

# GEMSTONE CARVING

## Assessment Packages

National Vocational  
Certificate Level 2

Version 1 - September 2018

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**Document Version**

September, 2018  
Islamabad, Pakistan

# GEMSTONE CARVING

**Assessment Packages**

National Vocational  
Certificate Level 2

Version 1 - September 2018





# ASSESSMENT MATERIAL

## EVIDENCE GUIDE

### Qualification

Gemstone Carving

CS Code: 0214G&J2A

Level: 2

Credit: 12

Version:1

## PREPARE CABOCHON MANUALLY

### CONTENTS

1. Assessment Summary and Record
2. Candidate Assessment
3. Assessor Judgment Guide
4. List of required tools/ equipment, material and context of assessment

### ASSESSMENT AND ASSESSOR DETAILS

Competent

☐

Not Yet Competent

☐

Assessment

☐

Re-Assessment

☐

Assessor's Name:

Assessor's Code

Assessor's Signature..... Date

DD		MM		YYYY					

### CANDIDATE DETAILS

Candidate's Name:

First Name Last Name

Father's Name

Institute Name and District

CNIC/ BFORM #

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Registration Number issued by Assessment Body

Gender

Male ☐ Female ☐ Transgender ☐

Candidate's Consent

I agree to the time and date of the assessment and am aware of the requirements of the assessment. I fully understand my rights of appeal.

Candidate's Signature:

### ASSESSMENT RESULTS SUMMARY FORM

You can use this cover sheet as an *Assessment Results Summary Form*. Simply post a photocopy of this completed coversheet to NAVTTTC

NAVTTTC OFFICE ONLY

1. DATE FORM RECEIVED:

DD		MM		YYYY					

2. DATE ENTERED INTO DATABASE:

DD		MM		YYYY					

# 1

## ASSESSMENT SUMMARY & RECORD

Candidate's Name:..... Father's Name:.....							
ACTIVITY	METHOD				DESIRED OUTCOMES	RESULT	
NATURE OF ACTIVITY	WRITTEN	ORAL	PORTFOLIO	OBSERVATION	DESIRED OUTCOMES FOR SUCCESSFUL ASSESSMENT OF COMPETENCY STANDARD: <b>PREPARE CABOCHON MANUALLY</b>	COMPETENT	NOT YET COMPETENT
Practical Skill Demonstration		✓		✓	<ul style="list-style-type: none"> <li>Perform role play for preparing Cabochon Manually</li> </ul>		
Knowledge Assessment	✓	✓			<ul style="list-style-type: none"> <li>Answer any questions your Assessor may have during the practical assessment</li> </ul>		
Other Requirement					<ul style="list-style-type: none"> <li>NA</li> </ul>		

# 2

## CANDIDATE ASSESSMENT

Candidate's Name:..... Father's Name:.....

ALL WORK ASSESSED IN THIS COMPETENCY STANDARD MUST BE YOUR OWN WORK.

### GUIDANCE TO CANDIDATE

To meet this standard you are required to perform within **90 Minutes** timeframe:

- **Perform a role play to demonstrate, Prepare cabochon manually:**

- ✓ Marking and sawing of stone
- ✓ Template marking on stone
- ✓ Prepare cabochon as per template marking
- ✓ Doping and course grinding of stone

**Important Note:** The following general performance criteria will be followed and performed in all the tasks (where applicable) by the candidate in order to meet this standard.

- ✓ Follow health and safety procedure as per the requirements of given task
- ✓ Prepare work station as per the requirements of task
- ✓ Select tools/ equipment as per the requirements of task
- ✓ Report to supervisor in case of any contingency after taking necessary actions
- ✓ Complete the work by following sequence of operations
- ✓ Perform task(s) within standard timeframe

ACTIVITIES	CANDIDATE RESPONSE
1. <b>Complete practical task in performing to prepare Cabochon Manually</b>	<p>During Practical assessment under observation by an assessor, I will correctly carry out the following task.</p> <ul style="list-style-type: none"> <li>• <b>Marking and sawing of stone</b> <ul style="list-style-type: none"> <li>✓ Mark stone for Cabochon making</li> <li>✓ Remove the unwanted areas with plier</li> <li>✓ Cut the marked stone with trim saw machine</li> </ul> </li> <li>• <b>Template marking on stone</b> <ul style="list-style-type: none"> <li>✓ Select size of cabochon on template</li> <li>✓ Perform template marking</li> </ul> </li> <li>• <b>Prepare Cabochon as per template marking</b> <ul style="list-style-type: none"> <li>✓ Ensure adequate water supply for cutting process</li> <li>✓ Make necessary arrangements in workstation</li> <li>✓ prepare cabochon with grinding machine</li> </ul> </li> <li>• <b>Doping and course grinding of stone</b> <ul style="list-style-type: none"> <li>✓ Arrange material for doping process</li> <li>✓ Fix stone on dope stick</li> <li>✓ Make smooth surface of stone</li> <li>✓ Perform course grinding at grit #180/#220/#260/#320</li> </ul> </li> </ul>
2. <b>Answer any questions your Assessor may have during the practical assessment</b>	<p>My answers to questions are correct and demonstrate my understanding of the topics and their application:</p>

Candidate's Name: ..... Father's Name: .....

### INSTRUCTIONS FOR ASSESSOR

This section contains minimum evidence requirements. Oral questioning may be used to clarify candidate understanding of the topic and its application.

ACTIVITIES	MINIMUM EVIDENCE REQUIRED	YES	NO	ASSESSOR COMMENTS
<b>1. Complete practical task in performing to prepare Cabochon Manually under observation by an assessor, including:</b>	During a practical assessment under observation by and assessor, the candidate correctly carried out the following tasks:			
<b>Marking and sawing of stone</b>	Mark stone for Cabochon making			
	Remove the unwanted areas with plier			
	Cut the marked stone with trim saw machine			
<b>Template marking on stone</b>	Select size of cabochon on template			
	Perform template marking			
<b>Prepare Cabochon as per template marking</b>	Ensure adequate water supply for cutting process			
	Make necessary arrangements in workstation			
	prepare cabochon with grinding machine			
<b>Doping and course grinding of stone</b>	Arrange material for doping process			
	Fix stone on dope stick			
	Make smooth surface of stone			
	Perform course grinding at grit #180/#220/#260/#320			

<p><b>2. Answer any questions their Assessor may have during the practical assessment</b></p>	<p>Candidate answers to questions are correct and demonstrate understanding of the topics and their application.</p> <p><i>Assessor to document all questions asked and candidate answers below. Use extra sheets if required and attach.</i></p>			
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# 4

## LIST OF TOOLS, EQUIPMENT, MATERIAL AND CONTEXT OF ASSESSMENT

<b>INSTRUCTIONS</b>	This section contains information regarding; <ul style="list-style-type: none"> <li>Context of the assessment</li> <li>List of required tools and equipment.</li> <li>List of consumable items required during the service</li> </ul>
<b>1. Context of Assessment</b>	This task will be performed in real time environment

<b>2. List of tools and equipment required</b>		
S. No	Name of Items ( tools and equipments)	Quantity
01	Light source	
02	Aluminum pencil or permanent marker	
03	Plier diamond cutter	
04	Trim saw Machine and blade as per requirement	
05	Template with difference 6, 4 and 2 in oval shapes	
06	Faceting unit machine for smooth work	
07	Leather/ Rubber lap with abrasive	
08	Grinding Machine with diamond grinding wheel	
09	Sprit lamp	
10	Doping wax and dope sticks	

<b>3. List of consumables</b>		
S. No	Name of Items	Quantity/Volume
01	Rough stone	
02	Sanding paper grit #180/#220/#260/#320	
03	Wax	



# ASSESSMENT MATERIAL

## EVIDENCE GUIDE

### Qualification

Gemstone Carving

CS Code: 0214G&J2 B

Level: 03

Credit: 08

Version: 01

## PREPARE CABOCHON WITH AUTO CAB MAKING MACHINE

### CONTENTS

1. Assessment Summary and Record
2. Candidate Assessment
3. Assessor Judgment Guide
4. List of required tools/ equipment, material and context of assessment

### ASSESSMENT AND ASSESSOR DETAILS

Competent

☐

Not Yet Competent

☐

Assessment

☐

Re-Assessment

☐

Assessor's Name:

Assessor's Code

Assessor's Signature..... Date

DD		MM		YYYY					

### CANDIDATE DETAILS

Candidate's Name:

First Name Last Name

Father's Name

Institute Name and District

CNIC/ BFORM #

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Registration Number issued by Assessment Body

Gender

Male ☐ Female ☐ Transgender ☐

Candidate's Consent

I agree to the time and date of the assessment and am aware of the requirements of the assessment. I fully understand my rights of appeal.

Candidate's Signature:

### ASSESSMENT RESULTS SUMMARY FORM

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DD		MM		YYYY					

# 1

## ASSESSMENT SUMMARY & RECORD

Candidate's Name:..... Father's Name:.....							
ACTIVITY	METHOD				DESIRED OUTCOMES	RESULT	
NATURE OF ACTIVITY	WRITTEN	ORAL	PORTFOLIO	OBSERVATION	DESIRED OUTCOMES FOR SUCCESSFUL ASSESSMENT OF COMPETENCY STANDARD: <b>PREPARE CABOCHON WITH AUTO CAB MAKING MACHINE</b>	COMPETENT	NOT YET COMPETENT
Practical Skill Demonstration		✓		✓	<ul style="list-style-type: none"> <li>Perform role play for prepare cabochon with auto cab making machine</li> </ul>		
Knowledge Assessment		✓			<ul style="list-style-type: none"> <li>Answer any questions your Assessor may have during the practical assessment</li> </ul>		
Other Requirement					<ul style="list-style-type: none"> <li>NA</li> </ul>		

# 2

## CANDIDATE ASSESSMENT

Candidate's Name:..... Father's Name:.....

ALL WORK ASSESSED IN THIS COMPETENCY STANDARD MUST BE YOUR OWN WORK.

### GUIDANCE TO CANDIDATE

To meet this standard you are required to perform within **One hour** timeframe:

**Perform a role play to demonstrate, prepare cabochon with auto cab making machine**

- ✓ Marking and sawing of stone
- ✓ Prepare stone for cab making
- ✓ Perform doping
- ✓ Prepare cabochon on auto machine

**Important Note:** The following general performance criteria will be followed and performed in all the tasks (where applicable) by the candidate in order to meet this standard.

- ✓ Follow health and safety procedure as per the requirements of given task
- ✓ Prepare work station as per the requirements of task
- ✓ Select tools/ equipment as per the requirements of task
- ✓ Report to supervisor in case of any contingency after taking necessary actions
- ✓ Complete the work by following sequence of operations
- ✓ Perform task(s) within standard timeframe

ACTIVITIES	CANDIDATE RESPONSE
1. Complete practical task in performing to prepare Cabochon with auto cab making machine	<p>During Practical assessment under observation by an assessor, I will correctly carry out the following task.</p> <ul style="list-style-type: none"> <li>• <b>Marking and sawing of stone</b> <ul style="list-style-type: none"> <li>✓ Mark stone for Cabochon making</li> <li>✓ Remove the unwanted areas with pliers</li> <li>✓ Mark stone and Cut with trim saw machine</li> </ul> </li> <li>• <b>Prepare stone for cab making</b> <ul style="list-style-type: none"> <li>✓ Ensure adequate water supply for cutting process</li> <li>✓ Make necessary arrangements in work station to prepare stone for cab making</li> <li>✓ Adjust auto cab machine for cabochon Making</li> </ul> </li> <li>• <b>Perform doping</b> <ul style="list-style-type: none"> <li>✓ Arrange material for doping process</li> <li>✓ Fix stone on dope stick</li> <li>✓ Fix of doped stone in auto cab making machine</li> </ul> </li> <li>• <b>Prepare cabochon on auto cab machine</b> <ul style="list-style-type: none"> <li>✓ Ensure adequate water supply for cutting process</li> <li>✓ Adjust machine according to template</li> <li>✓ Execute the auto cab making</li> </ul> </li> </ul>
2. Answer any questions your Assessor may have during the practical assessment	My answers to questions are correct and demonstrate my understanding of the topics and their application:

Candidate's Name: ..... Father's Name: .....

### INSTRUCTIONS FOR ASSESSOR

This section contains minimum evidence requirements. Oral questioning may be used to clarify candidate understanding of the topic and its application.

ACTIVITIES	MINIMUM EVIDENCE REQUIRED	YES	NO	ASSESSOR COMMENTS
<b>1. Complete practical task in performing to prepare Cabochon with auto cab making machine under observation by an assessor, including:</b>	During a practical assessment under observation by and assessor, the candidate correctly carried out the following tasks:			
<b>Marking and sawing of stone</b>	Mark stone for Cabochon making			
	Remove the unwanted areas with pliers			
	Mark stone and Cut with trim saw machine			
<b>Prepare stone for cab making</b>	Ensure adequate water supply for cutting process			
	Make necessary arrangements in work station to prepare stone for cab making			
	Adjust auto cab machine for cabochon Making			
<b>Perform doping</b>	Arrange material for doping process			
	Fix stone on dope stick			
	Fix of doped stone in auto cab making machine			
<b>Prepare cabochon on auto cab machine</b>	Ensure adequate water supply for cutting process			
	Adjust machine according to template			
	Execute the auto cab making			

<p><b>2. Answer any questions their Assessor may have during the practical assessment</b></p>	<p>Candidate answers to questions are correct and demonstrate understanding of the topics and their application.</p> <p><i>Assessor to document all questions asked and candidate answers below. Use extra sheets if required and attach.</i></p>			
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# 4

## LIST OF TOOLS, EQUIPMENT, MATERIAL AND CONTEXT OF ASSESSMENT

<b>INSTRUCTIONS</b>	This section contains information regarding; <ul style="list-style-type: none"> <li>Context of the assessment</li> <li>List of required tools and equipment.</li> <li>List of consumable items required during the service</li> </ul>
<b>1. Context of Assessment</b>	This task will be performed in real time environment

<b>2. List of tools and equipment required</b>		
S. No	Name of Items ( tools and equipments)	Quantity
01	Abrasive wheel, grit 400 and 600 "cut off disc"	
02	Aluminum pencil or permanent marker	
03	Pliers with diamond coated tips	
04	Trim saw Machine and blade as per requirement	
05	Sprit lamp	
06	Auto cab Machine	

<b>3. List of consumables</b>		
S. No	Name of Items	Quantity/Volume
01	Rough stone	
02	Doping wax and dope sticks	
03	Template with difference 6, 4 and 2 in oval shapes	





# ASSESSMENT MATERIAL

## EVIDENCE GUIDE

### Qualification

Gemstone Carving

CS Code: 0214G&J2 C

Level: 02

Credit: 12

Version: 01

## SANDING AND POLISHING OF CABOCHON

### CONTENTS

1. Assessment Summary and Record
2. Candidate Assessment
3. Assessor Judgment Guide
4. List of required tools/ equipment, material and context of assessment

### ASSESSMENT AND ASSESSOR DETAILS

Competent

☐

Not Yet Competent

☐

Assessment

☐

Re-Assessment

☐

Assessor's Name:

Assessor's Code

Assessor's Signature..... Date

DD		MM		YYYY					

### CANDIDATE DETAILS

Candidate's Name:

First Name Last Name

Father's Name

Institute Name and District

CNIC/ BFORM #

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Registration Number issued by Assessment Body

Gender

Male ☐ Female ☐ Transgender ☐

Candidate's Consent

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Candidate's Signature:

### ASSESSMENT RESULTS SUMMARY FORM

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DD		MM		YYYY					

# 1

## ASSESSMENT SUMMARY & RECORD

Candidate's Name:..... Father's Name:.....							
ACTIVITY	METHOD				DESIRED OUTCOMES	RESULT	
NATURE OF ACTIVITY	WRITTEN	ORAL	PORTFOLIO	OBSERVATION	DESIRED OUTCOMES FOR SUCCESSFUL ASSESSMENT OF COMPETENCY STANDARD: <b>SANDING AND POLISHING OF CABOCHON</b>	COMPETENT	NOT YET COMPETENT
Practical Skill Demonstration		✓		✓	<ul style="list-style-type: none"> <li>Perform role play for sanding and polishing of cabochon</li> </ul>		
Knowledge Assessment	✓	✓			<ul style="list-style-type: none"> <li>Answer any questions your Assessor may have during the practical assessment</li> </ul>		
Other Requirement					<ul style="list-style-type: none"> <li>NA</li> </ul>		

# 2

## CANDIDATE ASSESSMENT

Candidate's Name:..... Father's Name:.....

ALL WORK ASSESSED IN THIS COMPETENCY STANDARD MUST BE YOUR OWN WORK.

### GUIDANCE TO CANDIDATE

To meet this standard you are required to perform within **Two Hours** timeframe:

#### Perform a role play to demonstrate, sanding and polishing of cabochon

- ✓ Perform sanding on Cab stone
- ✓ Perform sanding with tumbler machine
- ✓ Perform polishing with tumbler machine

**Important Note:** The following general performance criteria will be followed and performed in all the tasks (where applicable) by the candidate in order to meet this standard.

- ✓ Follow health and safety procedure as per the requirements of given task
- ✓ Prepare work station as per the requirements of task
- ✓ Select tools/ equipment as per the requirements of task
- ✓ Report to supervisor in case of any contingency after taking necessary actions
- ✓ Complete the work by following sequence of operations
- ✓ Perform task(s) within standard timeframe

ACTIVITIES	CANDIDATE RESPONSE
1. <b>Complete practical task in performing Sanding and Polishing of Cabochon</b>	<p>During Practical assessment under observation by an assessor, I will correctly carry out the following task.</p> <ul style="list-style-type: none"> <li>• <b>Perform sanding on cab stone</b> <ul style="list-style-type: none"> <li>✓ Arrange sanding paper for sanding</li> <li>✓ Perform sanding on the stone with Grit# 400, #600, #1000 sanding paper according requirement</li> </ul> </li> <li>• <b>Perform sanding with tumbler machine</b> <ul style="list-style-type: none"> <li>✓ Identify and select appropriate sanding media</li> <li>✓ Mix sanding abrasive according to defined ratio of material and media</li> <li>✓ Add media with #600,#1000 abrasive to remove scratch</li> </ul> </li> <li>• <b>Perform Polishing with Tumbler Machine</b> <ul style="list-style-type: none"> <li>✓ Select appropriate polishing media</li> <li>✓ Use polishing abrasive according to defined ratio of material and media</li> <li>✓ Add media abrasive #600,#1000 (Aluminum oxide) for pre polish</li> <li>✓ Mix media with abrasive chrome oxide for polishing</li> </ul> </li> </ul>
2. <b>Answer any questions your Assessor may have during the practical assessment</b>	<p>My answers to questions are correct and demonstrate my understanding of the topics and their application:</p>

Candidate's Name: ..... Father's Name: .....

### INSTRUCTIONS FOR ASSESSOR

This section contains minimum evidence requirements. Oral questioning may be used to clarify candidate understanding of the topic and its application.

ACTIVITIES	MINIMUM EVIDENCE REQUIRED	YES	NO	ASSESSOR COMMENTS
<b>1. Complete practical task in performing to prepare Cabochon with auto cab making machine under observation by an assessor, including:</b>	During a practical assessment under observation by and assessor, the candidate correctly carried out the following tasks:			
<b>Perform sanding on cab stone</b>	Arrange sanding paper for sanding			
	Perform sanding on the stone with Grit# 400, #600, #1000 sanding paper according requirement			
<b>Perform Sanding with Tumbler Machine</b>	Identify and select appropriate sanding media			
	Mix sanding abrasive according to defined ratio of material and media			
	Add media with #600,#1000 abrasive to remove scratch			
<b>Perform Polishing with Tumbler Machine</b>	Select appropriate polishing media			
	Use polishing abrasive according to defined ratio of material and media			
	Add media abrasive #600,#1000 (Aluminum oxide) for pre polish			
	Mix media with abrasive chrome oxide for polishing			

<p><b>2. Answer any questions their Assessor may have during the practical assessment</b></p>	<p>Candidate answers to questions are correct and demonstrate understanding of the topics and their application.</p> <p><i>Assessor to document all questions asked and candidate answers below. Use extra sheets if required and attach.</i></p>			
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# 4

## LIST OF TOOLS, EQUIPMENT, MATERIAL AND CONTEXT OF ASSESSMENT

<b>INSTRUCTIONS</b>	This section contains information regarding; <ul style="list-style-type: none"> <li>Context of the assessment</li> <li>List of required tools and equipment.</li> <li>List of consumable items required during the service</li> </ul>
<b>1. Context of Assessment</b>	This task will be performed in real time environment

<b>2. List of tools and equipment required</b>		
S. No	Name of Items ( tools and equipments)	Quantity
01	Tumbler machine	
02	Sanding paper waterproof (400, 600,1000)	
03	Leather lab, rubber lap, buff	

<b>3. List of consumables</b>		
S. No	Name of Items	Quantity/Volume
01	Diamond Powder	
02	Chrome oxide, cerium oxide and aluminum oxide	
03	Cleaning cloth piece	



# ASSESSMENT MATERIAL

## EVIDENCE GUIDE

### Qualification

Gemstone Carving

CS Code: 0214G&J2D

Level: 02

Credit: 20

Version: 01

## BASIC CARVING WORK

### CONTENTS

1. Assessment Summary and Record
2. Candidate Assessment
3. Assessor Judgment Guide
4. List of required tools/ equipment, material and context of assessment

### ASSESSMENT AND ASSESSOR DETAILS

Competent

☐

Not Yet Competent

☐

Assessment

☐

Re-Assessment

☐

Assessor's Name:

Assessor's Code

Assessor's Signature..... Date

DD		MM		YYYY					

### CANDIDATE DETAILS

Candidate's Name:

First Name Last Name

Father's Name

Institute Name and District

CNIC/ BFORM #

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Registration Number issued by Assessment Body

Gender

Male ☐ Female ☐ Transgender ☐

Candidate's Consent

I agree to the time and date of the assessment and am aware of the requirements of the assessment. I fully understand my rights of appeal.

Candidate's Signature:

### ASSESSMENT RESULTS SUMMARY FORM

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DD		MM		YYYY					



# 1

## ASSESSMENT SUMMARY & RECORD

Candidate's Name:..... Father's Name:.....							
ACTIVITY	METHOD				DESIRED OUTCOMES	RESULT	
NATURE OF ACTIVITY	WRITTEN	ORAL	PORTFOLIO	OBSERVATION	DESIRED OUTCOMES FOR SUCCESSFUL ASSESSMENT OF COMPETENCY STANDARD: <b>BASIC CARVING WORK</b>	COMPETENT	NOT YET COMPETENT
Practical Skill Demonstration		✓		✓	<ul style="list-style-type: none"> <li>Perform role play for basic carving work</li> </ul>		
Knowledge Assessment	✓	✓			<ul style="list-style-type: none"> <li>Answer any questions your Assessor may have during the practical assessment</li> </ul>		
Other Requirement					<ul style="list-style-type: none"> <li>NA</li> </ul>		

# 2

## CANDIDATE ASSESSMENT

Candidate's Name:..... Father's Name:.....

ALL WORK ASSESSED IN THIS COMPETENCY STANDARD MUST BE YOUR OWN WORK.

### GUIDANCE TO CANDIDATE

To meet this standard you are required to perform within **four hour** timeframe:

#### Perform a role play to demonstrate, Basic Carving Work

- ✓ Extract Required shape for basic carving from stone
- ✓ Perform basic carving

**Important Note:** The following general performance criteria will be followed and performed in all the tasks (where applicable) by the candidate in order to meet this standard.

- ✓ Follow health and safety procedure as per the requirements of given task
- ✓ Prepare work station as per the requirements of task
- ✓ Select tools/ equipment as per the requirements of task
- ✓ Report to supervisor in case of any contingency after taking necessary actions
- ✓ Complete the work by following sequence of operations
- ✓ Perform task(s) within standard timeframe

ACTIVITIES	CANDIDATE RESPONSE
1. Complete practical task in performing Basic carving work	<p>During Practical assessment under observation by an assessor, I will correctly carry out the following task.</p> <ul style="list-style-type: none"> <li>• <b>Extract required shape for basic carving from stone</b> <ul style="list-style-type: none"> <li>✓ Ensure adequate water supply for grinding process</li> <li>✓ Perform pre marking on stone for desired carving design</li> <li>✓ Perform removal of unwanted edges of stone as per marking</li> <li>✓ Finalize the basic shape on stone</li> </ul> </li> <li>• <b>Perform basic carving</b> <ul style="list-style-type: none"> <li>✓ Select tools and machine for basic carving process</li> <li>✓ Install the carving tools in carving machine as per the requirement of the design</li> <li>✓ Select course grinding with grinding wheels</li> <li>✓ Perform basic carving and finalize the design</li> </ul> </li> </ul>
2. Answer any questions your Assessor may have during the practical assessment	<p>My answers to questions are correct and demonstrate my understanding of the topics and their application:</p>

Candidate's Name: ..... Father's Name: .....

### INSTRUCTIONS FOR ASSESSOR

This section contains minimum evidence requirements. Oral questioning may be used to clarify candidate understanding of the topic and its application.

ACTIVITIES	MINIMUM EVIDENCE REQUIRED	YES	NO	ASSESSOR COMMENTS
<b>1. Complete practical task in performing to basic carving work under observation by an assessor, including:</b>	During a practical assessment under observation by and assessor, the candidate correctly carried out the following tasks:			
<b>Required shape for basic carving from stone</b>	Ensure adequate water supply for grinding process			
	Perform pre marking on stone for desired carving design			
	Perform removal of unwanted edges of stone as per marking			
	Finalize the basic shape on stone			
<b>Perform basic carving</b>	Select tools and machine for basic carving process			
	Install the carving tools in carving machine as per the requirement of the design			
	Select course grinding with grinding wheels			
	Perform basic carving and finalize the design			

<p><b>2. Answer any questions their Assessor may have during the practical assessment</b></p>	<p>Candidate answers to questions are correct and demonstrate understanding of the topics and their application.</p> <p><i>Assessor to document all questions asked and candidate answers below. Use extra sheets if required and attach.</i></p>			
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# 4

## LIST OF TOOLS, EQUIPMENT, MATERIAL AND CONTEXT OF ASSESSMENT

<b>INSTRUCTIONS</b>	This section contains information regarding; <ul style="list-style-type: none"> <li>Context of the assessment</li> <li>List of required tools and equipment.</li> <li>List of consumable items required during the service</li> </ul>
<b>1. Context of Assessment</b>	This task will be performed in real time environment

<b>2. List of tools and equipment required</b>		
S. No	Name of Items ( tools and equipments)	Quantity
01	Carving Machine	
02	Flexible shaft Machine	
03	Trim saw machine 6"-8" blade	
04	Diamond coated carving tools kit	
05	Plier with diamond coated tips	

<b>3. List of consumables</b>		
S. No	Name of Items	Quantity/Volume
01	Stone for carving work	



# ASSESSMENT MATERIAL

## EVIDENCE GUIDE

### Qualification

Gemstone Carving

CS Code: 0214G&J2 E

Level: 03

Credit: 20

Version: 01

## ADVANCE CARVING WORK

### CONTENTS

1. Assessment Summary and Record
2. Candidate Assessment
3. Assessor Judgment Guide
4. List of required tools/ equipment, material and context of assessment

### ASSESSMENT AND ASSESSOR DETAILS

Competent

☐

Not Yet Competent

☐

Assessment

☐

Re-Assessment

☐

Assessor's Name:

Assessor's Code

Assessor's Signature..... Date

DD		MM		YYYY					

### CANDIDATE DETAILS

Candidate's Name:

First Name Last Name

Father's Name

Institute Name and District

CNIC/ BFORM #

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Registration Number issued by Assessment Body

Gender

Male ☐ Female ☐ Transgender ☐

Candidate's Consent

I agree to the time and date of the assessment and am aware of the requirements of the assessment. I fully understand my rights of appeal.

Candidate's Signature:

### ASSESSMENT RESULTS SUMMARY FORM

You can use this cover sheet as an *Assessment Results Summary Form*. Simply post a photocopy of this completed coversheet to NAVTTTC

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1. DATE FORM RECEIVED:

DD		MM		YYYY					

2. DATE ENTERED INTO DATABASE:

DD		MM		YYYY					

# 1

## ASSESSMENT SUMMARY & RECORD

Candidate's Name:..... Father's Name:.....								
ACTIVITY	METHOD				DESIRED OUTCOMES	RESULT		
NATURE OF ACTIVITY	WRITTEN	ORAL	PORTFOLIO	OBSERVATION	DESIRED OUTCOMES FOR SUCCESSFUL ASSESSMENT OF COMPETENCY STANDARD: <b>ADVANCE CARVING WORK</b>	COMPETENT	NOT YET COMPETENT	
Practical Skill Demonstration		✓		✓	<ul style="list-style-type: none"> <li>Perform role play for advance carving work</li> </ul>			
Knowledge Assessment		✓			<ul style="list-style-type: none"> <li>Answer any questions your Assessor may have during the practical assessment</li> </ul>			
Other Requirement					<ul style="list-style-type: none"> <li>NA</li> </ul>			



# 2

## CANDIDATE ASSESSMENT

Candidate's Name:..... Father's Name:.....

ALL WORK ASSESSED IN THIS COMPETENCY STANDARD MUST BE YOUR OWN WORK.

### GUIDANCE TO CANDIDATE

To meet this standard you are required to perform within **four hour** timeframe:

#### Perform a role play to demonstrate, advance carving work

- ✓ Develop 3D design with china clay
- ✓ Extract required shape for advance carving from stone
- ✓ Perform Advance carving

**Important Note:** The following general performance criteria will be followed and performed in all the tasks (where applicable) by the candidate in order to meet this standard.

- ✓ Follow health and safety procedure as per the requirements of given task
- ✓ Prepare work station as per the requirements of task
- ✓ Select tools/ equipment as per the requirements of task
- ✓ Report to supervisor in case of any contingency after taking necessary actions
- ✓ Complete the work by following sequence of operations
- ✓ Perform task(s) within standard timeframe

ACTIVITIES	CANDIDATE RESPONSE
1. Complete practical task in performing advance carving work	<p>During Practical assessment under observation by an assessor, I will correctly carry out the following task.</p> <ul style="list-style-type: none"> <li>• <b>Develop 3D design with china clay</b> <ul style="list-style-type: none"> <li>✓ Select China clay tools and machine</li> <li>✓ Develop prototype model with china clay according to design</li> </ul> </li> <li>• <b>Extract required shape for advance carving from stone</b> <ul style="list-style-type: none"> <li>✓ Select appropriate tools</li> <li>✓ Perform per marking on stone</li> <li>✓ Perform removed of unwanted edge of stone as per marking</li> <li>✓ Finalize the 3D shape on stone</li> </ul> </li> <li>• <b>Perform Advance carving</b> <ul style="list-style-type: none"> <li>✓ Select appropriate tools and machine</li> <li>✓ Mark points to stone according to model design</li> <li>✓ Perform shaping as per model design on stone</li> <li>✓ Finalize the 3D Carving work on stone</li> </ul> </li> </ul>
2. Answer any questions your Assessor may have during the practical assessment	<p>My answers to questions are correct and demonstrate my understanding of the topics and their application:</p>

Candidate's Name: ..... Father's Name: .....

### INSTRUCTIONS FOR ASSESSOR

This section contains minimum evidence requirements. Oral questioning may be used to clarify candidate understanding of the topic and its application.

ACTIVITIES	MINIMUM EVIDENCE REQUIRED	YES	NO	ASSESSOR COMMENTS
<b>1. Complete practical task in performing to advance carving work under observation by an assessor, including:</b>	During a practical assessment under observation by and assessor, the candidate correctly carried out the following tasks:			
<b>Develop 3D design with china clay</b>	Select China clay tools and machine			
	Develop prototype model with china clay according to design			
<b>Extract required shape for advance carving from stone</b>	Select appropriate tools			
	Perform per marking on stone			
	Perform removed of unwanted edge of stone as per marking			
	Finalize the 3D shape on stone			
<b>Perform Advance carving</b>	Select appropriate tools and machine			
	Mark points to stone according to model design			
	Perform shaping as per model design on stone			
	Finalize the 3D Carving work on stone			

<p><b>2. Answer any questions their Assessor may have during the practical assessment</b></p>	<p>Candidate answers to questions are correct and demonstrate understanding of the topics and their application.</p> <p><i>Assessor to document all questions asked and candidate answers below. Use extra sheets if required and attach.</i></p>			
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# 4

## LIST OF TOOLS, EQUIPMENT, MATERIAL AND CONTEXT OF ASSESSMENT

<b>INSTRUCTIONS</b>	This section contains information regarding; <ul style="list-style-type: none"> <li>Context of the assessment</li> <li>List of required tools and equipment.</li> <li>List of consumable items required during the service</li> </ul>
<b>1. Context of Assessment</b>	This task will be performed in real time environment

<b>2. List of tools and equipment required</b>		
S. No	Name of Items ( tools and equipments)	Quantity
01	Carving Machine	
02	Flexible shaft Machine	
03	Trim saw machine 6"-8" blade	
04	Diamond coated carving tools kit	
05	Plier with diamond coated tips	
06	Clamping device for holding stone	

<b>3. List of consumables</b>		
S. No	Name of Items	Quantity/Volume
01	China Clay	
02	Stone	
03		



# ASSESSMENT MATERIAL

## EVIDENCE GUIDE

### Qualification

Gemstone Carving

CS Code: 0214G&J2 F

Level: 03

Credit: 08

Version: 01

## SANDING AND POLISHING OF CARVING WORK

### CONTENTS

1. Assessment Summary and Record
2. Candidate Assessment
3. Assessor Judgment Guide
4. List of required tools/ equipment, material and context of assessment

### ASSESSMENT AND ASSESSOR DETAILS

Competent

☐

Not Yet Competent

☐

Assessment

☐

Re-Assessment

☐

Assessor's Name:

Assessor's Code

Assessor's Signature..... Date

DD		MM		YYYY					

### CANDIDATE DETAILS

Candidate's Name:

First Name Last Name

Father's Name

Institute Name and District

CNIC/ BFORM #

--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--

Registration Number issued by Assessment Body

Gender

Male ☐ Female ☐ Transgender ☐

Candidate's Consent

I agree to the time and date of the assessment and am aware of the requirements of the assessment. I fully understand my rights of appeal.

Candidate's Signature:

### ASSESSMENT RESULTS SUMMARY FORM

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2. DATE ENTERED INTO DATABASE:

DD		MM		YYYY					

# 1

## ASSESSMENT SUMMARY & RECORD

Candidate's Name:..... Father's Name:.....							
ACTIVITY	METHOD				DESIRED OUTCOMES	RESULT	
NATURE OF ACTIVITY	WRITTEN	ORAL	PORTFOLIO	OBSERVATION	DESIRED OUTCOMES FOR SUCCESSFUL ASSESSMENT OF COMPETENCY STANDARD: <b>SANDING AND POLISHING OF CARVING WORK</b>	COMPETENT	NOT YET COMPETENT
Practical Skill Demonstration		✓		✓	<ul style="list-style-type: none"> <li>Perform role play for sanding and polishing of carving work</li> </ul>		
Knowledge Assessment	✓	✓			<ul style="list-style-type: none"> <li>Answer any questions your Assessor may have during the practical assessment</li> </ul>		
Other Requirement					<ul style="list-style-type: none"> <li>NA</li> </ul>		

# 2

## CANDIDATE ASSESSMENT

Candidate's Name:..... Father's Name:.....

ALL WORK ASSESSED IN THIS COMPETENCY STANDARD MUST BE YOUR OWN WORK.

### GUIDANCE TO CANDIDATE

To meet this standard you are required to perform within **3 hour** timeframe:

#### Perform a role play to demonstrate, sanding and polishing of carving work

- ✓ Perform sanding on stone
- ✓ Perform polishing on stone

**Important Note:** The following general performance criteria will be followed and performed in all the tasks (where applicable) by the candidate in order to meet this standard.

- ✓ Follow health and safety procedure as per the requirements of given task
- ✓ Prepare work station as per the requirements of task
- ✓ Select tools/ equipment as per the requirements of task
- ✓ Report to supervisor in case of any contingency after taking necessary actions
- ✓ Complete the work by following sequence of operations
- ✓ Perform task(s) within standard timeframe

ACTIVITIES	CANDIDATE RESPONSE
1. Complete practical task in performing to sanding and polishing of carving work	<p>During Practical assessment under observation by an assessor, I will correctly carry out the following task.</p> <ul style="list-style-type: none"> <li>• <b>Perform sanding on stone</b> <ul style="list-style-type: none"> <li>✓ Use the flexible shaft machine for sanding process</li> <li>✓ Use the small disk of silicon carbide for engraving carve lines</li> <li>✓ Sanding on the stone with 400 sanding wheel according to requirement</li> <li>✓ Sanding on the stone with 600 sanding wheel according to requirement</li> <li>✓ Sanding on the stone with 1000 sanding wheel according to requirement</li> <li>✓ Use the abrasive for sanding with rubber wheel if required</li> </ul> </li> <li>• <b>Perform polishing on stone</b> <ul style="list-style-type: none"> <li>✓ Use the flexible shaft machine for polishing process</li> <li>✓ Perform polishing of stone with cotton buff and diamond powder (0-2) rubber leather and wooden polishing abrasive for engraving carve lines.</li> <li>✓ Perform polishing on the stone (aluminum oxide 6000 for pre polish)</li> <li>✓ Perform polishing on the stone (aluminum oxide 1000 for pre polish)</li> </ul> </li> </ul>
2. Answer any questions your Assessor may have during the practical assessment	<p>My answers to questions are correct and demonstrate my understanding of the topics and their application:</p>

Candidate's Name: ..... Father's Name: .....

### INSTRUCTIONS FOR ASSESSOR

This section contains minimum evidence requirements. Oral questioning may be used to clarify candidate understanding of the topic and its application.

ACTIVITIES	MINIMUM EVIDENCE REQUIRED	YES	NO	ASSESSOR COMMENTS
<b>1. Complete practical task in performing to sanding and polishing of carving work under observation by an assessor, including:</b>	During a practical assessment under observation by and assessor, the candidate correctly carried out the following tasks:			
<b>Perform sanding on stone</b>	Use the flexible shaft machine for sanding process			
	Use the small disk of silicon carbide for engraving carve lines			
	Sanding on the stone with 400 sanding wheel according to requirement			
	Sanding on the stone with 600 sanding wheel according to requirement			
	Sanding on the stone with 1000 sanding wheel according to requirement			
	Use the abrasive for sanding with rubber wheel if required			
<b>Perform polishing on stone</b>	Use the flexible shaft machine for polishing process			
	Perform polishing of stone with cotton buff and diamond powder (0-2) rubber leather and wooden polishing abrasive for engraving carve lines.			
	Perform polishing on the stone (aluminum oxide 6000 for pre polish)			
	Perform polishing on the stone (aluminum oxide 1000 for pre polish)			



<p><b>2. Answer any questions their Assessor may have during the practical assessment</b></p>	<p>Candidate answers to questions are correct and demonstrate understanding of the topics and their application.</p> <p><i>Assessor to document all questions asked and candidate answers below. Use extra sheets if required and attach.</i></p>			
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# 4

## LIST OF TOOLS, EQUIPMENT, MATERIAL AND CONTEXT OF ASSESSMENT

<b>INSTRUCTIONS</b>	This section contains information regarding; <ul style="list-style-type: none"> <li>Context of the assessment</li> <li>List of required tools and equipment.</li> <li>List of consumable items required during the service</li> </ul>
<b>1. Context of Assessment</b>	This task will be performed in real time environment

<b>2. List of tools and equipment required</b>		
S. No	Name of Items ( tools and equipments)	Quantity
01	Flexible shaft machine	
02	Small disk of silicon carbide	
03	Sanding wheel 400, 600 and 1000	

<b>3. List of consumables</b>		
S. No	Name of Items	Quantity/Volume
01	Chrome oxide, cerium oxide and aluminum oxide	
02	Sanding paper waterproof (400, 600, 1000)	
03	Stone	
04	Leather lap, rubber lap, buff	
05	Diamond Powder (0-2)	



# ASSESSMENT MATERIAL

## EVIDENCE GUIDE

Qualification code:

0214G&J2

Level: 02

Credit: 80

Version: 1

# GEMSTONE CARVING

## CONTENTS

1. Assessment Summary and Record
2. Candidate Assessment
3. Assessor Judgment Guide
4. List of required tools/ equipment, material and context of assessment

## ASSESSMENT AND ASSESSMENT PANEL DETAILS

Competent

☐

Not Yet Competent

☐

Assessment

☐

Re-Assessment

☐

Candidate's Instructor name: .....

Candidate's Instructor signature: .....

Private Sector Expert's name: .....

Private Sector Expert's signature: .....

Assessor's Name:

Assessor Code:

Assessor's Signature: ..... Date

DD	MM							YYYY	

## CANDIDATE DETAILS

Candidate Name:

Father Name

Institute Name and District

CNIC #

OR

Registration Number:

Gender

Male ☐

Female ☐

Candidate Consent

I agree to the time and date of the assessment and am aware of the requirements of the assessment. I fully understand my rights of appeal.

Candidate Signature:

## ASSESSMENT RESULTS SUMMARY FORM

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1. DATE FORM

RECEIVED:

DD	MM					YYYY	

2. DATE ENTERED INTO DATABASE:

DD	MM					YYYY	

# 1

## ASSESSMENT SUMMARY AND RECORD

ACTIVITY	METHOD				DESIRED OUTCOMES	RESULT	
NATURE OF ACTIVITY	WRITTEN	ORAL	PORTFOLIO	OBSERVATION	DESIRED OUTCOMES FOR SUCCESSFUL ASSESSMENT OF: GEMSTONE CARVING	COMPETENT	NOT YET COMPETENT
Practical final project		✓	✓	✓	Complete supplied project brief related to application of Gemstone Carving: <ul style="list-style-type: none"> <li>• Prepare cabochon manually</li> <li>• Prepare cabochon with auto cab making</li> <li>• Sanding and polishing of cabochon</li> <li>• Basic carving work</li> <li>• Advance carving work</li> <li>• Sanding and polishing of carving work</li> </ul>		
Knowledge assessment	✓	✓			<ul style="list-style-type: none"> <li>• Answer all questions the Assessment Panel will have following oral presentation of completed project brief</li> </ul>		
Other requirements					<ul style="list-style-type: none"> <li>• N/A</li> </ul>		

# 2

## CANDIDATE ASSESSMENT

Candidate Name..... Father Name .....

ALL WORK ASSESSED FOR THESE COMPETENCY STANDARDS MUST BE YOUR OWN WORK.

### GUIDANCE TO CANDIDATE

To meet this standard you are required to complete the following tasks within **five hours** timeframe:

- Prepare cabochon manually
- Prepare cabochon with auto cab making
- Sanding and polishing of cabochon
- Basic carving work
- Advance carving work
- Sanding and polishing of carving work

**Important Note:** The following general performance criteria will be followed and performed in all the tasks (where applicable) by the candidate in order to meet this standard.

- ✓ Follow health and safety procedure as per the requirements of given task
- ✓ Prepare work station as per the requirements of task
- ✓ Select tools/ equipment as per the requirements of task
- ✓ Report to supervisor in case of any contingency after taking necessary actions
- ✓ Complete the work by following sequence of operations
- ✓ Perform task(s) within standard timeframe

ACTIVITIES	CANDIDATE RESPONSE
<b>1.Tasks</b>  <b>I. Complete practical task in performing to Prepare cabochon manually</b>	<p>During Practical assessment under observation by an assessor, I will correctly carry out the following task.</p> <ul style="list-style-type: none"> <li>• <b>Marking and sawing of stone</b> <ul style="list-style-type: none"> <li>✓ Mark stone for Cabochon making</li> <li>✓ Remove the unwanted areas with plier</li> <li>✓ Cut the marked stone with trim saw machine</li> </ul> </li> <li>• <b>Template marking on stone</b> <ul style="list-style-type: none"> <li>✓ Select size of cabochon on template</li> <li>✓ Perform template marking</li> </ul> </li> <li>• <b>Prepare Cabochon as per template marking</b> <ul style="list-style-type: none"> <li>✓ Ensure adequate water supply for cutting process</li> <li>✓ Make necessary arrangements in workstation</li> <li>✓ prepare cabochon with grinding machine</li> </ul> </li> <li>• <b>Doping and course grinding of stone</b> <ul style="list-style-type: none"> <li>✓ Arrange material for doping process</li> <li>✓ Fix stone on dope stick</li> <li>✓ Make smooth surface of stone</li> <li>✓ Perform course grinding at grit #180/#220/#260/#320</li> </ul> </li> </ul>

<b>II. Complete practical task in performing to Prepare cabochon with auto cab making</b>	<ul style="list-style-type: none"> <li>• <b>Marking and sawing of stone</b> <ul style="list-style-type: none"> <li>✓ Mark stone for Cabochon making</li> <li>✓ Remove the unwanted areas with pliers</li> <li>✓ Mark stone and Cut with trim saw machine</li> </ul> </li> <li>• <b>Prepare stone for cab making</b> <ul style="list-style-type: none"> <li>✓ Ensure adequate water supply for cutting process</li> <li>✓ Make necessary arrangements in work station to prepare stone for cab making</li> <li>✓ Adjust auto cab machine for cabochon Making</li> </ul> </li> <li>• <b>Perform doping</b> <ul style="list-style-type: none"> <li>✓ Arrange material for doping process</li> <li>✓ Fix stone on dope stick</li> <li>✓ Fix of doped stone in auto cab making machine</li> </ul> </li> <li>• <b>Prepare cabochon on auto cab machine</b> <ul style="list-style-type: none"> <li>✓ Ensure adequate water supply for cutting process</li> <li>✓ Adjust machine according to template</li> <li>✓ Execute the auto cab making</li> </ul> </li> </ul>
<b>III. Complete practical task in performing Sanding and polishing of cabochon</b>	<ul style="list-style-type: none"> <li>• <b>Perform sanding on cab stone</b> <ul style="list-style-type: none"> <li>✓ Arrange sanding paper for sanding</li> <li>✓ Perform sanding on the stone with Grit# 400, #600, #1000 sanding paper according requirement</li> </ul> </li> <li>• <b>Perform sanding with tumbler machine</b> <ul style="list-style-type: none"> <li>✓ Identify and select appropriate sanding media</li> <li>✓ Mix sanding abrasive according to defined ratio of material and media</li> <li>✓ Add media with #600,#1000 abrasive to remove scratch</li> </ul> </li> <li>• <b>Perform Polishing with Tumbler Machine</b> <ul style="list-style-type: none"> <li>✓ Select appropriate polishing media</li> <li>✓ Use polishing abrasive according to defined ratio of material and media</li> <li>✓ Add media abrasive #600,#1000 (Aluminum oxide) for pre polish</li> <li>✓ Mix media with abrasive chrome oxide for polishing</li> </ul> </li> </ul>
<b>IV. Complete practical task in performing Basic carving work</b>	<ul style="list-style-type: none"> <li>• <b>Extract required shape for basic carving from stone</b> <ul style="list-style-type: none"> <li>✓ Ensure adequate water supply for grinding process</li> <li>✓ Perform pre marking on stone for desired carving design</li> <li>✓ Perform removal of unwanted edges of stone as per marking</li> <li>✓ Finalize the basic shape on stone</li> </ul> </li> <li>• <b>Perform basic carving</b> <ul style="list-style-type: none"> <li>✓ Select tools and machine for basic carving process</li> <li>✓ Install the carving tools in carving machine as per the requirement of the design</li> <li>✓ Select course grinding with grinding wheels</li> <li>✓ Perform basic carving and finalize the design</li> </ul> </li> </ul>
<b>IV. Complete practical task in performing Basic carving work Advance carving work</b>	<ul style="list-style-type: none"> <li>• <b>Develop 3D design with china clay</b> <ul style="list-style-type: none"> <li>✓ Select China clay tools and machine</li> <li>✓ Develop prototype model with china clay according to design</li> </ul> </li> <li>• <b>Extract required shape for advance carving from stone</b> <ul style="list-style-type: none"> <li>✓ Select appropriate tools</li> <li>✓ Perform pre marking on stone</li> <li>✓ Perform removed of unwanted edge of stone as per marking</li> <li>✓ Finalize the 3D shape on stone</li> </ul> </li> <li>• <b>Perform Advance carving</b> <ul style="list-style-type: none"> <li>✓ Select appropriate tools and machine</li> <li>✓ Mark points to stone according to model design</li> <li>✓ Perform shaping as per model design on stone</li> <li>✓ Finalize the 3D Carving work on stone</li> </ul> </li> </ul>

<b>V. Complete practical task in performing Sanding and polishing of carving work</b>	<ul style="list-style-type: none"> <li>• <b>Perform sanding on stone</b> <ul style="list-style-type: none"> <li>✓ Use the flexible shaft machine for sanding process</li> <li>✓ Use the small disk of silicon carbide for engraving carve lines</li> <li>✓ Sanding on the stone with 400 sanding wheel according to requirement</li> <li>✓ Sanding on the stone with 600 sanding wheel according to requirement</li> <li>✓ Sanding on the stone with 1000 sanding wheel according to requirement</li> <li>✓ Use the abrasive for sanding with rubber wheel if required</li> </ul> </li> <li>• <b>Perform polishing on stone</b> <ul style="list-style-type: none"> <li>✓ Use the flexible shaft machine for polishing process</li> <li>✓ Perform polishing of stone with cotton buff and diamond powder (0-2) rubber leather and wooden polishing abrasive for engraving carve lines.</li> <li>✓ Perform polishing on the stone (aluminum oxide 6000 for pre polish)</li> <li>✓ Perform polishing on the stone (aluminum oxide 1000 for pre polish)</li> </ul> </li> </ul>
<b>2. Other requirements</b>	<ul style="list-style-type: none"> <li>• NA</li> </ul>
<b>3. Answer any questions your Assessor may have during the practical assessment</b>	<ul style="list-style-type: none"> <li>• My answers to questions are correct and demonstrate my understanding of the topics and their application</li> </ul>

Candidate Name .....Father Name .....

**INSTRUCTIONS FOR ASSESSMENT PANEL****THIS SECTION CONTAINS MINIMUM EVIDENCE REQUIREMENTS**

- The Assessment Panel will consist of three members: a registered Assessor, the candidate's Instructor and an expert from the private sector.
- The project brief will consist of integrated task requirements to enable the candidate to supply sufficient evidence of their competence in the skills required to work as a Gemstone carving
- The project brief must be suitable for the level of knowledge and skills required (i.e. Level 2)
- The time frame for completion of assigned project brief is 5 hours

ACTIVITIES	MINIMUM EVIDENCE REQUIRED	YES	NO	ASSESSOR COMMENTS
<b>1. Complete practical task in performing to perform Gemstone Carving under observation by an assessor, including:</b>	During a practical assessment under observation by and assessor, the candidate correctly carried out the following tasks:			
<b>Marking and sawing of stone</b>	Mark stone for Cabochon making			
	Remove the unwanted areas with plier			
	Cut the marked stone with trim saw machine			
<b>Template marking on stone</b>	Select size of cabochon on template			
	Perform template marking			
<b>Prepare Cabochon as per template marking</b>	Ensure adequate water supply for cutting process			
	Make necessary arrangements in workstation			
	prepare cabochon with grinding machine			
<b>Doping and course grinding of stone</b>	Arrange material for doping process			
	Fix stone on dope stick			
	Make smooth surface of stone			
	Perform course grinding at grit #180/#220/#260/#320			
<b>Marking and sawing of stone</b>	Mark stone for Cabochon making			
	Remove the unwanted areas with pliers			
	Mark stone and Cut with trim saw machine			
<b>Prepare stone for cab making</b>	Ensure adequate water supply for cutting process			
	Make necessary arrangements in work station to prepare stone for cab making			



	Adjust auto cab machine for cabochon Making			
<b>Perform doping</b>	Arrange material for doping process			
	Fix stone on dope stick			
	Fix of doped stone in auto cab making machine			
<b>Prepare cabochon on auto cab machine</b>	Ensure adequate water supply for cutting process			
	Adjust machine according to template			
	Execute the auto cab making			
<b>Perform sanding on cab stone</b>	Arrange sanding paper for sanding			
	Perform sanding on the stone with Grit# 400, #600, #1000 sanding paper according requirement			
<b>Perform Sanding with Tumbler Machine</b>	Identify and select appropriate sanding media			
	Mix sanding abrasive according to defined ratio of material and media			
	Add media with #600,#1000 abrasive to remove scratch			
<b>Perform Polishing with Tumbler Machine</b>	Select appropriate polishing media			
	Use polishing abrasive according to defined ratio of material and media			
	Add media abrasive #600,#1000 (Aluminum oxide) for pre polish			
	Mix media with abrasive chrome oxide for polishing			
<b>Required shape for basic carving from stone</b>	Ensure adequate water supply for grinding process			
	Perform pre marking on stone for desired carving design			
	Perform removal of unwanted edges of stone as per marking			
	Finalize the basic shape on stone			
<b>Perform basic carving</b>	Select tools and machine for basic carving process			
	Install the carving tools in carving machine as per the requirement of the design			
	Select course grinding with grinding wheels			
	Perform basic carving and finalize the design			
<b>Develop 3D design with china clay</b>	Select China clay tools and machine			
	Develop prototype model with china clay according to design			

<b>Extract required shape for advance carving from stone</b>	Select appropriate tools			
	Perform per marking on stone			
	Perform removed of unwanted edge of stone as per marking			
	Finalize the 3D shape on stone			
<b>Perform Advance carving</b>	Select appropriate tools and machine			
	Mark points to stone according to model design			
	Perform shaping as per model design on stone			
	Finalize the 3D Carving work on stone			
<b>Perform sanding on stone</b>	Use the flexible shaft machine for sanding process			
	Use the small disk of silicon carbide for engraving carve lines			
	Sanding on the stone with 400 sanding wheel according to requirement			
	Sanding on the stone with 600 sanding wheel according to requirement			
	Sanding on the stone with 1000 sanding wheel according to requirement			
	Use the abrasive for sanding with rubber wheel if required			
<b>Perform polishing on stone</b>	Use the flexible shaft machine for polishing process			
	Perform polishing of stone with cotton buff and diamond powder (0-2) rubber leather and wooden polishing abrasive for engraving carve lines.			
	Perform polishing on the stone (aluminum oxide 6000 for pre polish)			

ACTIVITIES	MINIMUM EVIDENCE REQUIRED	YES	NO	ASSESSOR COMMENTS ON CANDIDATE PERFORMANCE
<b>2. Answer any questions their Assessor may have during the practical assessment</b>	<p>Candidate answers to questions are correct and demonstrate understanding of the topics and their application.</p> <p><i>Assessor to document all questions asked and candidate answers below. Use extra sheets if required and attach.</i></p>			

# 4

## LIST OF TOOLS, EQUIPMENT, MATERIAL AND CONTEXT OF ASSESSMENT

<b>instructions</b>	<p>This section contains information regarding;</p> <ul style="list-style-type: none"> <li>Context of the assessment</li> <li>List of required tools and equipment.</li> <li>List of consumable items required during the service</li> </ul>
<b>1.Context of Assessment</b>	<p>This practical final project will be conducted in a Lapidary lab/workshop environment.</p> <p>Required tools, equipment and consumables will vary according to project brief.</p>


2. List of tools and equipment required		
S. No	Name of Items ( tools and equipments)	Quantity
01	Light source	
02	Aluminum pencil or permanent marker	
03	Plier diamond cutter	
04	Trim saw Machine and blade as per requirement	
05	Template with difference 6, 4 and 2 in oval shapes	
06	Faceting unit machine for smooth work	
07	Leather/ Rubber lap with abrasive	
08	Grinding Machine with diamond grinding wheel	
09	Sprit lamp	
10	Doping wax and dope sticks	
11	Abrasive wheel, grit 400 and 600 "cut off disc"	
12	Aluminum pencil or permanent marker	
13	Pliers with diamond coated tips	
14	Auto cab Machine	
15	Tumbler machine	
16	Carving Machine	
17	Flexible shaft Machine	
18	Trim saw machine 6"-8" blade	
19	Diamond coated carving tools kit	
20	Flexible shaft Machine	
21	Clamping device for holding stone	
22	Small disk of silicon carbide	

3. List of consumables		
S. No	Name of Items	Quantity/Volume
01	Rough stone	
02	Sanding paper grit #180/#220/#260/#320	
03	Wax	
04	Diamond Powder	
05	Chrome oxide, cerium oxide and aluminum oxide	
06	Cleaning cloth piece	
07	Stone for carving work	
08	China Clay	
09	Sanding paper waterproof (400, 600, 1000)	
10	Leather lap, rubber lap, buff	

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