

# Model Curriculum

## Assorter (Advanced)

**SECTOR: GEMS & JEWELLERY**  
**SUB-SECTOR: DIAMOND PROCESSING**  
**OCCUPATION: ASSORTING**  
**REF ID: G&J/Q3603, VERSION 1.0**  
**NSQF LEVEL: 4**



## Certificate

### CURRICULUM COMPLIANCE TO QUALIFICATION PACK – NATIONAL OCCUPATIONAL STANDARDS

is hereby issued by the

**GEM & JEWELLERY SECTOR SKILL COUNCIL OF INDIA**

for the

### MODEL CURRICULUM

Complying to National Occupational Standards of  
Job Role/ Qualification Pack: '**Assorter (Advanced)**' QP No. '**G&J/Q3603 NSQF Level 4**'

Date of Issuance: **October 15<sup>th</sup>, 2016**

Valid up to: **October 14<sup>th</sup>, 2018**

\* Valid up to the next review date of the Qualification Pack

  
Mr. Premkumar Kothari  
Chairman  
(Gem & Jewellery Skill Council of India)

# Assorter (Advanced)

## CURRICULUM / SYLLABUS

This program is aimed at training candidates for the job of a “Assorter (Advanced)”, in the “Gems & Jewellery” Sector and aims at building the following key competencies amongst the learner

<b>Program Name</b>	<b>Assorter (Advanced)</b>		
<b>Qualification Pack Name &amp; Reference ID</b>	G&J/Q3603, Version 1.0		
<b>Version No.</b>	1.0	<b>Version Update Date</b>	Not Applicable
<b>Pre-requisites to Training</b>	10th Standard passed, preferably		
<b>Training Outcomes</b>	<p><b>After completing this programme, participants will be able to:</b></p> <ul style="list-style-type: none"> <li>• <b>Assort diamonds for jewellery manufacturing:</b> Segregating diamonds of similar characteristics into groups as per basic 4C’s and select them to be used in jewellery manufacturing</li> </ul> <p><b>OR</b></p> <ul style="list-style-type: none"> <li>• <b>Assort polished diamonds:</b> Tallying the weight of the stones from the weight written on the packet, grade and classifying into multiple group based on the 4C’s, Grade diamonds based on colour (from D to Z), clarity (From flawless to included) and cut (from excellent to poor), reporting problems related to lighting failure, tool failure, any delays, mismatch etc.</li> </ul> <p><b>OR</b></p> <ul style="list-style-type: none"> <li>• <b>Assort rough diamonds:</b> Segregating rough diamonds of similar characteristics into groups like makeable, sawable, cleavable and to send them further for processing</li> </ul> <p><b>OR</b></p> <ul style="list-style-type: none"> <li>• <b>Assort gemstones:</b> Segregating gemstones in groups in terms of type, size, colour and weight.</li> </ul> <p><b>and</b></p> <ul style="list-style-type: none"> <li>• <b>Coordinate with others:</b> Coordinate with others to work as a team and multitask and communicate with colleagues. Achieve team goals and individual goals.</li> <li>• <b>Maintain health and safety at workplace:</b> Familiarising artisan towards potential hazards in order to make work environment safe for everyone against fire and other hazards with first aid procedures</li> </ul>		



Sr. No.	Module	Key Learning Outcomes	Equipment Required
			Writing Pad, Pen, Pencil, Eraser, Sieve Set, Polished Diamonds stock
4 (Optional NOS)	<p><b>Assort gemstones</b></p> <p><b>Theory Duration</b> (hh:mm) 20:00</p> <p><b>Practical Duration</b> (hh:mm) 122:00</p> <p><b>Corresponding NOS Code</b> G&amp;J/N3606</p>	<ul style="list-style-type: none"> <li>To be able to verify the weight of gemstones</li> <li>To know cleaning of gemstones using a clean cloth if required</li> <li>To understand the concept of precious and semi-precious gemstones</li> <li>To understand basics of 4Cs in case of gemstones with concepts like transparency and cutting style</li> <li>To be able to use sieve to classify the diamonds as per size and shapes</li> <li>To know the classification of gemstones on the basis of colour transparency and clarity</li> <li>To be able to use loupe or eye glass under light to view gemstones</li> <li>To be able to report problems related to lighting failure, tool failure, any delays, mismatch etc.</li> </ul>	<p><b>Mandatory</b> – Paper Pad/Japan Tk, Table Lamp / Diamond Lamp, Stone Scoop / Supadi, Jeweller’s Loupe, Tweezers, Calculator, Packets for Gemstone with Safety Backing Paper, Grading Tray, Cleaning Cloth/Gem Cloth, Gem Balance, Writing Pad, Pen, Pencil, Eraser, Sieve Set, Tripod, Polished Diamonds stock</p>
5	<p><b>Coordinate with others</b></p> <p><b>Theory Duration</b> (hh:mm) 02:00</p> <p><b>Practical Duration</b> (hh:mm) 02:00</p> <p><b>Corresponding NOS Code</b> G&amp;J/N9901</p>	<ul style="list-style-type: none"> <li>To know reporting structure.</li> <li>To coordinate work instructions and raw material received from supervisor</li> <li>To know team coordination</li> <li>To understand the importance of individual’s role in the workflow</li> <li>To understand company’s policies on personnel management</li> </ul>	
6	<p><b>Maintain health and safety at workplace</b></p> <p><b>Theory Duration</b> (hh:mm) 02:00</p> <p><b>Practical Duration</b> (hh:mm) 02:00</p> <p><b>Corresponding NOS Code</b> G&amp;J/N9902</p>	<ul style="list-style-type: none"> <li>To know company’s policies on handling sharp tools and materials</li> <li>To understand the workflow involved in company’s diamond processing</li> <li>To understand first aid and emergency procedures</li> <li>To understand various hazards and safety signs</li> <li>To know about occupational norms based on company policy</li> </ul>	<p><b>Mandatory</b> – Table Lamp / Diamond Lamp</p>
	<p><b>Total Duration</b></p> <p><b>Theory Duration</b></p>	<p><b>Unique Equipment Required:</b> Paper Pad/Japan Tk, Table Lamp / Diamond Lamp, Stone Scoop / Supadi, Jeweller’s Loupe, Tweezers, Calculator, Packets for</p>	

Sr. No.	Module	Key Learning Outcomes	Equipment Required
	24:00 <b>Practical Duration</b> 126:00	Gemstone with Safety Backing Paper, Grading Tray, Cleaning Cloth/Gem Cloth, Gem Balance, Writing Pad, Pen, Pencil, Eraser, Sieve Set, Tripod, Polished Diamonds stock	

Grand Total Course Duration: **150Hours, 0 Minutes**

(This syllabus/ curriculum has been approved by [Gem and Jewellery Skill Council of India](#))

**Trainer Prerequisites for Job role: “Assorter (Advanced)” mapped to Qualification Pack: “G&J/Q3603, v1.0”**

Sr. No.	Area	Details
1	<b>Job Description</b>	To deliver accredited training service, mapping to the curriculum detailed above, in accordance with the Qualification Pack “G&J/Q3603”, Version 1.0.
2	<b>Personal Attributes</b>	Aptitude for conducting training, and pre/post work to ensure competent, employable candidates at the end of the training. Strong communication skills, interpersonal skills, ability to work as part of a team; a passion for quality and for developing others; well-organised and focused, eager to learn and keep oneself updated with the latest in the mentioned field.
3	<b>Minimum Educational Qualifications</b>	Minimum 10 <sup>th</sup> Standard Passed
4a	<b>Domain Certification</b>	Certified for Job Role: <u>Assorter (Advanced)</u> mapped to QP: “G&J/Q3603, v1.0”. Minimum accepted score as per SSC guidelines is 80% on the SSC prescribed online theory assessment test based on an industry validated question bank.
4b	<b>Platform Certification</b>	Recommended that the Trainer is certified for the Job Role: “Trainer”, mapped to the Qualification Pack: “SSC/1402”. Minimum accepted score for the trainer is 80% as per SSC guidelines.
5	<b>Experience</b>	Minimum 5-years of experience in Diamond Grading.

## Annexure: Assessment Criteria

<b>Assessment Criteria</b>	
<b>Job Role</b>	<b>Assorter (Advanced)</b>
<b>Qualification Pack</b>	<b>G&amp;J/Q3603, Version 1.0</b>
<b>Sector Skill Council</b>	<b>Gem &amp; Jewellery Skill Council of India</b>

<b>Sr. No.</b>	<b>Guidelines for Assessment</b>
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	Individual assessment agencies will create theory question papers for candidates at every examination/training centre. (as per assessment criteria below)
4	Individual assessment agencies will create practical tests for skill evaluation for candidates at every examination/training centre. (as per assessment criteria below)
5	To pass the Qualification Pack, every candidate should score a minimum 70% of aggregate marks to successfully clear the assessment.
6	In case of successfully passing only certain number of NOSs, the candidate is eligible to take subsequent assessment on the balance NOSs to pass the Qualification Pack.

Assessment outcomes	Assessment Criteria for outcomes	Marks Allocation			
		Total Marks (20+80)	Out of	Theory	Skills Practical
<b>1. G&amp;J/N9901 Coordinate with others</b>	PC1.Coordinate for receiving work instructions and raw materials from reporting supervisor	<b>20</b>	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		2	0	2
	PC5.Coordinate with colleagues to share work, as per the workload		3	0	3
	PC6.Communicate and discuss work flow related difficulties in order to find solutions with mutual agreement		2	0	2
	PC7. Coordinate and receive feedback from quality control department		2	1	1
	PC8.Coordinate for putting team goals over individual goals		1	0	1
	PC9.Resolve conflicts by communicating with colleagues and other departments		2	0	2

	PC10. Communicate and discuss work Coordinate with colleagues regarding multitasking in other departments with requirements		3	1	2
	PC11. Adhere to nondisclosure policy of the company in all outside coordination		2	1	1
	<b>Sub Total</b>		<b>20</b>	<b>3</b>	<b>17</b>
<b>2. G&amp;J/N9902 Maintain health and safety at workplace</b>	PC1. Identify and use appropriate protective clothing/equipment for specific tasks and work	<b>20</b>	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 bad working position		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
	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 situation or medical emergency		3	1	2
	PC12. Participate in emergency procedures such as raising alarm, safe evacuation, correct means of escape, correct assembly point etc.		2	1	1
	<b>Sub Total</b>		<b>20</b>	<b>3</b>	<b>17</b>

Optional NOS		Marks Allocation			
Assessment outcomes	Assessment Criteria for outcomes	Total Marks (14+46)	Out of	Theory	Skills Practical
<b>Set A: 1.G&amp;J/N3603 Assort diamonds for jewellery manufacturing</b>	PC1. Follow instructions of diamond procurer in terms of sorting	<b>60</b>	5	2	3
	PC2. Check the weight and number of stones, with respect to what is mentioned on the packet		5	2	3
	PC3. Use a sieve to classify the diamonds based on its size		5	2	3
	PC4. Do a basic sorting based on shape and size		8	2	6
	PC5. Look at each diamond individually through an eye glass and make further classification into groups as per company policy.		5	2	3
	PC6. Select diamonds which are of similar characteristics such as cut, carat, colour and clarity and segregate as per quality required by the company		5	2	3
	PC7. Reject diamonds which are not as per required quality		3	0	3
	PC8. Maintain buffer stock to meet future requirements		2	0	2
	PC9. Accurately segregate/group the diamonds as per the company's policy		6	1	5

	PC10. Use judgment for selecting and rejecting diamonds		5	0	5
	PC11. Deliver in time to next process.		1	0	1
	PC12. Ensure near zero damage/loss to the diamonds		1	0	1
	PC13. Improve speed of assorting / time taken per stone		2	0	2
	PC14. Achieve number of diamonds sorted as per the target assigned		5	1	4
	PC15. Comply with relevant legislation, standards, policies and procedures		2	0	2
	<b>Sub Total</b>		<b>60</b>	<b>14</b>	<b>46</b>

Optional NOS			Marks Allocation		
Assessment outcomes	Assessment Criteria for outcomes	Total Mark (14+46)	Out of	Theory	Skills Practica I
<b>Set B: 1.G&amp;J/N3604 Assort polished diamonds</b>	PC1. Accept the packet of polished diamonds from supervisor/procurer with instructions for sorting	<b>60</b>	1	0	1
	PC2. Check the weight and number of stones, with respect to what is mentioned on the packet		2	1	1
	PC3. Remove the diamonds from the packet and place them on the tray under the light		2	1	1
	PC4. Clean the diamonds using a cleaning cloth if required		5	1	4
	PC5. Use a sieve to classify the diamonds based on its size and shape		5	1	4
	PC6. Hold the diamond with the help of tweezers under light and view it through a loupe one by one		8	3	5

	PC7. Measure the dimensions of the diamond and calculate the required ratios		5	1	4
	PC8. Grade the diamond based on its colour, cut, clarity and carat weight		8	1	7
	PC9. Use the UV Box to check the fluorescence of the diamond (if required)		2	0	2
	PC10. Use the symmetry analyzer machine to check the cut dimensions (if provided)		2	1	1
	PC11. Place assorted diamonds in the packets, label as per the company's policy and return to the supervisor with tallied weight		2	1	1
	PC12. Accurately measure the 4Cs of a diamond		8	3	5
	PC13. Match his/her judgment with the grading given by GIA or other agencies		5	0	5
	PC14. Deliver in time to next process		1	0	1
	PC15. Complete work with no loss of diamonds		1	0	1
	PC16. Improve speed of assorting/time taken per stone.		1	0	1
	PC17. Achieve the productivity in terms of carats or number of pieces as set by the company		1	0	1
	PC18. Comply with relevant legislation, standards, policies and procedures		1	0	1
	<b>Sub Total</b>		<b>60</b>	<b>14</b>	<b>46</b>

Optional NOS			Marks Allocation		
Assessment outcomes	Assessment Criteria for outcomes	Total Mark (14+46)	Out of	Theory	Skills Practical
	PC1. Check the weight and number of stones, against what is mentioned on the packet		2	0	2
	PC2. Remove the roughs from the packet and place them on the tray under the light		1	0	1

<b>Set C: 1.G&amp;J/N3605 Assort rough diamonds</b>	PC3. Clean the roughs using a cleaning cloth if required	<b>60</b>	3	1	2
	PC4. Use sieve to classify the diamonds broadly based on its size		5	2	3
	PC5. Do a basic sorting based on shape and size		5	2	3
	PC6. Look at each rough individually through an eye glass and make further classification into groups as per company policy		5	2	3
	PC7. Hold the rough with the help of tweezers under light and view it through a loupe one by one		5	2	3
	PC8. Classify them into groups as per company policy e.g. makeable, sawable, cleavable and rejection		5	2	3
	PC9. Send the rough for windowing if one is not able to look into it clearly to make any judgment (if required)		5	1	4
	PC10. Accurately segregate/group of the roughs as per the company's policies		6	2	4
	PC11. Identify different types of rough, e.g. Syndicate, Australian, Coated, Braza, Cleavage etc.		5	0	5
	PC12. Judge accurately the approximate expected yield, expected clarity, etc.		5	0	5
	PC13. Complete work with no loss of roughs		2	0	2
	PC14. Achieve the productivity in terms of carats or number of pieces as set by the company		2	0	2
	PC15. Deliver in time to next process		2	0	2
	PC16. Comply with relevant legislation, standards, policies and procedures		2	0	2
	<b>Sub Total</b>		<b>60</b>	<b>14</b>	<b>46</b>

Optional NOS			Marks Allocation		
Assessment outcomes	Assessment Criteria for outcomes	Total Mark (14+46)	Out of	Theory	Skills Practical
<b>Set D: 1.G&amp;J/N3606 Assort gemstones</b>	PC1. Assort stones accurately as per design in terms of weight, size, colour and type	<b>60</b>	10	2	8
	PC2. Maintain even colour of stones sorted or as required by design		10	2	8
	PC3. Distinguish between types of stones correctly, e.g., raw versus factory manufactured		12	2	10
	PC4. Make timely delivery of sorted stones for setting		5	2	3
	PC5. Assort number of stones as per the target given		5	2	3
	PC6. Ensure that no stones lost or damaged during counting or sorting		4	2	2
	PC7. Report mismatch regarding colour, type, size or weight of stones to be sorted against the description of the bag received		10	2	8
	PC8. Report shortage of stones in the bag as per design		2	0	2
	PC9. Comply with relevant legislation, standards, policies and procedures		2	0	2
<b>Sub Total</b>			<b>60</b>	<b>14</b>	<b>46</b>
<b>Grand Total</b>		<b>100</b>	<b>100</b>	<b>20</b>	<b>80</b>
<b>Percentage Weightage:</b>				<b>20%</b>	<b>80%</b>
<b>Minimum Pass % to qualify (aggregate):</b>				<b>70%</b>	