stone loss
	KB5. basic gemology and properties of different types of stones
	KB6. different types of stones such as precious, semi-precious, synthetic
	KB7. market value of stone to understand the rationale for different acceptable
	levels of stone loss
	KB8. origin of the stone, i.e., which mine, particularly, precious stones to read
	the softness/ hardness as developed from precedence of use
	KB9. assess the angle indexing required
	KB10. maintain symmetry of facets while polishing the stone
	KB11. angle-indexing on polishing machine for achieving maximum clarity and
Cl :II. (c)	brilliance in polished stone
Skills (S)	
A. Core Skills/ Generic	Writing Skills
Skills	The user/ individual on the job needs to know and understand how to:
	SA1. prepare status and progress reports
	SA2. fill the requisition slip for ordering tools and consumables
	SA3. report stone losses via documentation as per company policy
	Reading Skills
	SA4. read height, weight, dimensions of the stones facets as given on job
	sheets
	SA5. read company rules and compliance documents required to complete the
	work
	Oral Communication (Listening and Speaking skills)
	SA6. receive instructions and materials from reporting supervisor
	SA7. give feedback to supervisor or facet maker on any specific stone handling
	requirement
	CAR discuss tack lists, schoolules, and work leads with so workers
	SA8. discuss task lists, schedules, and work-loads with co-workers







Polish the faceted or cabochon gemstone

B. Professional Skills	Decision Making				
	The user/ individual on the job needs to know and understand how to:				
	SB1. decide the selection of buffing plate to be used for the stone type such as cloth, wool, and wood according to the stone hardness and color changing properties Plan and Organize				
	SB2. plan and organize required toolkit at the work bench for effective work management				
	Customer Centricity				
	N.A.				
	Problem Solving				
	SB3. deliver the stone to next work process on time				
	Analytical Thinking				
	SB4. improve work processes for greater productivity				
	SB5. assess the angles at which the doped stones have to be polished to				
	achieve the brilliance and colour				
	Critical Thinking				
	SB6. anticipate process disruption and reasons for delay				







Polish the faceted or cabochon gemstone

NOS Version Control

NOS Code	G&J/N6703		
Credits (NSQF)	TBD	Version number	1.0
Industry	Gems & Jewellery	Drafted on	28/08/2016
Industry Sub-sector	Gemstone Processing	Last reviewed on	17/01/2018
Occupation	Gemstone Faceting & Polishing	Next review date	17/01/2022



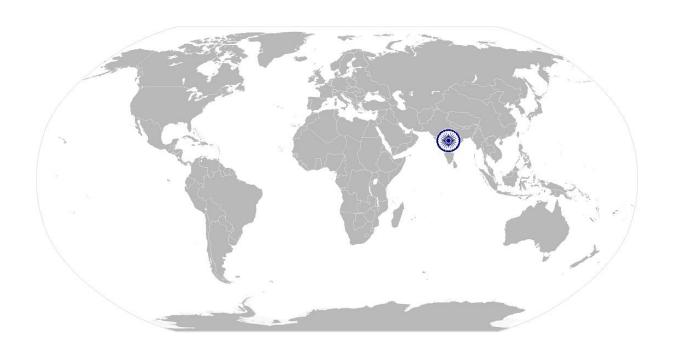






Polish the girdle of faceted gemstone

National Occupational Standard



Overview

This unit is about providing finish, shine and lustre by polishing the girdle of a faceted gemstone.







Polish the girdle of faceted gemstone

Unit Code	G&J/N6704
Unit Title (Task)	Polish the girdle of faceted gemstone
Description	This OS unit is about providing final finish to the girdle of the gemstone by
	polishing
Scope	This unit/task covers the following:
	Preparing for girdle polishing of gemstone
	Polishing girdle of gemstone
	Maintaining productivity
	Handling problems
Parformance Criteri	ia(DC) wirt the Scope

Performance Criteria(PC) w.r.t. the Scope

Element	Performance Criteria					
Preparing for girdle	To be competent, the user/individual on the job must be able to:					
polishing of gemstone	PC1. receive bag of faceted gemstones and instructions from supervisor					
	PC2. match the stone type, weight and number as mentioned on the bag					
	PC3. check shape, size and facet of stone for polishing as per job sheet for					
	symmetry and colour defects and potential problems in polishing process					
	PC4. understand the type of stone to be polished such as soft or hard,					
	transparent or translucent or opaque					
	PC5. carry out girdle polishing within permitted level of stone loss					
	PC6. use water jet to reduce adverse effect of overheating of stone, such as					
	change of colour or breakage					
Polishing girdle of	PC7. bring out the sharpness of the edges of girdle clearly					
gemstone	PC8. maintain shape and size of the faceted stone					
	PC9. calibrate the shape and size of girdle to be achieved					
	PC10. avoid damage to facets that were previously created					
	PC11. select correct angle for girdle polishing					
	PC12. achieve sparkle or shine or finish as per job sheet or plan					
	PC13. ensure accurate use of angle-indexing					
	PC14. use correct lap, powder and buff					
	PC15. achieve accurate calibration					
	PC16. achieve maximum number of QC approved girdle polished gemstones					
Maintaining productivity	PC17. achieve the number of girdles polished per day against target given					
	PC18. deliver scratch-less facets with brilliance level as per job sheet					
	PC19. maintain, stone loss within prescribed limits, particularly, in precious					
	stones					
Handling problems	PC20. deliver polished stone in time by reporting problems faced or anticipated					
	well in advanced					
Knowledge and Understar	nding (K)					
A. Organizational	The user/individual on the job needs to know and understand:					
Context						







Polish the girdle of faceted gemstone

(knowledge of the	KA1. company's policies on: acceptable limits of stone loss, incentives, delivery
company/organisation	standards, safety and hazards, integrity and personnel management
and its process)	KA2. non-disclosure of "confidential information" provided by the company
' '	either orally or in writing marked as confidential
	KA3. liability arising out of loss, theft or inadvertent disclosure of confidential
	information
	KA4. work flow involved in gemstone processing of company
	KA5. importance of the individual's role in the workflow
	KA6. reporting structure
B. Technical Knowledge	The user/individual on the job needs to know and understand:
· ·	KB1. the process of girdle faceting
	KB2. angle-indexing on polishing machine for achieving maximum clarity and
	brilliance in girdle of stone
	KB3. how the polishing mill works
	KB4. different types of laps available in terms of material such as diamond or
	steel or the grits
	KB5. use different types of buff for different stone types such as wool, wood,
	and leather and buffing powders such as chrome oxide
	KB6. use water jet to keep the stone cool
	KB7. basic gemology and properties of different stones
	KB8. different types of stones such as pecious, semi-precious, synthetic
	KB9. market value of stone to understand the rationale for different acceptable
	levels of stone loss
	KB10. origin of the stone, i.e., which mine, particularly, precious stones to read
	the softness/ hardness as developed from precedence of use
	KB11. how to work in a safe environment, i.e., without injuries
Skills (S)	KB11. How to work in a safe environment, i.e., without injuries
Skills (3)	
A. Core Skills/ Generic	Writing Skills
Skills	The user/ individual on the job needs to know and understand how to:
	SA1. document the damage to the stone during polishing
	SA2. report stone losses via documentation as per company policy
	Reading Skills
	SA3. convert the stone plan on job sheet to a brilliant stone using polishing mill
	SA4. spot difficulties with respect to practicality of plan or facets created
	Oral Communication (Listening and Speaking skills)







Polish the girdle of faceted gemstone

	SA5. receive instructions and materials from supervisor
	SA6. give feedback to supervisor or facet maker on any specific stone handling requirement
	SA7. report any incidents of high stone loss
	SA8. discuss task lists, schedules, and work-loads with co-workers
	SA9. share work load when multiple deliverables are required
B. Professional Skills	Decision Making
	The user/ individual on the job needs to know and understand how to:
	SB1. make decisions pertaining to the selection of laps and the compounds to be used as per standard operating procedure
	Plan and Organize
	SB2. plan and organize the girdle polishing process to achieve fine polish
	Customer Centricity
	N.A.
	Problem Solving
	SB3. reduce stone loss within company limits SB4. resolve issues in polishing to deliver polished stone as per schedule
	Analytical Thinking
	SB5. assess the angles at which the girdle of doped stones has to be polished to achieve the brilliance and colour SB6. improve work processes for greater productivity
	Critical Thinking
	SB7. spot process disruption and reasons for delay







Polish the girdle of faceted gemstone

NOS Version Control

NOS Code	G&J/N6704				
Credits (NSQF)	TBD	Version number	1.0		
Industry	Gems & Jewellery	Drafted on	28/08/2016		
Industry Sub-sector	Gemstone Processing	Last reviewed on	17/01/2018		
Occupation	Gemstone Faceting & Polishing	Next review date	17/01/2022		





G&J/Q6706

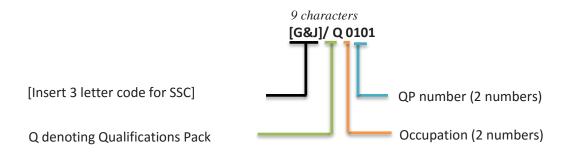
Qualifications Pack for Gemstone Polisher



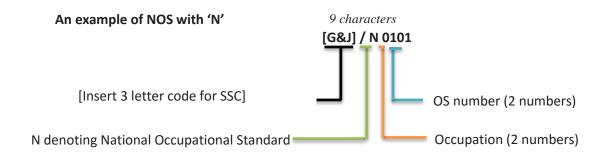
Annexure

Nomenclature for QP and NOS

Qualifications Pack



Occupational Standard



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G&J/Q6706

Qualifications Pack for Gemstone Polisher

The following acronyms/codes have been used in the nomenclature above:

Sub-sector	Range of Occupation numbers
Handmade gold and gems-set	01-11
jewellery	
Imitation Jewellery	12-20
Cast and diamond-set jewellery	21-40
Diamond processing	41-60
Gemstone processing	61-80
Jewellery retailing	81-90
Silver Smithing	91-98
Common	99

Sequence	Description	Example
Three letters	Industry name	G&J
Slash	/	/
Next letter	Whether QP or NOS	N
Next two numbers	Occupation code	01
Next two numbers	OS number	01





Criteria For Assessment Of Trainees

<u>Job Role</u> Gemstone Polisher <u>Qualification Pack</u> G&J/Q6706 <u>Sector Skill Council</u> Gem & Jewellery

Guidelines for Assessment

- 1. Criteria for assessment for each Qualification Pack will be created by the Sector Skill Council. Each 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 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 this criterion.
- 6. To pass the Qualification Pack, every trainee should score a minimum of 50% of aggregate marks to successfully clear the assessment.
- 7. In case of *unsuccessful completion*, the trainee may seek reassessment on the Qualification Pack.

Total Marks: 60	Compulsory NO	S		Marks Allocation	
Assessment outcomes	Assessment Criteria for outcomes	Total Marks	Out Of	Theory	Skills Practical
1. G&J/N6601 Dop the gemstone	PC1. match the stone type, weight and number as mentioned on the bag received from supervisor	20	1	0	1
	PC2. check the assortment of stones for shape, size, softness		2	0	2
	PC3. interpret the plan for the stone as per job sheet for stone to be aligned		2	1	1
	PC4. align the stone with accuracy		2	0	2
	PC5. make correct selection of dop and material for fixing		2	0	2
	PC6. maintain appropriate level of heating so that stone does not change colour		2	1	1





Compulsory NOS Total Marks: 60			Marks Allocation		
Assessment outcomes	Assessment Criteria for outcomes	Total Marks	Out Of	Theory	Skills Practical
	PC7. achieve scratch-free doping		3	1	2
	PC8. achieve secure setting		2	0	2
	PC9. ensure timely delivery to facet maker or shaper		1	0	1
	PC10. achieve number of dop prepared per day as per target given		2	1	1
	PC11. deliver damage-free output with minimum hazards		1	0	1
	Total		20	4	16

Total Marks:100	Compulsory NO	S		Marks A	llocation
Assessment outcomes	Assessment Criteria for outcomes	Total Marks	Out Of	Theory	Skills Practical
2. G&J/N9901 Coordinate with others	PC1. coordinate for receiving work instructions and raw materials from reporting supervisor	20	1	0	1
	PC2. communicate to the reporting supervisor about process flow improvements, product defects received from previous process, repairs and maintenance of tools and machinery as required		1	0	1
	PC3. communicate to reporting supervisor about operation details and hazards		1	0	1
	PC4. interact with supervisor regarding compliance of company policy and rules		3	0	3
	PC5. coordinate with colleagues to share work, as per the workload in order to achieve team goals		3	0	3
	PC6. communicate and discuss work flow related difficulties in order to find solutions with mutual agreement		2	0	2





Total Marks:100	Compulsory NOS Total Marks:100			Marks Allocation	
Assessment outcomes	Assessment Criteria for outcomes	Total Marks	Out Of	Theory	Skills Practical
	PC7. coordinate and receive feedback from quality control department		2	1	1
	PC8. resolve conflicts by communicating with colleagues and other departments		2	0	2
	PC9. communicate and discuss work Coordinate with colleagues regarding multitasking in other departments with requirements		3	1	2
	PC10. adhere to nondisclosure policy of the company in all outside coordination		2	1	1
	Total		20	3	17

Total Marks: 100	Compulsory NO	S		Marks A	location
Assessment outcomes	Assessment Criteria for outcomes	Total Marks	Out Of	Theory	Skills Practical
3. G&J/N9902 Maintain health and safety at workplace	PC1. identify and use appropriate protective clothing/equipment for specific tasks and work	20	2	0	2
	PC2. identify hazardous job activities in his/her job and communicate the possible causes of risks or accidents in the workplace		1	0	1
	PC3. carry out safe working practices while dealing with hazards to ensure safety of self and others		1	0	1
	PC4. identify and avoid doing any tasks or activities in a wrong posture		2	0	2
	PC5. practice appropriate working postures to minimise occupational health related issues		2	1	1
	PC6. use the appropriate fire extinguishers on different types of fire		1	0	1
	PC7.demonstrate rescue techniques applied during fire hazard		2	0	2





Compulsory NOS Total Marks: 100			Marks Allocation		
Assessment outcomes	Assessment Criteria for outcomes	Total Marks	Out Of	Theory	Skills Practical
	PC8. demonstrate good housekeeping in order to prevent fire hazards		1	0	1
	PC9.demonstrate the correct use of any fire extinguisher		2	0	2
	PC10. administer appropriate first aid procedure to victims wherever required eg.in case of bleeding, burns, choking, electric shock etc.		1	0	1
	PC11. respond promptly and appropriately to an accident or medical emergency		3	1	2
	PC12. participate in emergency procedures such as raising alarm, safe evacuation etc.,		2	1	1
	Total		20	3	17

ELECTIVES Elective 1.1 Facet Making					
Total Marks: 40				Marks Allocation	
Assessment outcomes	Assessment Criteria for outcomes	Total Mark	Out Of	Theory	Skills Practical
1.1 G&J/N6701 Make facets on gemstone	PC1. match the stone type, weight, number as mentioned on the bag with gemstones received from supervisor	40	2	1	1
	PC2. identify faceting requirement as per plan such as how many facets and shape of facet to be created		2	1	1
	PC3. achieve maximum number of facets to be created per stone		5	2	3
	PC4. cut facets according to the shape, colour, brilliance and metered edges		5	2	3
	PC5. make accurate use of angle-indexing		5	2	3
	PC6. use correct lap and powder for the stone		3	1	2





ELECTIVES Elective 1.1 Facet Making					
Total Marks: 40			Marks Allo		llocation
Assessment outcomes	Total Mark Out Of				Skills Practical
	PC7. ensure there is no window in facets		3	1	2
	PC8. achieve accurate calibration		2	0	2
	PC9. achieve maximum number of QC approved stones		2	0	2
	PC10. achieve number and carats of stones faceted per day against target given		4	0	4
	PC11. achieve scratch-less facets		4	0	4
	PC12. maintain stone loss within prescribed limits, particularly, in precious stones		1	0	1
	PC13. deliver faceted stone in time by reporting problems faced or anticipated well in advanced		2	0	2
	Total		40	10	30

ELECTIVES Elective 2.1 Facet Polishing						
Total Marks: 40				Marks Allocation		
Assessment outcomes	Assessment Criteria for outcomes	Total Mark	Out Of	Theory	Skills Practical	
2.1 G&J/N6703 Polish the faceted or cabochon gemstone	PC1. match the stone type, weight, number as mentioned on the bag with gemstone received from supervisor	40	2	1	1	
<u> </u>	PC2. check shape, size and facet or cabochon of stone for polishing as per job sheet for symmetry and colour defects and potential problems in polishing process		3	1	2	
	PC3. understand the type of stone to be polished such as soft or hard, transparent or translucent or opaque		3	2	1	





ELECTIVES Elective 2.1 Facet Polishing						
Total Marks: 40				Marks Allocation		
Assessment outcomes	Assessment Criteria for outcomes	Total Mark	Out Of	Theory	Skills Practical	
	PC4. level the scaife or faceting mill		3	1	2	
	PC5. set the correct pressure on water jet to reduce adverse effect of overheating of stone, such as change of colour or breakage		3	1	2	
	PC6. ensure that no window is seen on the surface of the stone and facets are polished completely		4	1	3	
	PC7. achieve appropriate angle- indexing		4	1	3	
	PC8. use correct lap, powder and buff		3	1	2	
	PC9. calibrate the gemstone		4	0	4	
	PC10. achieve maximum number of QC approved polished gemstones		2	0	2	
	PC11. deliver the number of stones polished per day against target given		2	0	2	
	PC12. achieve scratch-less facets or cabochon with brilliance level as per job sheet		4	1	3	
	PC13. maintain stone loss within prescribed limits, particularly, in precious stones		2	0	2	
	PC14. deliver polished stone in time by reporting problems faced or anticipated well in advanced		1	0	1	
	Total		40	10	30	





ELECTIVES Elective 3.1 Girdle Polishing						
Total Marks: 40				Marks Allocation		
Assessment outcomes	Assessment Criteria for outcomes	Total Mark	Out Of	Theory	Skills Practical	
3.1 G&J/N6704 Polish the girdle of faceted gemstone	PC1. receive bag of faceted gemstones and instructions from supervisor		1	0	1	
	PC2. match the stone type, weight and number as mentioned on the bag		1	0	1	
	PC3. check shape, size and facet of stone for polishing as per job sheet for symmetry and colour defects and potential problems in polishing process	40	2	1	1	
	PC4. understand the type of stone to be polished such as soft or hard, transparent or translucent or opaque		2	1	1	
	PC5. carry out the polishing within the permitted level of stone loss		2	0	2	
	PC6. use water jet to reduce adverse effect of overheating of stone, such as change of colour or breakage		2	0	2	
	PC7. bring out sharpness of edges of girdle clearly		2	0	2	
	PC8. maintain shape and size of the faceted stone		2	1	1	
	PC9. calibrate the shape and size of girdle to be achieved		3	1	2	
	PC10. avoid damage to facets that were previously created		2	1	1	
	PC11. select correct angle for girdle polishing		3	1	2	
	PC12. achieve sparkle or shine or finish as per job sheet or plan		5	0	5	
	PC13. ensure accurate use of angle-indexing		2	1	1	





ELECTIVES Elective 3.1 Girdle Polishing						
Total Marks: 40	-			Marks Allocation		
Assessment outcomes	Assessment Criteria for outcomes	Total Mark	Out Of	Theory	Skills Practical	
	PC14. use correct lap, powder		3	0	3	
	and buff		3		3	
	PC15. achieve accurate		2	1	1	
	calibration		2	1	1	
	PC16. achieve maximum					
	number of QC approved girdle		1	0	1	
	polished gemstones					
	PC17. achieve the number of	1				
	girdles polished per day		1	0	1	
	against target given					
	PC18. deliver scratch-less					
	facets with brilliance level as		2	1	1	
	per job sheet					
	PC19. maintain, stone loss					
	within prescribed limits,		1	1	0	
	particularly, in precious stones					
	PC20. deliver polished stone in					
	time by reporting problems				4	
	faced or anticipated well in		1	0	1	
	advanced					
	Total		40	10	30	