



**National Vocational Certificate level 2, in  
(Gems & Jewellery Sector)**

# **GEMSTONE FACETING**



**National Vocational and Technical Training Commission (NAVTTTC)  
Government of Pakistan**

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National Vocational Certificate level 2, in  
(Gems & Jewellery Sector)  
**“GEMSTONE FACETING”**

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## TITLE OF QUALIFICATION

National Vocational Certificate level 2, in (Gems and Jewellery Sector) “Gemstone Faceting”

## INTRODUCTION

The National Competency Standards are written specifications of skill and knowledge competencies required in a particular trade. The competency standards are developed in collaboration with United Nations Industrial Development Organization (UNIDO), GIZ and National Vocational & Technical Training Commission (NAVTTTC).

Industry experts from the relevant industries from different geographical locations across Pakistan were consulted during the development process of these competency standards to ensure input and ownership of all the stakeholders. NAVTTTC approves these competency standards on the recommendation of Industry Advisory Group (IAG) for the Gems and Jewelry sector.

Powerful

This National Vocational Qualification is developed for the all beginners starting their jewelry making journey, this training is not required any experience, metal smithing skills or power tools. All you need will be a lot of enthusiasm and a few basic, inexpensive beading tools and supplies. There is a lot of information available in this qualification, including step-by-step techniques and beading projects. Some techniques can be mastered in a matter of minutes, while others might take some time to learn. A great starting point for beginners is to become acquainted with all the jewelry making supplies and tools, the details of jewelry supply information is also included in the module. After this training students can start with some of the basic earring projects, and then move on to fashion jewelry making projects.

The National Competency Standards could be used as a referral document for the development of curricula to be used by training institutions.

Training in the course is based on defined competency standards, which are industry oriented. Trainer being the facilitator of the training programme encourages and assists trainees to learn in a practical exposure and practice. Trainees are likely to work in groups (pairs) and all doing something different. Some are doing practical tasks in the workshop, some writing, some not even in the classroom or workshop but in another part of the building using specialist equipment, working on computers doing research on the Internet or the library. As trainees learn at different pace they might well be at different stages in their learning, thus learning must be tailored to suit individual needs. The following facilitation methods (teaching strategies) are generally employed:

**Direct Instruction Method:** This might be effective when introducing a new topic to a larger group of trainees in a relative short amount of time. In most cases this method relies on one-way communication, hence there are limited opportunities to get feedback on the trainee's understanding.

**Discussion Method:** This allows trainees to actively participate in sharing knowledge and ideas. It will help the trainer to determine whether trainees understand the content of the topic. On the other hand, there is a possibility of straying off topic under discussion and some trainees dominating others on their views.

**Small Group Method:** Pairing trainees to help and learn from each other often results in faster knowledge/skill transfer than with the whole class. The physical arrangement of the classroom/workshop and individual assessment may be challenging. Analogy method should be in corporate.

**Problem Solving Method:** This is a very popular teaching strategy for the training. Trainees are challenged and are usually highly motivated when they gain new knowledge and skills by solving problems (Contingency skills). Trainees develop critical thinking skills and the ability to adapt to new learning situations (Transfer skills). It might be time consuming and because trainees sometimes work individually, they may not learn all the things that they are expected to learn.

**Research Method:** This is used for workshops and laboratory tasks, field experiments, and case studies. It encourages trainees to investigate and find answers for themselves and to critically evaluate information. It however requires a lot of time and careful planning of research projects for the trainee.

The detail of the competency standards included in this qualifications given below:

National Vocational Certificate level 2, in (Gems and Jewelry Sector) "Gemstone Faceting"

- A. Perform gemstone identification
- B. Perform gemstones trimming and free hand shaping
- C. Prepare gemstone for faceting
- D. Perform gemstone faceting
- E. Perform gemstone polishing

## PURPOSE OF THE QUALIFICATION

The purpose of the training is to provide skilled manpower for the value addition on gemstone of the existing Gems and Jewellery sector and related industry. This will improve the abilities and accreditation of a Gemstone Faceting Expert in terms of national and international standards applicable in the field of Gemstone Faceting. The

availability of quality Gemstone Faceting Experts in the local and international markets will ultimately bring economic benefits to the producers and processors.

The core purpose of this qualification is to produce employable Gemstone Faceting Experts, who could provide advanced Services of cutting & polishing of gemstones. In addition this qualification will prepare youth to be employee in Gemstone industry or work as an entrepreneur. To prepare and train students through skill training and enabling them to earn their living either through employment in industry or to be self-employed as Gemstone Faceting Expert.

## MAIN OBJECTIVES OF THE QUALIFICATION

Gemstone Faceting qualification consists of theoretical and practical details required for the identification, Faceting and Polishing of precious, semi-precious, raw or polished gemstone. The main objectives of the qualification are as follows:

1. Perform Basic Gemstone Identification
2. Perform Gemstone Trimming & Free Hand Shaping
3. Prepare Gemstone for Faceting
4. Perform Gemstone Faceting
5. Perform Polishing of Gemstone

## DATE OF VALIDATION

The level 2 of national vocational qualification on Gems and Jewelry Sector – Gemstone Faceting has been validated by the Qualifications Development Committee (QDC) members on March 2018 and will remain in currency until March 2023.

## CODES OF QUALIFICATIONS

The International Standard Classification of Education (ISCED) is a framework for assembling, compiling and analyzing cross-nationally comparable statistics on education and training. ISCED codes for these qualifications are assigned as follows:

## ISCED Classification for Fashion Jewelry Maker (Beads and Wires)

Code	Description
<b>0214G&amp;J3</b>	National Vocational Certificate level 2 in Gems and Jewellery Sector –“Gemstone Faceting”

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## MEMBERS OF QUALIFICATIONS DEVELOPMENT COMMITTEE

The following members participated in the qualifications development and validation of these qualifications:

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## ENTRY REQUIREMENTS

The entry for National Vocational Certificate level 2, in (Gems and Jewellery Sector) “Gemstone Faceting” are given below:

Entry for assessment for this qualification is open. However, entry into formal training institutes, based on this qualification may require skills and knowledge equivalent to middle (Grade 8) with some working knowledge of this field.

## SUMMARY OF COMPETENCY STANDARDS

Code	Competency Standards	Level	Credits	Category
<b>0214G&amp;J3 A</b>	Perform basic gemstone identification	2	10	Functional
<b>0214G&amp;J3 B</b>	Perform gemstones trimming and free hand shaping	2	10	Generic
<b>0214G&amp;J3 C</b>	Prepare gemstone for faceting	2	10	Technical
<b>0214G&amp;J3 D</b>	Perform gemstone faceting	2	30	Technical
<b>0214G&amp;J3 E</b>	Perform gemstone polishing	2	20	Technical
<b>041600453</b>	Occupational health and safety	2	3	Technical
<b>041600455</b>	Communicate in the workplace to support customers and team	3	6	Technical
<b>041600459</b>	Work effectively in a customer service - sales environment	3	7	Technical
<b>041600460</b>	Develop professionalism	3	3	Technical
<b>041600461</b>	Comply with health and safety regulations	3	2	Technical

## Competency Standard A: Perform Basic Gemstone identification

### Overview

This competency standard covers the skills and knowledge required to have basic knowledge of Gemstones through identifications of physical properties.

Competency Units	Performance Criteria	Knowledge and understanding
<b>A1: Properties of gemstone</b>	<p><b>Trainee will be able to:</b></p> <p><b>P1.</b> Identify Gemstone on physical properties</p> <p><b>P2.</b> Identify gemstones optical properties</p> <p><b>P3.</b> Judge gemstone for faceting process on its properties</p>	<p><b>Trainee will able to know:</b></p> <p><b>K1.</b> Physical properties (Cleavage, Breakage, Fracture and feathers, hardness and specific gravity)</p> <p><b>K2.</b> Optical properties of Gemstone, (refractive index)</p> <p><b>K3.</b> Color Zoning, Critical angle and orientation</p> <p><b>K4.</b> Gemstone found in Pakistan</p>
<b>A2: identify the crystal structure of gemstone</b>	<p><b>Trainee will be able to:</b></p> <p><b>P1.</b> Identify the crystal structure based on wooden crystal sample</p>	<p><b>Trainee will able to know:</b></p> <p><b>K1.</b> Understanding of seven basic crystal system (cubic, Tetragonal, hexagonal, trigonal, orthorhombic, monoclinic and triclinic)</p>

## Critical Evidence(s) Required

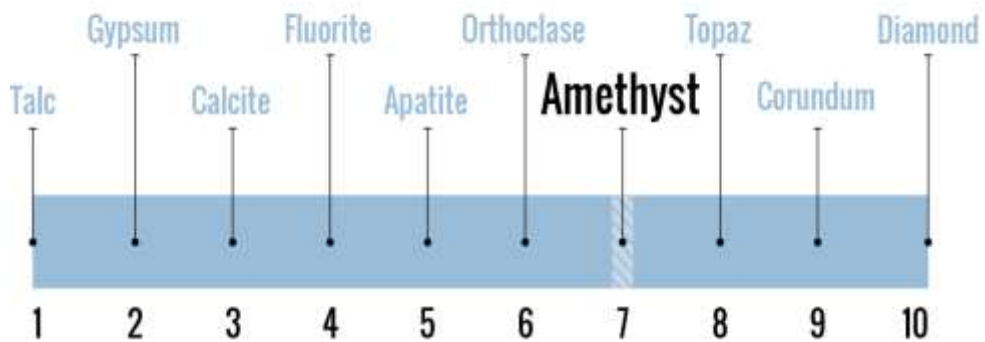
The candidate needs to produce following critical evidence(s) in order to be competent in this competency standard:

- To understand physical properties of gemstones.
- To understand physical properties of gemstones.
- To understand crystal systems of gemstone



1 TALC		6 FELDSPAR	
2 GYPSUM		7 QUARTZ	
3 CALCITE		8 TOPAZ	
4 FLOURITE		9 CORUNDUM	
5 APATITE		10 DIAMOND	

## Mohs Hardness Scale



## **Tools and equipment required**

- Loup 10X
- Harness pencil
- Crystals Models
- Tweezers
- Various gemstones as per need

## Competency Standard B: Perform Gemstone Trimming and free hand Shaping

### Overview

This competency standard covers the skills and knowledge required to carry out trimming, sawing and shaping of gemstones with the help of various machines and tools.

Competency Units	Performance Criteria	Knowledge and understanding
<b>B1:Perform trimming</b>	<p><b><i>Trainee will be able to:</i></b></p> <p><b>P1.</b> Judge stone for trimming process.</p> <p><b>P2.</b>Removal of unwanted portion</p> <p><b>P3.</b>Identify gemstones optical properties</p> <p><b>P4.</b>Judge gemstone for faceting process on its properties</p>	<p><b>Trainee will able to know:</b></p> <p><b>K1.</b> Introduction to Trim saw machine and blades various thickness and size</p> <p><b>K2.</b> Adopt appropriate safety measures for trimming process</p>
<b>B2:Perform freehand shaping</b>	<p><b><i>Trainee will be able to:</i></b></p> <p><b>P1.</b>Select appropriate tools and machine for shaping</p> <p><b>P2.</b>Adopt safety precaution and measures</p> <p><b>P3.</b>Ensure adequate water supply during shaping process</p> <p><b>P4.</b> Select gemstone cut according to requirement</p> <p><b>P5.</b> Shape gemstone to selected cut</p>	<p><b><i>Trainee will able to know:</i></b></p> <p><b>K1.</b>Understanding of tools, machine and its operations</p> <p><b>K2.</b>Understand the types of gemstone cutting styles for faceting</p> <p><b>K3.</b>Prepare stone for shaping</p>

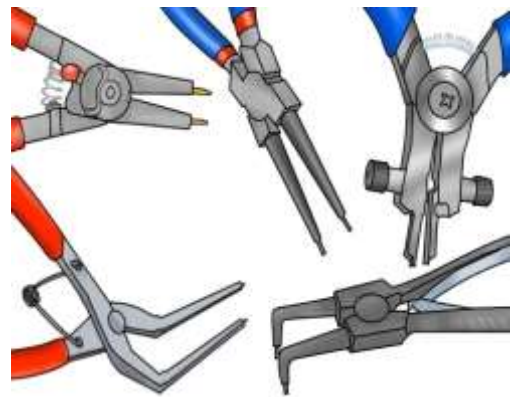
## Critical Evidence(s) Required

The candidate needs to produce following critical evidence(s) in order to be competent in this competency standard:

- To perform trimming and sawing of gemstones
- To perform shaping of gemstones

## Tools and equipment required

- Trim saw machine
- Various types of blades for trimming
- Plier with Diamond coated tips
- Grinder with diamond coated wheels





## Competency Standard C: Prepare gemstone for faceting

### Overview

This competency standard covers the skills and knowledge required to carry out orientations, doping and faceting of gemstone by using various machines and tools.

Competency Units	Performance Criteria	Knowledge & understanding
<b>C1:Gemstone doping</b>	<b><i>Trainee will be able to:</i></b> <b>P1.</b> Arrange doping process material  <b>P2.</b> Select dop stick as per requirement  <b>P3.</b> Fix the stone of dop stick  <b>P4.</b> Perform doping process of stone  <b>P5.</b> Verify doped stone according to requirement	<b>Trainee will able to know:</b> <b>K1.</b> Understand doping material  <b>K2.</b> Understand color, luster, reflection  <b>K3.</b> Type and usage of dop stick  <b>K4.</b> Know the doping procedure
<b>C2:Prepare stone for faceting</b>	<b><i>Trainee will be able to:</i></b> <b>P1.</b> Adopt safety measures  <b>P2.</b> Ensure adequate water supply for faceting  <b>P3.</b> Install master lap as per requirement  <b>P4.</b> Adjust faceting unit and faceter with leveling dop sticks	<b><i>Trainee will able to know:</i></b>  <b>K1.</b> Knowledge about faceting unit and faceter  <b>K2.</b> Know the diamond coated laps and types  <b>K3.</b> Understand adjustment procedure of faceting unit and faceter

**P5.**Fix doped stone in faceter

**K4.** Knowledge about index gars 32, 64, 72, 80, 96, 120 as per requirement of cut

<b>C3:Gemstone orientation</b>	<b><i>Trainee will be able to:</i></b>  <b>P1.</b> Make pre-form of stone for faceting  <b>P2.</b> Perform Orientation	<b><i>Trainee will be able to know:</i></b>  <b>K1.</b> Understand orientation process
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### Critical Evidence(s) Required

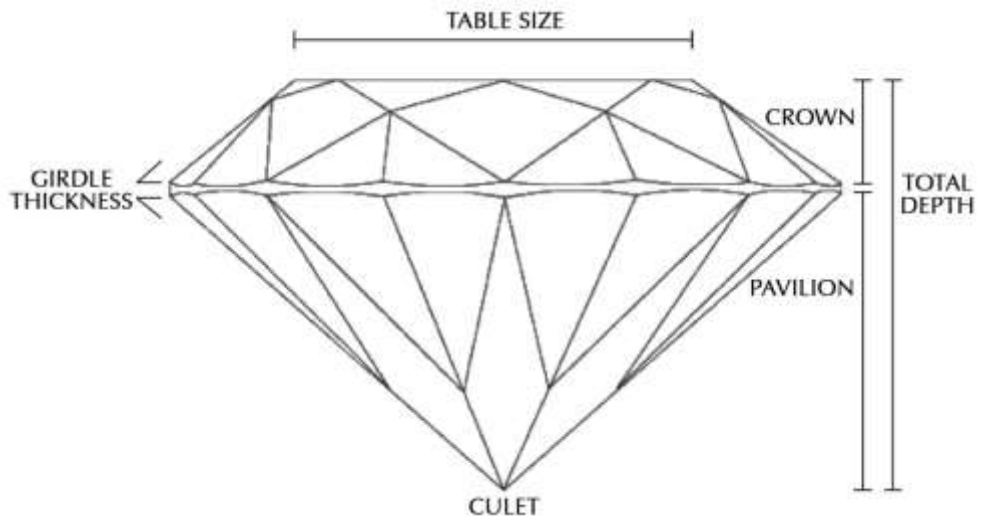
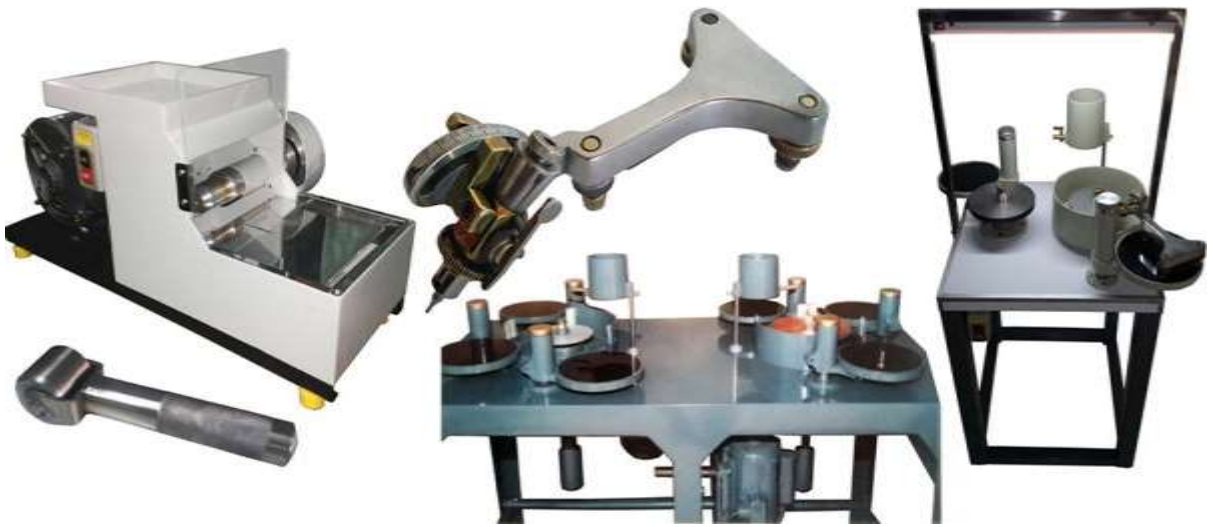
The candidate needs to produce following critical evidence(s) in order to be competent in this competency standard:

- To orient the give gemstone
- To dop the given gemstone.
- Perform faceting on given gemstone

### Tools and equipment required

- Doping unit
- Dopsticks (round, V-Shaped and plate)
- Sprit Lamp and sprit
- Doping wax
- Master lap
- Faceting Unit
- Faceter (J-P-C)
- L-keys

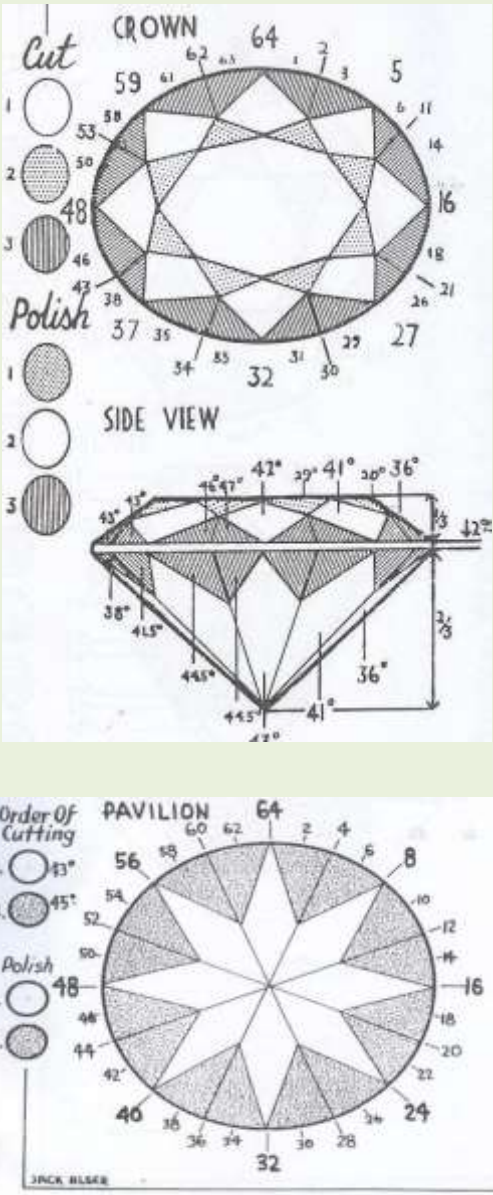




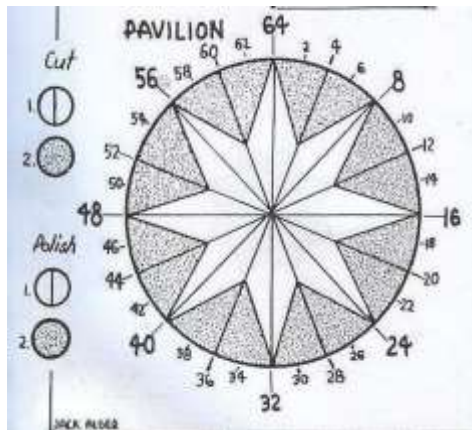
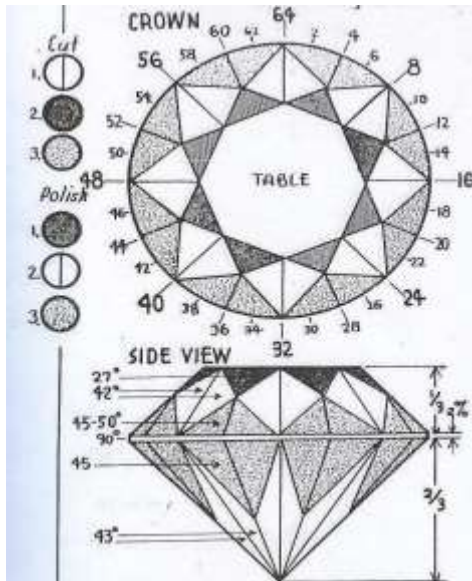
## Competency Standard D: Perform Gemstone Faceting

### Overview

This competency standard covers the skills and knowledge required to carry out orientations, doping and faceting of gemstone by using various machines and tools in different cuts.

Competency Units	Performance Criteria	Knowledge & understanding
<p><b>D1: Perform round cut</b></p> 	<p><b>Trainee will be able to:</b></p> <p><b>P1.</b> Prepare pre-form of stone requirement</p> <p><b>P2.</b> Put main facet Angle 42 indexing 64-32 , 16-48, 8-40, 24-56</p> <p><b>P3.</b> Star facet Angle 27, indexing 4-12-20-28-36-44-52-60,</p> <p><b>P4.</b> Girdle facet angle 44 to 51, (adjustable), indexing 8-2+-2, 16+-2, 24+-2, 32+-2, 40+-2, 48+-2, 56+-2, 64+-2,</p> <p><b>P5.</b> Angle 0, for table indexing 64</p> <p><b>P6.</b> Marking with aluminum 64 index.</p> <p><b>P7.</b> Re-dop pavilion side</p> <p><b>P8.</b> Adjust main facet opposite of crown main facet</p> <p><b>P9.</b> Angle 43, index 64-32 , 16-48, 8-40, 24-56</p> <p><b>P10.</b> Girdle facet angle 44 to 51, (adjustable), indexing 8-2+-2, 16+-2, 24+-2, 32+-2, 40+-2, 48+-2, 56+-2, 64+-2,</p>	<p><b>Trainee will be able to know:</b></p> <p><b>K1.</b> Know the procedure of round cut</p>

**D2: Perform vertical modified main faceting**



**Trainee will be able to:**

- P1.** Put main facet
- P2.** Angle 42 indexing 64-32 , 16-48, 8-40, 24-56
- P3.** Modified vertical angle 42 indexing 8-+1, 16-+1, 24-+1, 32-+1, 40-+1, 48-+1, 56-+1, 64-+1
- P4.** Star facet Angle 27, indexing 4-12-20-28-36-44-52-60,
- P5.** Girdle facet angle 44 to 51, (adjustable), indexing 8-2+-2, 16+-2, 24+-2, 32+-2, 40+-2, 48+-2, 56+-2, 64+-2,
- P6.** Angle 0, for table indexing 64
- P7.** Marking with aluminum 64 index.
- P8.** Re-dop pavilion side

**Trainee will able to know:**

- K1.** Know the procedure of vertical modified main faceting

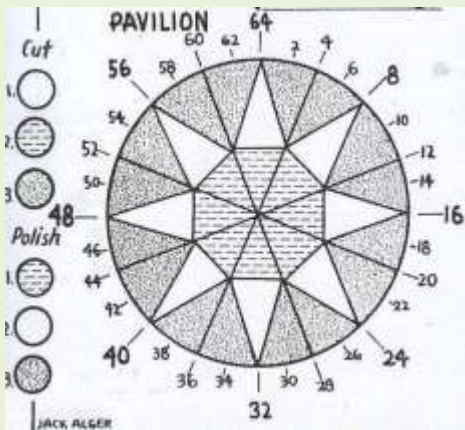
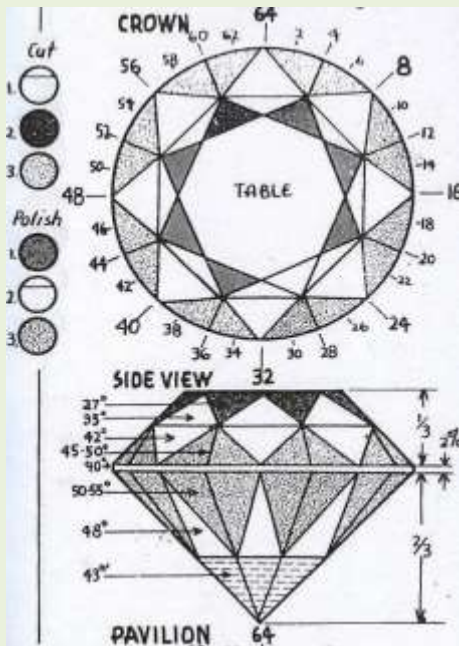
**D3: Perform horizontal modified cut**

**Trainee will be able to:**

- Put main facet
- P1.** Angle 42 indexing 64-32 , 16-48, 8-40, 24-56
- P2.** Modified horizontal angle 35 64-32 , 16-48, 8-40, 24-56
- P3.** Star facet Angle 27, indexing 4-12-20-28-36-44-52-60,
- P4.** Girdle facet angle 44 to 51, (adjustable), indexing 8-

**Trainee will able to know:**

- K1.** Know the horizontal modified cut



2+-2, 16+-2, 24+-2, 32+-2, 40+-2, 48+-2, 56+-2, 64+-2

**P5.**Angle 0, for table indexing 64

**P6.**Marking with aluminum 64 index.

**P7.**Re-dop pavilion side

**P8.**Adjust main facet opposite of crown main facet

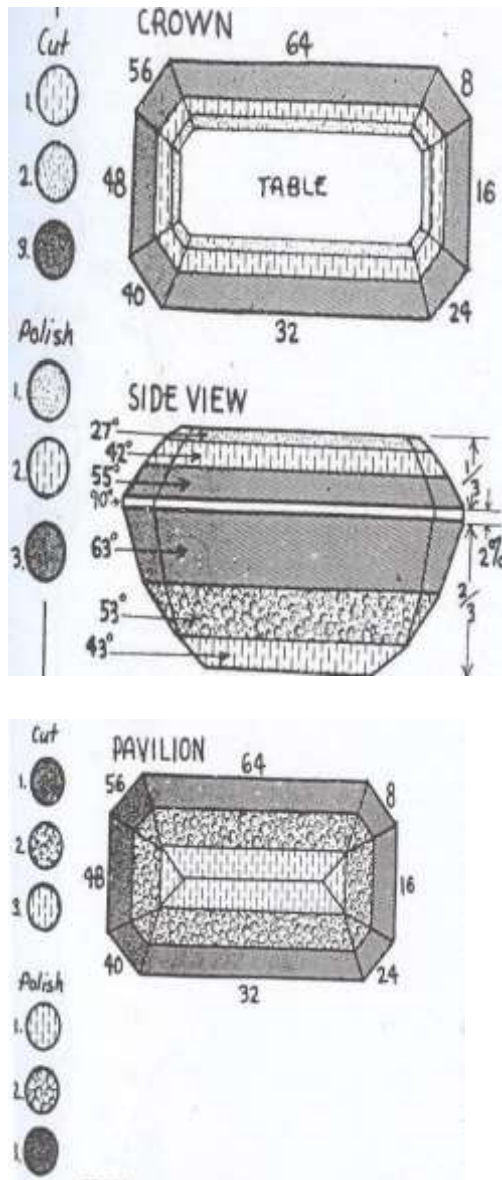
**P9.**Angle 43, index 64-32 , 16-48, 8-40, 24-56

**P10.**Modified horizontal cut

**P11.**Angle 49, index 64-32 , 16-48, 8-40, 24-56

**P12.**Girdle facet angle 51 to 55, (adjustable), indexing 8-2+-2, 16+-2, 24+-2, 32+-2, 40+-2, 48+-2, 56+-2, 64+-2,

**D4: Perform step cut**



**Trainee will be able to:**

**Trainee will be able to know:**

**P1.** Cut girdle first angle 90 indexing 64-32 , 16-48 as per design  
Put main facet

**K1.** Know the procedure of step cut

**P2.** Angle 42 indexing 64-32 , 16-48, 8-40, 24-56

**P3.** Star facet angle 27  
Indexing 64-32 , 16-48, 8-40, 24-56

**P4.** Angle 0  
Indexing 64-32 , 16-48, 8-40, 24-56  
Four facet cut angle 90 indexing 8-40, 24-56

**P5.** Re-dop pavilion side

**P6.** Adjust main facet opposite of crown main facet

**P7.** Angle 63, index 64-32 , 16-48, 8-40, 24-56

**P8.** Angle 53, index 64-32 , 16-48, 8-40, 24-56

**P9.** Angle 43, index 64-32 , 16-48

**D5: Perform French star cut**

**Trainee will be able to:**

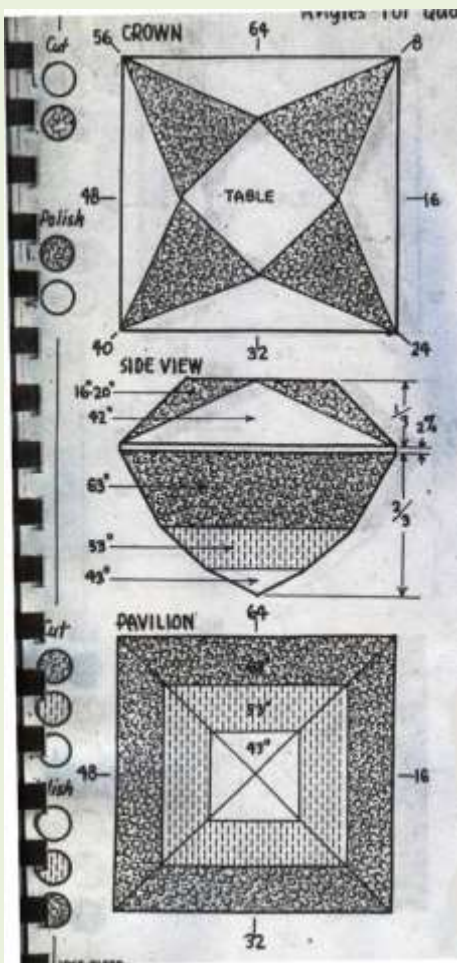
**Trainee will be able to know:**

**P1.** Cut girdle first angle 90 indexing 64-32 , 16-48 as per design  
Put main facet

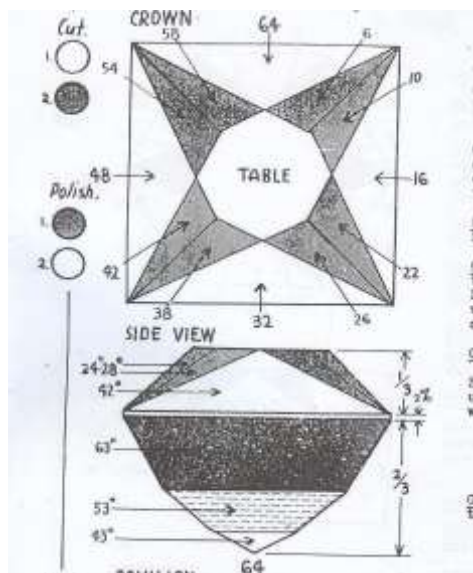
**K1.** Know the procedure of star cut

**P2.** Angle 42 indexing 64-32 , 16-48

**P3.** Star facet angle 16-20 (adjustable)  
Indexing 8-24, 40-56



**D6: Perform double star cut**



**P4.**Angle 0, for table indexing 64  
Re-dop pavilion side

**P5.**Adjust main facet opposite of crown main facet

**P6.**Angle 63 indexing 64-32 , 16-48

**P7.**Angle 53 indexing 64-32 , 16-48

**P8.**Angle 43 indexing 64-32 , 16-48

**Trainee will be able to:**

**Trainee will able to know:**

**P1.**Cut girdle first angle 90 indexing 64-32 , 16-48 as per design

**K1.**Know the procedure of double star cut

**P2.**Angle 42 indexing 64-32 , 16-48

**P3.**Star facet angle 24 to 28, (adjustable), indexing 8-2+-2, 24+-2, 40+-2, 56+-2

**P4.**Angle 0, for table indexing 64

**P5.**Marking with aluminum.

**P6.**Re-dop pavilion side

**P7.**Adjust main facet opposite of crown main

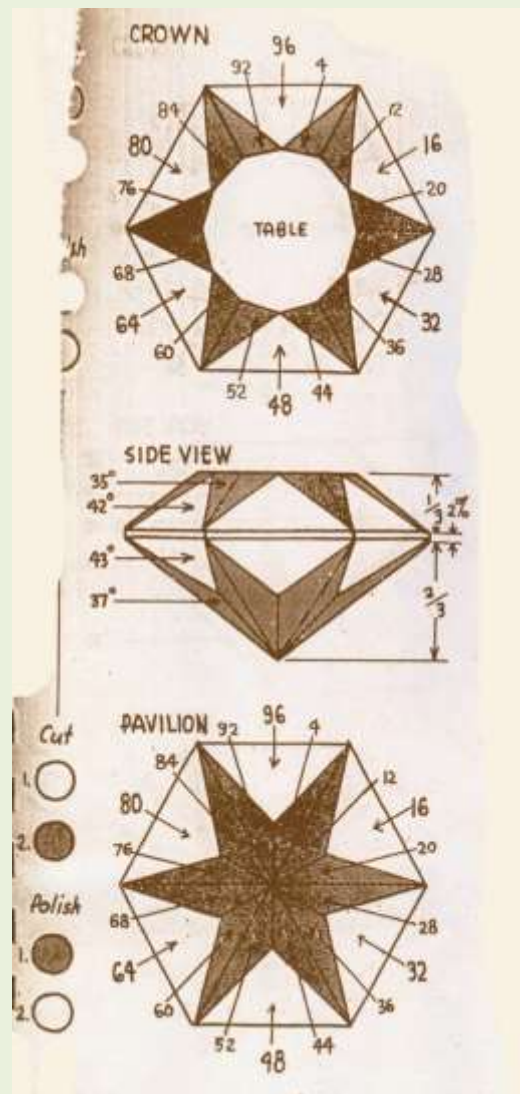


**P8.** Angle 63, index 64-32 ,  
16-48, 8-40, 24-56

**P9.** Angle 53, index 64-32 ,  
16-48, 8-40, 24-56

**P10.** Angle 43, index 64-32 ,  
16-48

**D7: Perform Mitchell six rays star cut(96 index)**



**Trainee will be able to:**

- P1.** Arrange polishing material as per requirement
- P2.** Cut girdle first angle 90 indexing 96-48, 16-64, 32-80 as per design
- P3.** Angle 42 indexing 64-32 , 16-48
- P4.** star facet angle (adjustable)
- P5.** indexing 4-12,20-28, 36-44, 52-64, 68-76, 84-92
- P6.** Angle 0, for table indexing 96  
Marking with aluminum.
- P7.** Re-dop pavilion side
- P8.** Adjust main facet opposite of crown main Angle 37,
- P9.** indexing 4-12,20-28, 36-44, 52-64, 68-76, 84-92

**Trainee will able to know:**

**K1.** Know the procedure of Mitchell six rays star cut(96 index)

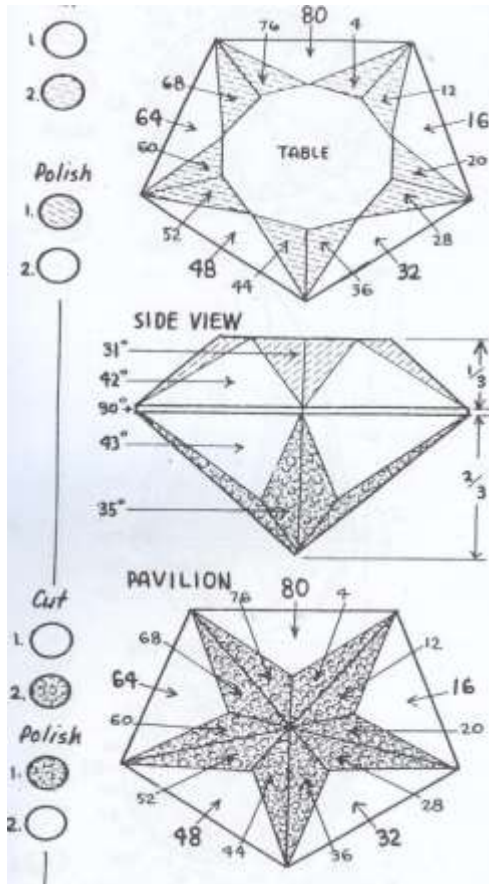
**D8: Perform Mitchell five rays star cut(80 index)**

**Trainee will be able to:**

- P1.** Arrange polishing material as per requirement

**Trainee will able to know:**

**K1.** Know the procedure of Mitchell five



**P2.** Cut girdle first angle 90 rays star indexing 80, 16-64, 32-48 cut(80 index) as per design

**P3.** Ten facet indexing 4-12, 20-28, 36-44, 52-60, 68-76

**P4.** Angle 0, for table indexing 80  
Marking with aluminum.

**P5.** Re-dop pavilion side

**P6.** Adjust main facet opposite of crown main

**P7.** Angle 43-80, 16-64, 32-48  
Ten facet

**P8.** Angle 35 indexing 4-12, 20-28, 36-44, 52-60, 68-76

**D9: Perform Jubilee cut**

**Trainee will be able to:**

**Trainee will able to know:**

**P1.** Arrange polishing material as per requirement

**K1.** Know the procedure of Jubilee cut

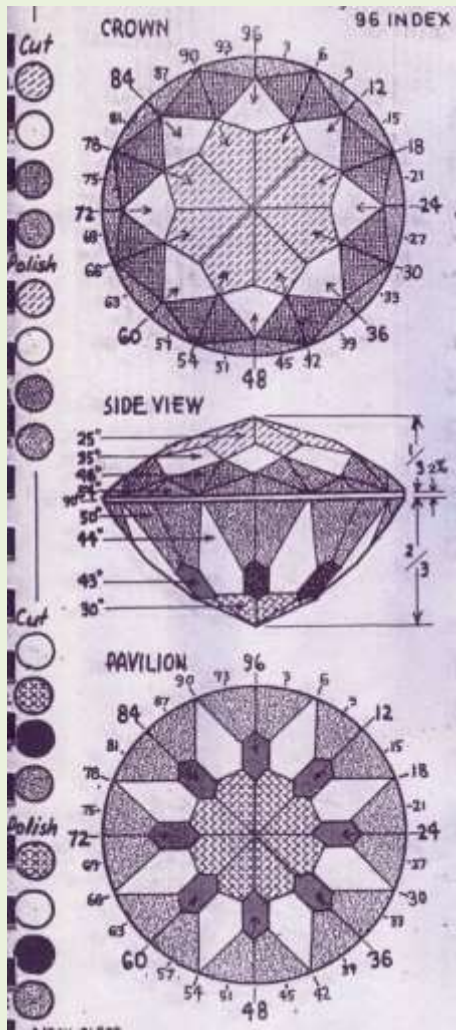
**P2.** Cut girdle first angle 90

**P3.** Angle 22, indexing 64-32, 16-48, 8-40, 24-56

**P4.** angle 32, indexing 4-12, 20-28, 36-44, 52-60

**P5.** Angle 43, Indexing 8-+1, 16-+1, 24-+1, 32-+1, 40-+1, 48-+1, 56-+1, 64-+1

**P6.** Angle 47, Indexing 8-+2, 16-+2, 24-+2, 32-+2, 40-+2, 48-+2, 56-+2, 64-+2



**D10: Perform brilliant bead cut**

**P7.** indexing 96

**P8.** Marking with aluminum.

**P9.** Re-dop pavilion side

**P10.** Adjust main facet opposite of crown main

**P11.** Angle 49, Indexing 64-32 , 16-48, 8-40, 24-56

**P12.** Angle 39, Indexing 64-32 , 16-48, 8-40, 24-56

**P13.** Angle 48, Indexing 4-12 , 20-28, 36-44, 52-60

**P14.** Angle 54 Indexing 8-2+-2, 16+-2, 24+-2, 32+-2, 40+-2, 48+-2, 56+-2, 64+-2,

**Trainee will be able to:**

**P1.** Cut girdle first angle 90

**P2.** Angle 30 and indexing 64-32 , 16-48, 8-40, 24-56, 4-12, 20-28, 36-44, 52-60

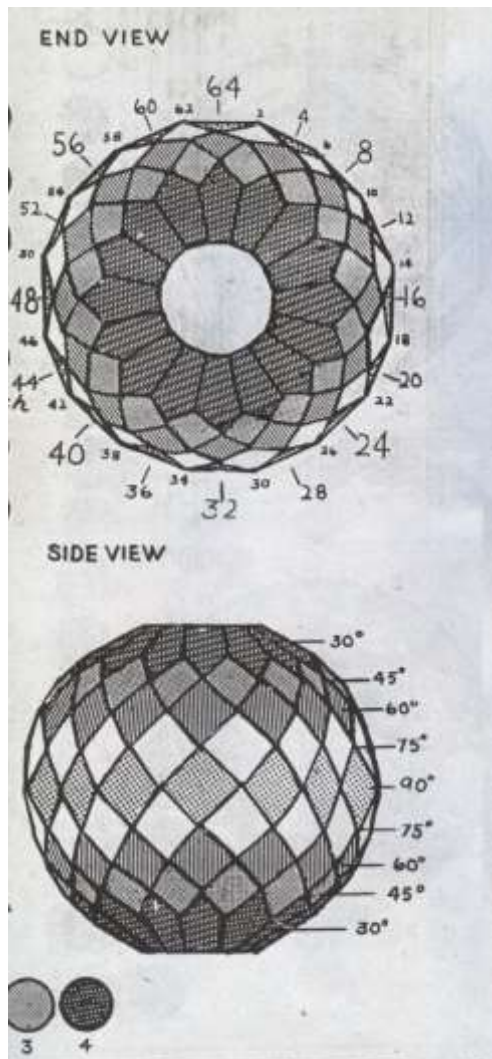
**P3.** Angle 45  
Indexing 8+-2, 16+-2, 24+-2, 32+-2, 40+-2, 48+-2, 56+-2, 64+-2

**P4.** Angle 60 and indexing 64-32 , 16-48, 8-40, 24-56, 4-12, 20-28, 36-44, 52-60

**P5.** Angle 75 and Indexing 8+-2, 16+-2, 24+-2, 32+-2, 40+-2, 48+-2, 56+-2, 64+-2

**Trainee will be able to know:**

**K1.** Know the procedure of brilliant bead cut



**P6.** Angle 90 and indexing 64-32 , 16-48, 8-40, 24-56, 4-12, 20-28, 36-44, 52-60

**P7.** Angle 0, for table indexing 64  
Marking with aluminum.

**P8.** Re-dop pavilion side

**P9.** Adjust main facet opposite of crown main

**P10.** Angle 90 and Indexing 8-+2, 16-+2, 24-+2, 32-+2, 40-+2, 48-+2, 56-+2, 64-+2

**P11.** Angle 75 and indexing 64-32 , 16-48, 8-40, 24-56, 4-12, 20-28, 36-44, 52-60

**P12.** Angle 60 and Indexing 8-+2, 16-+2, 24-+2, 32-+2, 40-+2, 48-+2, 56-+2, 64-+2

**P13.** Angle 45 and indexing 64-32 , 16-48, 8-40, 24-56, 4-12, 20-28, 36-44, 52-60

**P14.** Angle 30 and Indexing 8-+2, 16-+2, 24-+2, 32-+2, 40-+2, 48-+2, 56-+2, 64-+2

**P15.** Angle 0, for table indexing 64

**D11.** Perform double diamond horizontal cut

**Trainee will be able to**

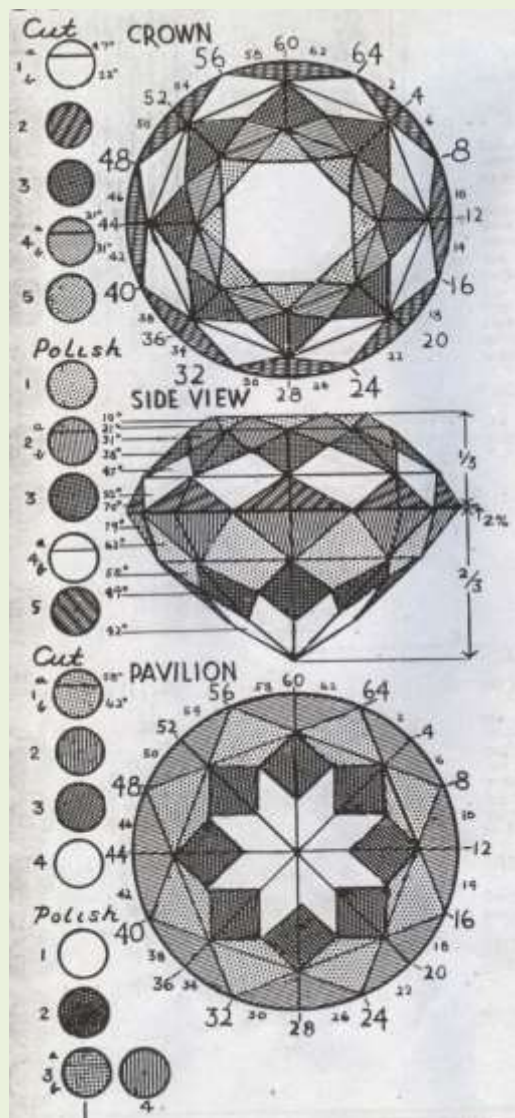
**P1.** Cut girdle first angle 90

**P2.** Angle 52 and indexing 64-32 , 16-48, 8-40, 24-56

**P3.** Angle 70 and Indexing 8-+2, 16-+2, 24-+2, 32-+2, 40-+2, 48-+2, 56-+2, 64-+2

**Trainee will be able to know:**

**K1.** Know the procedure of double diamond horizontal cut



**P4.** Angle 38 and Indexing 8-+2, 16-+2, 24-+2, 32-+2, 40-+2, 48-+2, 56-+2, 64-+2

**P5.** Angle 31 and indexing 64-32 , 16-48, 8-40, 24-56

**P6.** Angle 21 and indexing 64-32 , 16-48, 8-40, 24-56

**P7.** Angle 10 and Indexing 4-12, 20-28, 36-44, 52-60

**P8.** Angle 0, for table indexing 64  
Marking with aluminum.

**P9.** Re-dop pavilion side

**P10.** Adjust main facet opposite of crown main

**P11.** Angle 62 and indexing 64-32 , 16-48, 8-40, 24-56

**P12.** Angle 58 and indexing 64-32 , 16-48, 8-40, 24-56

**P13.** Angle 79 and Indexing 8-+2, 16-+2, 24-+2, 32-+2, 40-+2, 48-+2, 56-+2, 64-+2

**P14.** Angle 49 and Indexing 8-+2, 16-+2, 24-+2, 32-+2, 40-+2, 48-+2, 56-+2, 64-+2

**P15.** Angle 42 and indexing 64-32 , 16-48, 8-40, 24-56

**D12.** Perform Portuguese cut

*Trainee will be able to*

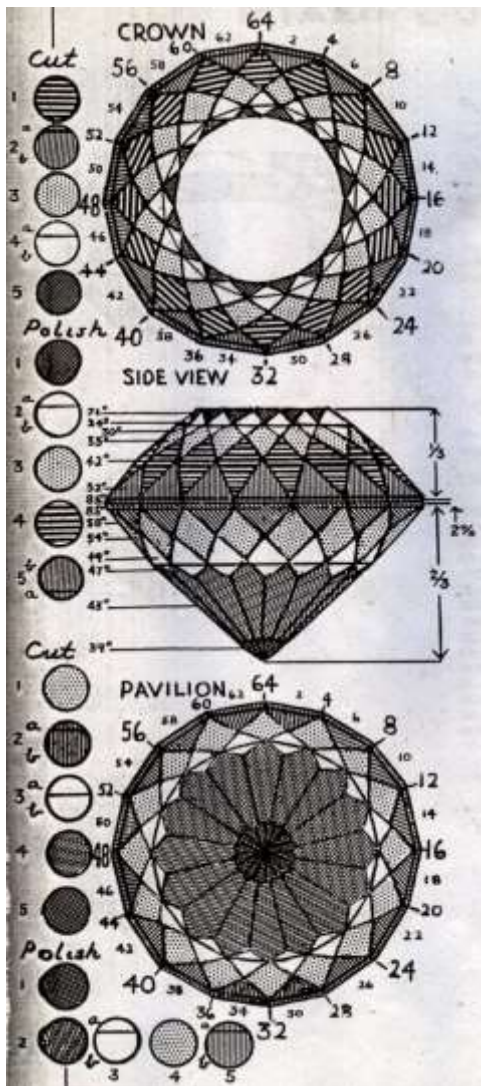
*Trainee will be able to know:*

**P1.** Arrange polishing material as per requirement

**P2.** Cut girdle first angle 90

**P3.** Angle 42 and indexing 64-32 , 16-48, 8-40, 24-56, 4-12, 20-28, 36-44, 52-60

**K1.** Know the procedure of Portuguese cut



**P4.** Angle 52 and Indexing  
8-+2, 16-+2, 24-+2, 32-+2,  
40-+2, 48-+2, 56-+2, 64-+2

**P5.** Angle 85 and Indexing  
8-+2, 16-+2, 24-+2, 32-+2,  
40-+2, 48-+2, 56-+2, 64-+2

**P6.** Angle 35 and Indexing  
8-+2, 16-+2, 24-+2, 32-+2,  
40-+2, 48-+2, 56-+2, 64-+2

**P7.** Angle 30 and indexing  
64-32 , 16-48, 8-40, 24-  
56,4-12, 20-28, 36-44, 52-  
60

**P8.** Angle 24 and indexing  
64-32 , 16-48, 8-40, 24-  
56,4-12, 20-28, 36-44, 52-  
60

**P9.** Angle 21 and Indexing  
8-+2, 16-+2, 24-+2, 32-+2,  
40-+2, 48-+2, 56-+2, 64-+2

**P10.** Angle 0, for table  
indexing 64  
Marking with aluminum.

**P11.** Re-dop pavilion side

**P12.** Adjust main facet  
opposite of crown main

**P13.** Angle 54 and indexing  
64-32 , 16-48, 8-40, 24-  
56,4-12, 20-28, 36-44, 52-  
60

**P14.** Angle 58 and Indexing  
8-+2, 16-+2, 24-+2, 32-+2,  
40-+2, 48-+2, 56-+2, 64-+2

**P15.** Angle 85 and Indexing  
8-+2, 16-+2, 24-+2, 32-+2,  
40-+2, 48-+2, 56-+2, 64-+2

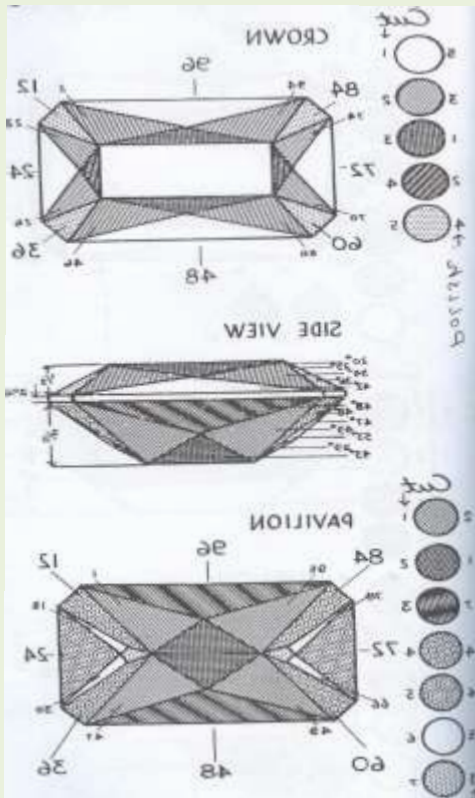
**P16.** Angle 49 and Indexing  
8-+2, 16-+2, 24-+2, 32-+2,  
40-+2, 48-+2, 56-+2, 64-+2

**P17.** Angle 47 and Indexing  
8-+2, 16-+2, 24-+2, 32-+2,  
40-+2, 48-+2, 56-+2, 64-+2

**P18.** Angle 43 and indexing  
64-32 , 16-48, 8-40, 24-  
56, 4-12, 20-28, 36-44, 52-  
60

**P19.** Angle 39 and Indexing  
8-+2, 16-+2, 24-+2, 32-+2,  
40-+2, 48-+2, 56-+2, 64-+2

**D13. Perform scissors cut**



**Trainee will be able to**

- P1.** Arrange polishing material as per requirement
- P2.** Cut girdle first angle 90  
Indexing 96-48, 24-72
- P3.** Angle 42 and Indexing  
96-48, 24-72
- P4.** Angle 34 and Indexing  
96-+2, 48-+2, 24-+2, 72-+2
- P5.** Angle 20 and Indexing  
96-48
- P6.** Angle 23 and Indexing  
24-72
- P7.** Angle 36 and Indexing  
12-36, 60-84
- P8.** Angle 90 and Indexing  
12-36, 60-84
- P9.** Angle 0, for table  
indexing 64  
Marking with aluminum.
- P10.** Re-dop pavilion side
- P11.** Adjust main facet  
opposite of crown main

**Trainee will able to know:**

**K1.** Know the procedure of Scissors cut

**P12.** Angle 45 and Indexing 96-+1, 48-+1

**P13.** Angle 43 and Indexing 96-48

**P14.** Angle 48 and Indexing 12-36, 60-84

**P15.** Angle 47 and Indexing 24-72

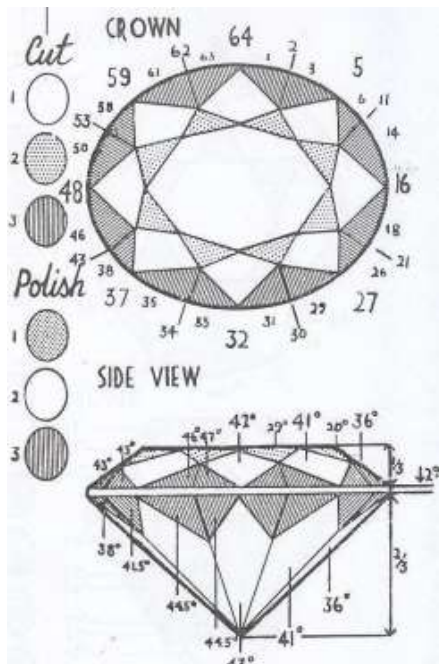
**P16.** Angle 53 and Indexing 18-30, 66-78

**P17.** Angle 29 and Indexing 24-72

**D14. Perform brilliant oval cut**

**Trainee will be able to**

**Trainee will be able to know:**



**P1.** Arrange polishing material as per requirement

**P2.** Shape the stone as per requirement

**P3.** Angle 42  
Indexing 64-32

**P4.** Angle 35 and Indexing 16-48

**P5.** Angle 41 and Indexing 6-26, 38-58 Star facet

**P6.** Angle 27 and Indexing 64-+3, 32-+3 (adjustable)Girdle facet

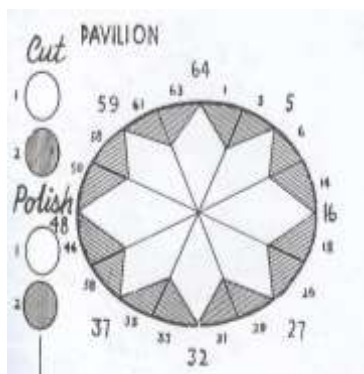
**P7.** Angle 45-52 and Indexing 64 -+2, -+4, 32-+2, -+4,

**P8.** Angle 41-42(adjustable) indexing 16-+2, 48-+2

**P9.** Angle 45 and Indexing 8,24,40,56

**P10.** Angle 0, for table indexing 64  
Marking with aluminum.

**K1.** Know the procedure of brilliant oval cut





**P11.** Re-dop pavilion side

**P12.** Adjust main facet  
opposite of crown main

**P13.** Angle 43 and Indexing  
64-32

**P14.** Angle 37 and Indexing  
16-48

**P15.** Angle 42 and Indexing  
6,26,38,58

**P16.** Girdle facet and 45-52  
(adjustable) Indexing 64-+2,  
-+4 32-+2, -+4,

**P17.** Angle 41-  
42(adjustable)  
Indexing 16-+2, 48-+2

**P18.** Angle 45-  
46(adjustable) Indexing  
8,24,40,56

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## **Critical Evidence(s) Required**

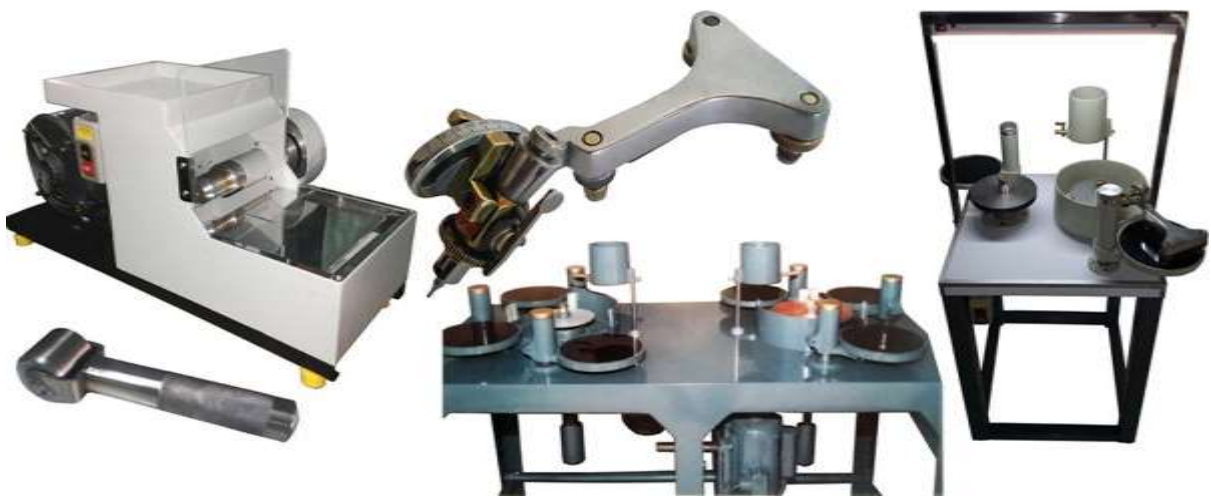
The candidate needs to produce following critical evidence(s) in order to be competent in this competency standard:

- Perform round brilliant cut.
- Perform vertical modified main faceting
- Perform horizontal modified cut
- Perform step cut
- Perform French star cut
- Perform double star cut
- Perform Mitchell six rays star cut(96 index)
- Perform Mitchell five rays star cut(80 index)
- Perform Jubilee cut
- Perform brilliant bead cut
- Perform double diamond horizontal cut
- Perform Portuguese cut
- Perform scissors cut
- Perform brilliant oval cut



## Tools and equipment required

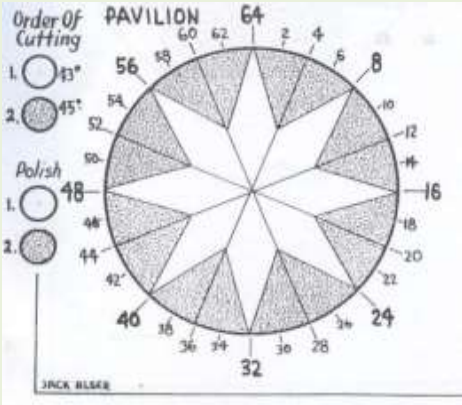
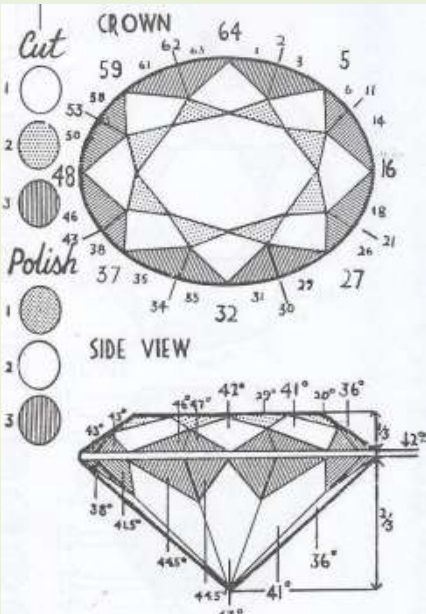
- Faceting unit
- Facetor
- Doped stone fixed in facetor
- Laps (180, 600 and 1000)
- Master lap
- L-Keys
- Table lamp
- Water supply



## Competency Standard E: Perform Gemstone Polishing

### Overview

This competency standard covers the skills and knowledge required to carry out polishing on already faceted gemstones using various tools and machines.

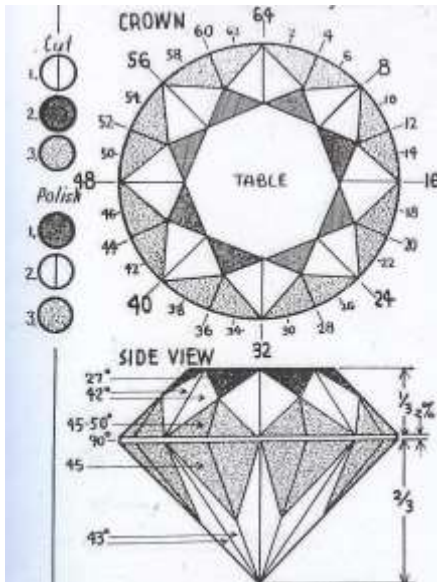
Competency Units	Performance Criteria	Knowledge & understanding
<p><b>D1: Perform polishing for round cut</b></p>  	<p><b>Trainee will be able to:</b></p> <p><b>P1.</b> Arrange polishing material as per requirement</p> <p><b>P2.</b> Polish main facet</p> <p><b>P3.</b> Angle 42 indexing 64-32 , 16-48, 8-40, 24-56</p> <p><b>P4.</b> Star facet Angle 27, indexing 4-12-20-28-36-44-52-60,</p> <p><b>P5.</b> Girdle facet angle 44 to 51, (adjustable), indexing 8-2+-2, 16+-2, 24+-2, 32+-2, 40+-2, 48+-2, 56+-2, 64+-2,</p> <p><b>P6.</b> Angle 0, for table indexing 64</p> <p><b>P7.</b> Marking with aluminum 64 index.</p> <p><b>P8.</b> Re-dop pavilion side</p> <p><b>P9.</b> Adjust main facet opposite of crown main facet</p> <p><b>P10.</b> Angle 43, index 64-32 , 16-48, 8-40, 24-56</p>	<p><b>Trainee will able to know:</b></p> <p><b>K1.</b> Know the procedure of polishing for round cut</p> <p><b>K2.</b> Knowledge about polishing abrasive and combination of different polishing laps (Lead, Tin, Plastic, Copper)</p>

**P11.**Girdle facet angle 44 to 51, (adjustable), indexing 8-2+-2, 16+-2, 24+-2, 32+-2, 40+-2, 48+-2, 56+-2, 64+-2,

**D2:Perform polishing of vertical modified main faceting**

**Trainee will be able to:**  
**P1.** Arrange polishing material as per requirement

**Trainee will able to know:**



**P2.** Polish main facet

**K1.** Know the procedure of polishing for vertical modified main faceting

**P3.** Angle 42 indexing 64-32 , 16-48, 8-40, 24-56

**P4.**Modified vertical angle 42 indexing 8-+1, 16-+1, 24-+1, 32-+1, 40-+1, 48-+1, 56-+1, 64-+1

**P5.**Star facet Angle 27, indexing 4-12-20-28-36-44-52-60,

**P6.**Girdle facet angle 44 to 51, (adjustable), indexing 8-2+-2, 16+-2, 24+-2, 32+-2, 40+-2, 48+-2, 56+-2, 64+-2,

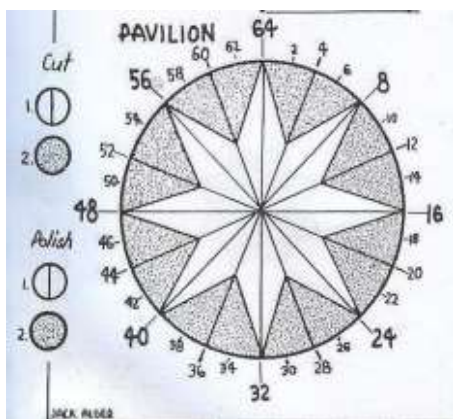
**P7.**Angle 0, for table indexing 64

**P8.**Marking with aluminum 64 index.

**P9.**Re-dop pavilion side

**P10.**Angle 43, index 64-32 , 16-48, 8-40, 24-56

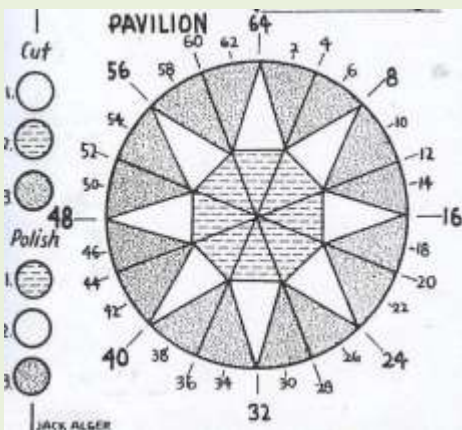
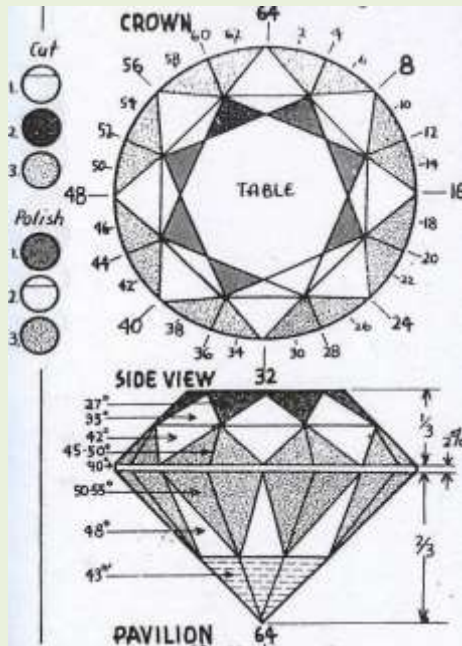
**P11.**Modified main facet in pavilion angle 43 indexing 8-+1, 16-+1, 24-+1, 32-+1, 40-+1, 48-+1, 56-+1, 64-+1



**D3:Perform polishing for horizontal modified cut**

**Trainee will be able to:**

**Trainee will able to know:**



**P1.** Arrange polishing material as per requirement

**P2.** Polish main facet

**P3.** Angle 42 indexing 64-32 , 16-48, 8-40, 24-56

**P4.** Modified horizontal angle 35 64-32 , 16-48, 8-40, 24-56

**P5.** Star facet Angle 27, indexing 4-12-20-28-36-44-52-60,

**P6.** Girdle facet angle 44 to 51, (adjustable), indexing 8-2+-2, 16+-2, 24+-2, 32+-2, 40+-2, 48+-2, 56+-2, 64+-2

**P7.** Angle 0, for table indexing 64

**P8.** Marking with aluminum 64 index.

**P9.** Re-dop pavilion side

**P10.** Adjust main facet opposite of crown main facet

**P11.** Angle 43, index 64-32 , 16-48, 8-40, 24-56

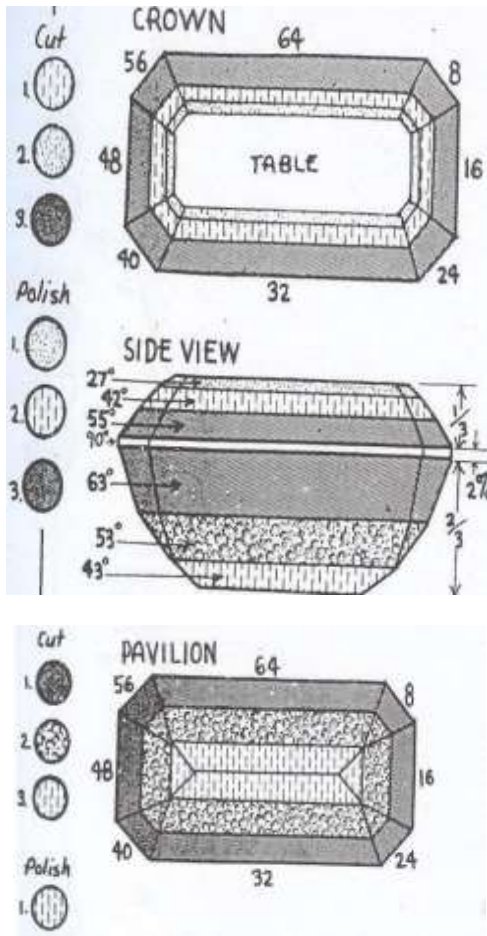
**P12.** Modified horizontal cut

**P13.** Angle 49, index 64-32 , 16-48, 8-40, 24-56

**P14.** Girdle facet angle 51 to 55, (adjustable), indexing 8-2+-2, 16+-2, 24+-2, 32+-2, 40+-2, 48+-2, 56+-2, 64+-2,

**K1.** Know the polishing of horizontal modified cut

**D4: Perform polishing for step**



cut

**Trainee will be able to:**

**P1.** Arrange polishing material as per requirement

**P2.** Polish main facet

**P3.** Angle 42 indexing 64-32 , 16-48, 8-40, 24-56

**P4.** Star facet angle 27  
Indexing 64-32 , 16-48, 8-40, 24-56

**P5.** Angle 0 and Indexing 64,

**P6.** Re-dop pavilion side

**P7.** Adjust main facet opposite of crown main facet

**P8.** Angle 63, index 64-32 , 16-48, 8-40, 24-56

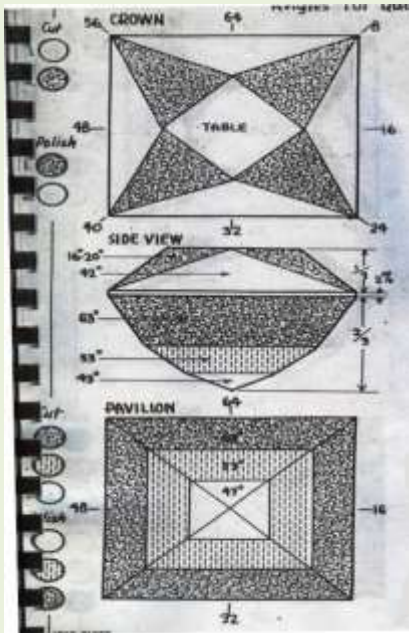
**P9.** Angle 53, index 64-32 , 16-48, 8-40, 24-56

**P10.** Angle 43, index 64-32 , 16-48

**Trainee will be able to know:**

**K1.** Know the procedure of step cut

**D5: Perform polishing for French star cut**



**Trainee will be able to:**

- P1.** Arrange polishing material as per requirement
- P2.** Polish main facet
- P3.** Angle 42 indexing 64-32 , 16-48
- P4.** Star facet angle 16-20(adjustable) Indexing 8-24, 40-56
- P5.** Angle 0, for table indexing 64
- Re-dop pavilion side**
- P6.** Adjust main facet opposite of crown main facet
- P7.** Angle 63 indexing 64-32 , 16-48
- P8.** Angle 53 indexing 64-32 , 16-48
- P9.** Angle 43 indexing 64-32 , 16-48

**Trainee will able to know:**

**K1.** Know the procedure of star cut

**D6: Perform polishing for double star cut**

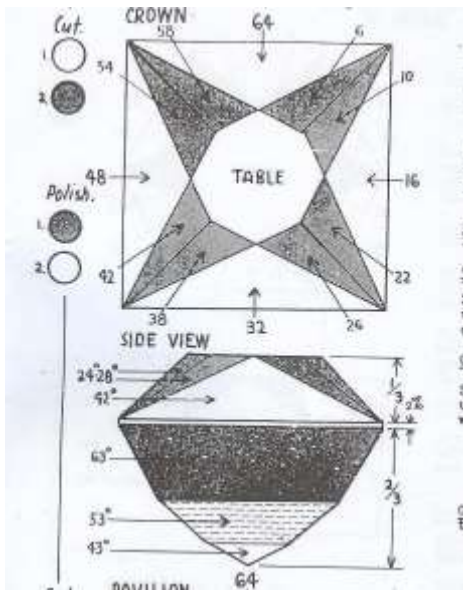
**Trainee will be able to:**

- P1.** Arrange polishing material as per requirement
- P2.** Polish main facet
- P3.** Angle 42 indexing 64-32 , 16-48
- P4.** Star facet angle 24 to 28, (adjustable), indexing 8-2+-2, 24+-2, 40+-2, 56+-2
- P5.** Angle 0, for table indexing 64

**Trainee will able to know:**

**K1.** Know the procedure of double star cut





**P6.** Marking with aluminum.

**P7.** Re-dop pavilion side

**P8.** Adjust main facet opposite of crown main

**P9.** Angle 63, index 64-32 , 16-48, 8-40, 24-56

**P10.** Angle 53, index 64-32 , 16-48, 8-40, 24-56

**P11.** Angle 43, index 64-32 , 16-48

**D7: Perform polishing for Mitchell six rays star cut(96 index)**

***Trainee will be able to:***

**P1.** Arrange polishing material as per requirement

**P2.** Polish main facet

**P3.** Angle 42 indexing 64-32 , 16-48

**P4.** star facet angle 35 (adjustable)

**P5.** indexing 4-12,20-28, 36-44, 52-64, 68-76, 84-92

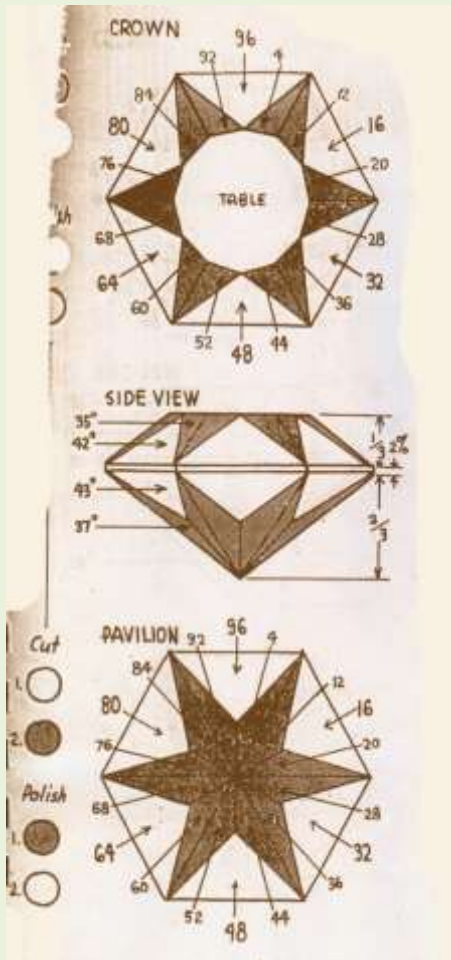
**P6.** Angle 0, for table indexing 96  
Marking with aluminum.

**P7.** Re-dop pavilion side  
**P8.** Adjust main facet opposite of crown main  
Angle 37,

**P9.** indexing 4-12,20-28, 36-44, 52-64, 68-76, 84-92

***Trainee will be able to know:***

**K1.** Know the procedure of polishing for Mitchell six rays star cut(96 index)



**D8: Perform polishing for Mitchell five rays star cut(80 index)**

**Trainee will be able to:**

**P1.** Arrange polishing material as per requirement

**P2.** 5 facets at 42 degree 80, 16,32,48,64

**P3.** Ten facet indexing 4-12, 20-28, 36-44, 52-60, 68-76

**P4.** Angle 0, for table indexing 80  
Marking with aluminum.

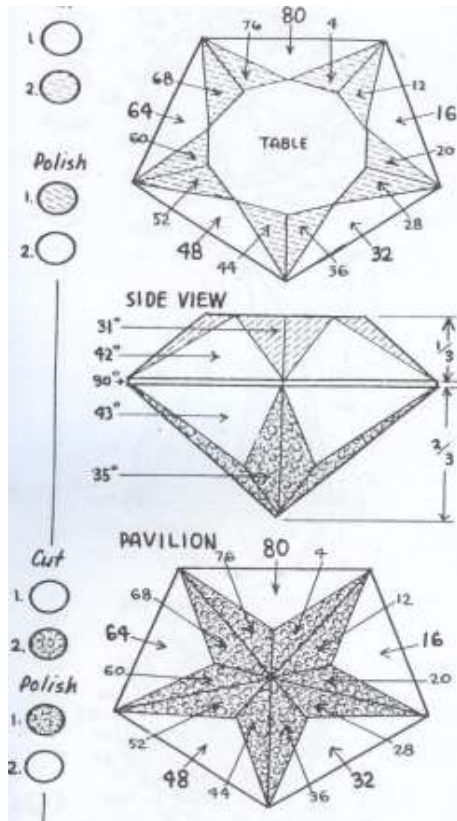
**P5.** Re-dop pavilion side

**P6.** Adjust main facet opposite of crown main

**Trainee will able to know:**

**K1.** Know the procedure of Mitchell five rays star cut(80 index)

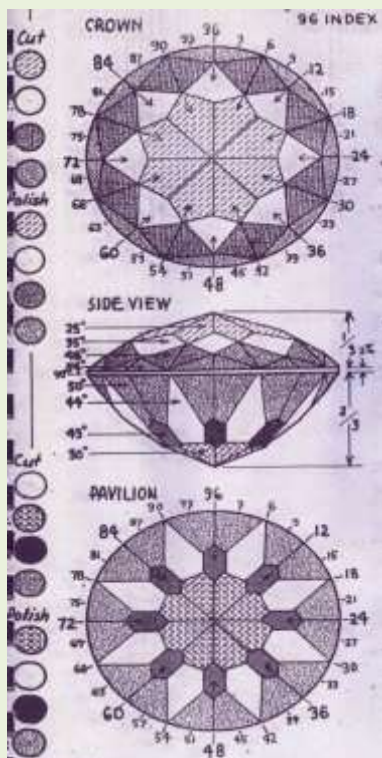
angle 43 Indexing 80,  
16-64, 32-48



**D9: Perform polishing for**

**Trainee will be able to:**

**Trainee will able to know:**



**Jubilee cut**

**P1.** Arrange polishing material as per requirement

**P2.** Angle 22, indexing 64-32 , 16-48, 8-40, 24-56

**P3.** angle 32, indexing 4-12, 20-28, 36-44, 52-60

**P4.** Angle 43, Indexing 8-+1, 16-+1, 24-+1, 32-+1, 40-+1, 48-+1, 56-+1, 64-+1

**P5.** Angle 47, Indexing 8-+2, 16-+2, 24-+2, 32-+2, 40-+2, 48-+2, 56-+2, 64-+2

**P6.** indexing 96

**P7.** Marking with aluminum.

**K1.** Know the procedure of polishing for Jubilee cut

	<p><b>P8.</b> Re-dop pavilion side</p> <p><b>P9.</b> Adjust main facet opposite of crown main</p> <p><b>P10.</b> Angle 49, Indexing 64-32 , 16-48, 8-40, 24-56</p> <p><b>P11.</b> Angle 39, Indexing 64-32 , 16-48, 8-40, 24-56</p> <p><b>P12.</b> Angle 48, Indexing 4-12 , 20-28, 36-44, 52-60</p> <p><b>P13.</b> Angle 54 Indexing 8-2+-2, 16+-2, 24+-2, 32+-2, 40+-2, 48+-2, 56+-2, 64+-2,</p>	
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**D10: Perform polishing for brilliant bead cut**

***Trainee will be able to:***

***Trainee will be able to know:***

**P1.** Polish girdle facet angle 90

**K1.** Know the procedure of polishing for brilliant bead cut

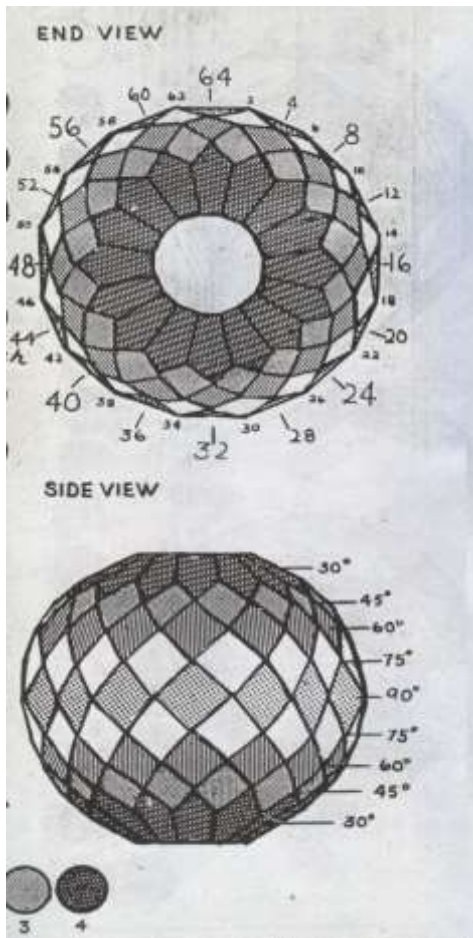
**P2.** Angle 30 and indexing 64-32 , 16-48, 8-40, 24-56, 4-12, 20-28, 36-44, 52-60

**P3.** Angle 45 Indexing 8+-2, 16+-2, 24+-2, 32+-2, 40+-2, 48+-2, 56+-2, 64+-2

**P4.** Angle 60 and indexing 64-32 , 16-48, 8-40, 24-56, 4-12, 20-28, 36-44, 52-60

**P5.** Angle 75 and Indexing 8+-2, 16+-2, 24+-2, 32+-2, 40+-2, 48+-2, 56+-2, 64+-2

**P6.** Angle 0, for table indexing 64



Marking with aluminum.

**P7.** Re-dop pavilion side

**P8.** Adjust main facet opposite of crown main

**P9.** Angle 75 and indexing 64-32 , 16-48, 8-40, 24-56, 4-12, 20-28, 36-44, 52-60

**P10.** Angle 60 and Indexing 8-+2, 16-+2, 24-+2, 32-+2, 40-+2, 48-+2, 56-+2, 64-+2

**P11.** Angle 45 and indexing 64-32 , 16-48, 8-40, 24-56, 4-12, 20-28, 36-44, 52-60

**P12.** Angle 30 and Indexing 8-+2, 16-+2, 24-+2, 32-+2, 40-+2, 48-+2, 56-+2, 64-+2

**P13.** Angle 0, for table indexing 64

**D11.** Perform polishing for double diamond horizontal cut

*Trainee will be able to*

**P1.** Cut girdle first angle 90

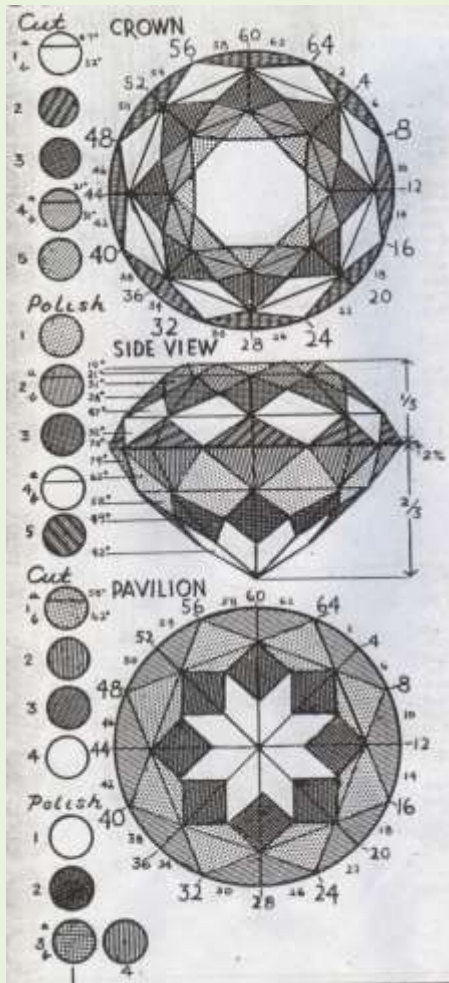
**P2.** Angle 52 and indexing 64-32 , 16-48, 8-40, 24-56

**P3.** Angle 70 and Indexing 8-+2, 16-+2, 24-+2, 32-+2, 40-+2, 48-+2, 56-+2, 64-+2

**P4.** Angle 38 and Indexing 8-+2, 16-+2, 24-+2, 32-+2, 40-+2, 48-+2, 56-+2, 64-+2

*Trainee will able to know:*

**K1.** Know the procedure of polishing for double diamond horizontal cut



**P5.** Angle 31 and indexing 64-32 , 16-48, 8-40, 24-56

**P6.** Angle 21 and indexing 64-32 , 16-48, 8-40, 24-56

**P7.** Angle 10 and Indexing 4-12, 20-28, 36-44, 52-60

**P8.** Angle 0, for table indexing 64  
Marking with aluminum.

**P9.** Re-dop pavilion side

**P10.** Adjust main facet opposite of crown main angle 62 and indexing 64-32 , 16-48, 8-40, 24-56

**P11.** Angle 58 and indexing 64-32 , 16-48, 8-40, 24-56

**P12.** Angle 79 and Indexing 8-+2, 16-+2, 24-+2, 32-+2, 40-+2, 48-+2, 56-+2, 64-+2

**P13.** Angle 49 and Indexing 8-+2, 16-+2, 24-+2, 32-+2, 40-+2, 48-+2, 56-+2, 64-+2

**P14.** Angle 42 and indexing 64-32 , 16-48, 8-40, 24-56

**D12.** Perform polishing for Portuguese cut

**Trainee will be able to**

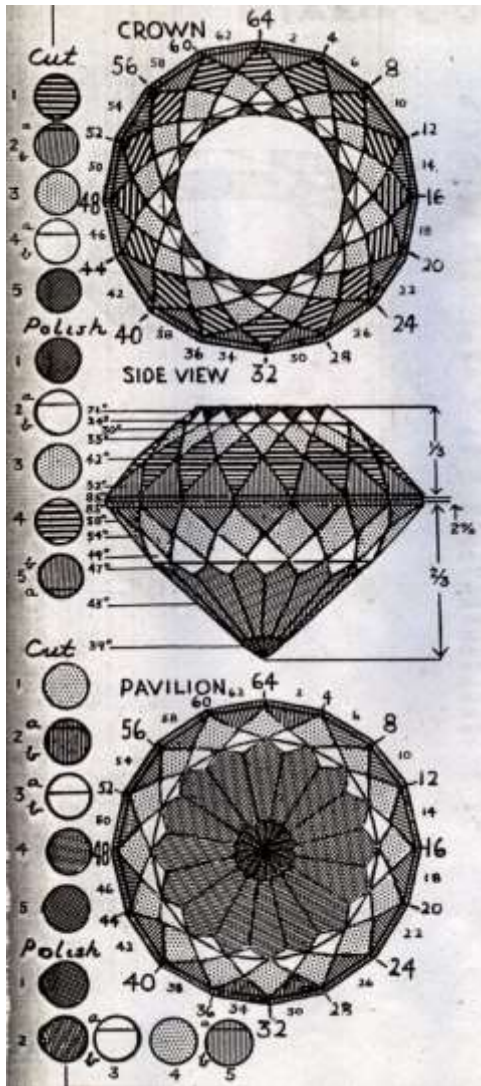
**Trainee will be able to know:**

**P1.** Arrange polishing material as per requirement

**K1.** Know the procedure of polishing for

**P2.** Angle 42 and indexing 64-32 , 16-48,

Portuguese cut



8-40, 24-56, 4-12, 20-28, 36-44, 52-60

**P3.** Angle 52 and Indexing 8-+2, 16-+2, 24-+2, 32-+2, 40-+2, 48-+2, 56-+2, 64-+2

**P4.** Angle 85 and Indexing 8-+2, 16-+2, 24-+2, 32-+2, 40-+2, 48-+2, 56-+2, 64-+2

**P5.** Angle 35 and Indexing 8-+2, 16-+2, 24-+2, 32-+2, 40-+2, 48-+2, 56-+2, 64-+2

**P6.** Angle 30 and indexing 64-32, 16-48, 8-40, 24-56, 4-12, 20-28, 36-44, 52-60

**P7.** Angle 24 and indexing 64-32, 16-48, 8-40, 24-56, 4-12, 20-28, 36-44, 52-60

**P8.** Angle 21 and Indexing 8-+2, 16-+2, 24-+2, 32-+2, 40-+2, 48-+2, 56-+2, 64-+2

**P9.** Angle 0, for table indexing 64  
Marking with aluminum.

**P10.** Re-dop pavilion side

**P11.** Adjust main facet opposite of crown main

**P12.** Angle 54 and indexing 64-32, 16-48, 8-40, 24-56, 4-12, 20-28, 36-44, 52-60

**P13.** Angle 58 and Indexing 8-+2, 16-+2,

24-+2, 32-+2, 40-+2, 48-+2, 56-+2, 64-+2

**P14.** Angle 85 and Indexing 8-+2, 16-+2, 24-+2, 32-+2, 40-+2, 48-+2, 56-+2, 64-+2

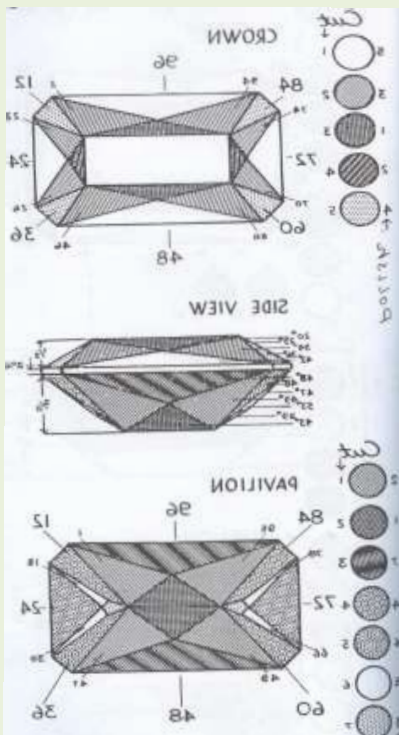
**P15.** Angle 49 and Indexing 8-+2, 16-+2, 24-+2, 32-+2, 40-+2, 48-+2, 56-+2, 64-+2

**P16.** Angle 47 and Indexing 8-+2, 16-+2, 24-+2, 32-+2, 40-+2, 48-+2, 56-+2, 64-+2

**P17.** Angle 43 and indexing 64-32 , 16-48, 8-40, 24-56, 4-12, 20-28, 36-44, 52-60

**P18.** Angle 39 and Indexing 8-+2, 16-+2, 24-+2, 32-+2, 40-+2, 48-+2, 56-+2, 64-+2

**D13. Perform polishing for scissors cut**



**Trainee will be able to**

**P1.** Arrange polishing material as per requirement

**P2.** Angle 42 and Indexing 96-48, 24-72

**P3.** Angle 34 and Indexing 96-+2, 48-+2, 24-+2, 72-+2

**P4.** Angle 20 and Indexing 96-48

**P5.** Angle 23 and Indexing 24-72

**P6.** Angle 36 and Indexing 12-36, 60-84

**Trainee will be able to know:**

**K1.** Know the procedure of Scissors cut



**P7.** Angle 0, for table indexing 64  
Marking with aluminum.

**P8.** Re-dop pavilion side

**P9.** Adjust main facet opposite of crown main

**P10.** Angle 45 and Indexing 96-+1, 48-+1

**P11.** Angle 43 and Indexing 96-48

**P12.** Angle 48 and Indexing 12-36, 60-84

**P13.** Angle 47 and Indexing 24-72

**P14.** Angle 53 and Indexing 18-30, 66-78

**P15.** Angle 29 and Indexing 24-72

**D14. Perform Polishing brilliant oval cut**

**Trainee will be able to**  
**P1.** Arrange polishing material as per requirement

**Trainee will be able to know:**

**P2.** Shape the stone as per requirement

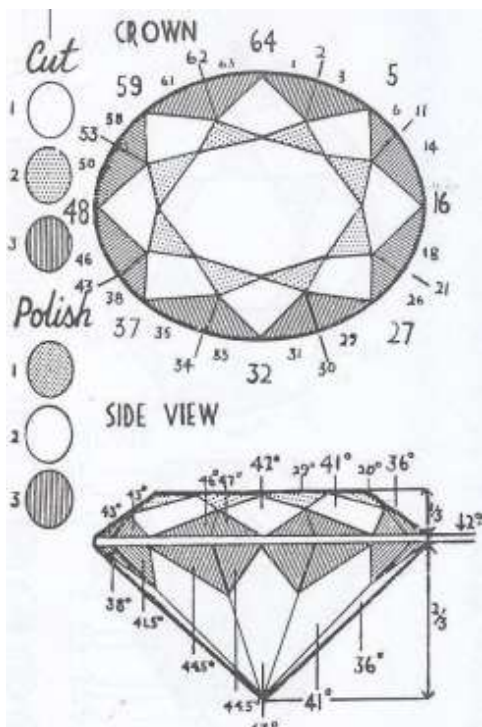
**K1.** Know the procedure of brilliant oval cut

**P3.** Angle 42  
Indexing 64-32

**P4.** Angle 35 and Indexing 16-48

**P5.** Angle 41 and Indexing 6-26, 38-58  
Star facet

**P6.** Angle 27 and Indexing 64-+3, 32-+3  
(adjustable)Girdle facet



**P7.** Angle 45-52 and Indexing 64 --2, --4, 32+2, --4,

**P8.** Angle 41-42(adjustable) indexing 16+2, 48+2

**P9.** Angle 45 and Indexing 8,24,40,56

**P10.** Angle 0, for table indexing 64  
Marking with aluminum.

**P11.** Re-dop pavilion side

**P12.** Adjust main facet opposite of crown main

**P13.** Angle 43 and Indexing 64-32

**P14.** Angle 37 and Indexing 16-48

**P15.** Angle 42 and Indexing 6,26,38,58

**P16.** Girdle facet and 45-52 (adjustable) Indexing 64+2, --4 32+2, --4,

**P17.** Angle 41-42(adjustable) Indexing 16+2, 48+2

**P18.** Angle 45-46(adjustable) Indexing 8,24,40,56

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## **Critical Evidence(s) Required**

The candidate needs to produce following critical evidence(s) in order to be competent in this competency standard:

- Perform polishing on round brilliant cut.

- Perform polishing on vertical modified main faceting
- Perform polishing on horizontal modified cut
- Perform polishing on step cut
- Perform polishing on French star cut
- Perform polishing on double star cut
- Perform polishing on Mitchell six rays star cut(96 index)
- Perform polishing on Mitchell five rays star cut(80 index)
- Perform polishing on Jubilee cut
- Perform polishing on brilliant bead cut

### **Tools and equipment required**

- Faceting unit
- Facetor
- Doped stone fixed in facetor
- Copper lap, Tin lap, lead lap, plastic lap
- Master lap
- L-Keys
- Table lamp
- Water supply
- Dop sticks (Round, V-Shaped and Plate)
- Sprite lamp and sprit
- Doping Wax
- Aluminum pencil for marking
- Diamond powder
- Chrome oxide, cerium oxide, aluminum oxide
- Olive oil

## Occupational health and safety

### Purpose

It is for the safety of persons working in that environment.

### Classification ISCED

0416 Wholesale and retail sales

### Available grade

Competent / Not yet competent

### Modification history

N/A

Unit of Competency	Performance Criteria	Knowledge
<b>I1. Identify and implement safe working practices</b>	You must be able to: P1. Study of facility layout design and operations P2. Implement the health and safety measures	You must know and understand: K1. Knowledge of health and safety precautions

## Communicate in the workplace to support customers and team

### Purpose

This Competency standard identifies the competencies required to communicate in the workplace to support customers and team as per organization's approved guidelines and procedures. You will be expected to communicate face-to-face with customers, use technology to communicate with customers, communicate with customers and colleagues from diverse backgrounds, work in a team, ask appropriate probing / questioning from customers and provide continuous feedback to customers / colleagues. Your underpinning knowledge about basic communication tools and correspondence tactics will be sufficient for you to provide the basics of the work.

### Classification ISCED

### Available grade

Competent / Not yet competent

### Modification history

N/A

Unit of Competency	Performance Criteria	Knowledge
<b>B1. Communicate face-to-face with customers.</b>	<b>You must be able to:</b> P1. Maintain welcoming customer environment that reflects company branding and market position and is in line with the company policy and procedures. P2. Greet customer warmly according to company policy and procedures. P3. Create effective service environment through verbal and non-verbal	<b>You must be able to:</b> K1. Explain different techniques that can be applied when communicate with customer face to face K2. Describe types of customer behavior and dealings K3. Explain different communication skills and techniques K4. Explain the basic key elements of the communication process.

	<p>interaction according to company policy and procedures.</p> <p>P4. Use questioning and active listening to determine customer needs.</p> <p>P5. Use positive and inclusive language.</p> <p>P6. Recognize personal factors impact on customer service delivery</p>	<p>K5. Describe a range of communication methods that can be used to effectively communicate with customers and identify the most appropriate to use in different situations.</p> <p>K6. Explain how 'body language' impacts on the communication process.</p>
<p><b>B2. Use technology to communicate with customers.</b></p>	<p><b>You must be able to:</b></p> <p>P1. Answer telephone according to the company procedures.</p> <p>P2. Questioning and active listening to identify caller and establish and confirm requirements.</p> <p>P3. Use telephone system functions according to instructions.</p> <p>P4. Use email, social networking sites and other technologies to receive and process information and customer requests in line with company policy and procedures.</p> <p>P5. Record and promptly pass on messages or information.</p> <p>P6. Inform customer of any problems and relevant action being taken.</p> <p>P7. Perform follow-up action as necessary.</p>	<p><b>You must be able to:</b></p> <p>K1. Identify the recognized principles of communicating electronically, by telephone and in writing.</p> <p>K2. Describe the different methods of collecting customer feedback on telephone.</p> <p>K3. Explain the importance of collecting customer feedback and how this can be used to improve customer service.</p> <p>K4. Describe how technology can affect and enhance the service delivery process.</p>
<p><b>B3. Communicate with customers and colleagues from diverse backgrounds.</b></p>	<p><b>You must be able to:</b></p> <p>P1. Treat customers and colleagues from diverse backgrounds with respect and sensitivity.</p> <p>P2. Consider cultural differences in verbal and non-verbal communication.</p> <p>P3. Use gestures or simple words to communicate where language barriers exist.</p>	<p><b>You must be able to:</b></p> <p>K1. Identify the barriers to effective communication that can arise and how best to deal with these.</p> <p>K2. Identify and explain when it is necessary to seek advice or assistance from colleagues and when to take own initiative.</p> <p>K3. Describe different types of</p>

	<p>P4. Obtain assistance from colleagues or supervisors when required to facilitate communications.</p>	<p>dealings techniques with different types of behaviors</p>
<p><b>B4. Work in a team.</b></p>	<p><b>You must be able to:</b></p> <p>P1. Display a courteous and helpful manner at all times.</p> <p>P2. Complete allocated tasks willingly, according to set timeframes.</p> <p>P3. Actively seek or provide assistance by approaching other team members when difficulties arise.</p> <p>P4. Identify and use lines of communication with supervisors and peers according to company policy.</p> <p>P5. Encourage, acknowledge and act upon constructive feedback provided by other team members.</p> <p>P6. Use questioning to minimise misunderstandings.</p> <p>P7. Identify signs of potential workplace conflict wherever possible and take action to resolve the situation using open and respectful communication.</p> <p>P8. Participate in team problem solving.</p> <p>P9. Interpret organization's goals and objectives and translate them into individual targets</p> <p>P10. Prepare plan of action to achieve individual as well as team goals</p>	<p><b>You must be able to:</b></p> <p>K1. Define team work.</p> <p>K2. Explain the importance of team work.</p> <p>K3. Define company goals and objectives as well as SOPs of the company</p> <p>K4. Explain different concepts and techniques of problem solving</p> <p>K5. Describe systematic decision making process</p> <p>K6. Describe characteristics of a successful teamwork experience.</p>
<p><b>B5. Ask appropriate probing / questioning from customers</b></p>	<p><b>You must be able to:</b></p> <p>P1. Use different types of questions when appropriate.</p> <p>P2. Allow the other person to answer freely.</p> <p>P3. Collect facts, information and data about the other person's situation.</p>	<p><b>You must be able to:</b></p> <p>K1. Explain:</p> <ul style="list-style-type: none"> <li>• Open-ended questions</li> <li>• Close-ended questions</li> <li>• High gain questions</li> <li>• Mirror questions</li> <li>• Probing questions</li> <li>• Situation questions</li> </ul>

	<p>P4. Focus on the necessary information (information that links directly to product or service)</p>	
<p><b>B6. Provide continuous feed-back</b></p>	<p><b>You must be able to:</b></p> <p>P1. Give and receive feed-back with customers.</p> <p>P2. Apply appropriate body language and read customers body language.</p> <p>P3. Give and receive feed-back with internal departments.</p> <p>P4. Design a communication system / process and share information.</p> <p>P5. Gain commitment from others to work together in the interest of the customers.</p> <p>P6. Conduct meetings.</p> <p>P7. Utilize the feed-back to identify opportunities for product / service improvement.</p>	<p><b>You must be able to:</b></p> <p>K1. Explain how to use customer feed-back to improve your business</p> <p>K2. Define importance of body language.</p> <p>K3. Explain communication ethics.</p> <p>K4. Define organizational Jargon.</p>

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## Work effectively in a customer service/ sales environment

### Purpose

This Competency standard identifies the competencies required Work Effectively in a Customer Service/Sales Environment as per Organization's approved guidelines and procedures. You will be expected to work within organizational requirements, support the work team, maintain personal presentation, develop effective work habits, portray ethical behaviour and acquire up to date product / service knowledge. Your underpinning knowledge about Work Effectively in a Customer Service/Sales Environment will be sufficient for you to provide the basics of the work.

### Classification ISCED

0416 Wholesale and retail sales

### Available grade

Competent / Not yet competent

### Modification history

N/A

Unit of Competency	Performance Criteria	Knowledge
<b>F1. Work within organizational requirements.</b>	<b>You must be able to:</b>  P1. Identify and read organisation's requirements and responsibilities and seek advice from appropriate people where necessary.  P2. Interpret staff rosters and provide sufficient notice of unavailability	<b>You must be able to:</b>  K1. Define industry awards and agreements that relate to personal job role and terms and conditions of employment.  K2. Differentiate between employer and employee responsibilities.  K3. Explain different relevant legislation and statutory requirements.

for rostered hours according to workplace policy and procedures.

- P3. Develop and use a current working knowledge and understanding of employee and employer rights and responsibilities.
- P4. Comply with relevant duty of care and legal responsibilities, and support organisational culture.
- P5. Identify roles and responsibilities of colleagues and immediate supervisors.
- P6. Identify standards and values considered to be detrimental to the organisation and communicate this through appropriate channels.
- P7. Identify, recognise and follow behaviour that contributes to a safe and sustainable work environment.

**F2.Support the work team.**

**You must be able to:**

- P1. Display courteous and helpful behaviour at all times.
- P2. Take opportunities to enhance the level of assistance offered to colleagues and meet all reasonable requests for assistance within acceptable workplace timeframes.
- P3. Complete allocated tasks as required.
- P4. Seek assistance when

**You must be able to:**

- K1. Explain the importance of team work
- K2. Define workplace relations
- K3. Explain workplace policies, plans and procedures, including:
  - Dealing with grievances
  - Discriminatory behavior
  - Equal opportunity issues.
  - Staff rosters and notification of shift
  - Availability or non-attendance

- difficulties arise.
- P5. Use questioning techniques to clarify instructions or responsibilities.
- P6. Identify and display a non-discriminatory attitude in all contacts with customers and other staff members.

- Providing customer service to colleagues and customers.

<p><b>F3. Maintain personal presentation.</b></p>	<p><b>You must be able to:</b></p> <p>P1. Observe appropriate dress code and presentation as required by the workplace, job role and level of customer contact.</p> <p>P2. Follow personal hygiene procedures according to organisational policy and relevant legislation.</p>	<p><b>You must be able to:</b></p> <p>K1. Explain hygiene and personal presentation</p> <p>K2. Explain the importance of workplace ethics</p>
<p><b>F4. Develop effective work habits.</b></p>	<p><b>You must be able to:</b></p> <p>P1. Interpret, confirm and act on workplace information, instructions and procedures relevant to the particular task.</p> <p>P2. Ask questions to seek and clarify workplace information.</p> <p>P3. Plan and organise daily work routine within the scope of the job role.</p> <p>P4. Prioritise and complete tasks according to required timeframes.</p> <p>P5. Identify work and personal priorities and achieve a balance between competing priorities</p>	<p><b>You must be able to:</b></p> <p>K1. Explain staff counseling and disciplinary procedures</p> <p>K2. Describe workplace organizational structure.</p>

<b>F5. Portray ethical behavior</b>	<b>You must be able to:</b> P1. Follow ethical code of conduct. P2. Understand your customer's code of ethics. P3. Declare conflict of interest. P4. Maintain confidentiality. P5. Honour your commitments (timeframe, deliverables etc.) P6. Use internet for business only on company time.	<b>You must be able to:</b> K1. Explain the importance of ethical behavior. K2. Explain the importance of commitment in sales and customer services.
<b>F6. Acquire up to date product / service knowledge</b>	<b>You must be able to:</b> P1. Gather information about your product / services. P2. Identify the components of your product and services. P3. Recognize the essential selling features of your products and services. P4. Translate all essential features of your product and services. P5. Analyze product success. P6. Identify your market position. P7. Familiar with all product promotions, sales manuals and product literature. P8. Keep information of latest technology advances and seek ways to use these technologies in your work.	<b>You must be able to:</b> K1. Explain: <ul style="list-style-type: none"> <li>• Price per product.</li> <li>• Profit per product / service.</li> <li>• Price fluctuation</li> <li>• Product strengths</li> <li>• Product weaknesses.</li> <li>• Warranty / guarantee policies.</li> <li>• Packaging facilities and potential.</li> </ul> K2. Explain how your product/service fits into your customers overall operations, business plan, sales success, operation cost etc.

## Develop professionalism

### Purpose

This Competency standard identifies the competencies required to Develop Professionalism as per Organization's approved guidelines and procedures. You will be expected to create a personal vision / mission, manage your attitude, practice self-discipline, manage time, manage your professional development, and participate in trainings and performance review. Your underpinning knowledge about Develop Professionalism will be sufficient for you to provide the basics of the work.

### Classification ISCED

0416 Wholesale and retail sales

### Available grade

Competent / Not yet competent

### Modification history

N/A

Unit of Competency	Performance Criteria	Knowledge
<b>G1. Create a personal vision / mission</b>	<b>You must be able to:</b> P1. Clarify / prioritize self-values and consider the value of others. P2. Clarify expectations of yourself and expectations others have of you. P3. Identify what you need to do to be successful (personal standards, targets, goals, principals) P4. Set specific short and long term goals. P5. Translate the vision into	<b>You must be able to:</b> K1. Explain long and short term goals. K2. Explain why personal vision and mission is important for success. K3. Describe the advantages of personal vision and mission.

	<p>actionable steps.</p> <p>P6. Integrate the vision into daily practice.</p> <p>P7. Recount frequently with your vision and change accordingly.</p>	
<b>G2. Manage your attitude.</b>	<p><b>You must be able to:</b></p> <p>P1. Challenge yourself, break old habits, and move out of your comfort zone.</p> <p>P2. Practice innovative techniques for out of the box creative thinking.</p> <p>P3. Seek out support and feedback from others on the team, in the organization / community etc.</p> <p>P4. Identify daily, weekly accomplishments.</p> <p>P5. Read inspirational material, audiotapes etc.</p>	<p><b>You must be able to:</b></p> <p>K1. Explain the importance of personal and professional motivation</p> <p>K2. Identify your positive attitude.</p> <p>K3. Explain the advantages of innovative ideas and techniques during job.</p>
<b>G3. Practice self-discipline</b>	<p><b>You must be able to:</b></p> <p>P1. Accountable for your performance.</p> <p>P2. Identify what you need to do to be successful.</p> <p>P3. Communicate your priorities to others.</p> <p>P4. Make and honour appointments with yourself and others.</p> <p>P5. Practice relaxation and energizing techniques.</p>	<p><b>You must be able to:</b></p> <p>K1. Explain the importance of communication.</p> <p>K2. Explain the advantages of self-discipline.</p>
<b>G4. Manage time</b>	<p><b>You must be able to:</b></p> <p>P1. Isolate key success activities and prioritize them.</p> <p>P2. Breakdown large tasks down into manageable action steps (set time frame).</p> <p>P3. Create or adopt action plans and follow it.</p> <p>P4. Set aside appropriate blocks of time for goal-related activities.</p>	<p><b>You must be able to:</b></p> <p>K1. Explain the importance of time management to achieve different tasks.</p>

P5. Make the best possible use of support people / recourses to accomplish tasks.

<p><b>G5.Manage your professional development</b></p>	<p><b>You must be able to:</b></p> <p>P1. Take inventory of your personal interests, abilities, skills, knowledge etc.</p> <p>P2. Identify and prioritize the strengths and gaps.</p> <p>P3. Use available assessment tools.</p> <p>P4. Create a personal growth strategy / career path.</p> <p>P5. Set personal goals and timeframe for achieving them.</p> <p>P6. Learn from your mistakes.</p>	<p><b>You must be able to:</b></p> <p>K1. Explain the importance and need of professional development.</p>
<p><b>G6.Participate in trainings and performance review</b></p>	<p><b>You must be able to:</b></p> <p>P1. Analyse, evaluate and improve performance, and report significant issues/problems to senior management</p> <p>P2. Demonstrate to-do attitude in profession</p> <p>P3. Demonstrate understanding of skills requirements</p> <p>P4. Use the competences acquired in trainings</p>	<p><b>You must be able to:</b></p> <p>K1. Define concept about performance standards.</p> <p>K2. Explain policies, procedures and regulations regarding human resources of the organization.</p> <p>K3. Explain self-planning and management techniques</p> <p>K4. Define goals and strategies of self- development.</p> <p>K5. Explain relevant knowledge about training / job requirements</p>

## Comply with health and safety regulations

### Purpose

This Competency standard identifies the competencies required to comply with health and Safety Regulations as per Organization's approved guidelines and procedures. You will be expected to interpret health and safety regulations, apply basic safety procedures and apply basic emergency procedures. Your underpinning knowledge about comply with health and safety regulations will be sufficient for you to provide the basics of the work.

### Classification ISCED

0416 Wholesale and retail sales

### Available grade

Competent / Not yet competent

### Modification history

N/A

Unit of Competency	Performance Criteria	Knowledge
<b>H1. Interpret health and safety regulations, standards and guidelines of an organization.</b>	<b>You must be able to:</b>  P1. Identify, understand and apply health and safety regulations at workplace  P2. Assess risk of injury and equipment damages in common work situations and report to department concerned for timely response  P3. Participate in quality enhancement of products or services of the	<b>You must be able to:</b>  K1. Explain concepts and principles of health, safety, quality and environment regulations.  K2. Define types of risk of injuring and equipment damages.  K3. Describe types of risk and injury at workplace.  K4. Explain the procedure of dealing with risk and injury situation.



	<p>organization</p> <p>P4. Comply with quality and safety standards effectively</p> <p>P5. Handle toxic and hazardous material and product with caution</p> <p>P6. Assess risk of injuries and accidents and report it to senior management for avoiding serious injuries</p>	<p>K5. Explain health and safety policies and guidelines of the organization.</p> <p>K6. define characteristics and types of toxic and hazardous material or products offered by company and their impact on environment.</p>
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**H2. Apply basic safety procedures.**

**You must be able to:**

- P1. Follow safety procedures to achieve a safe work environment, according to all relevant WHS legislation, including codes of practice relating to particular hazards in the industry or workplace.
- P2. Identify and report unsafe work practices , including faulty plant and equipment according to company policy and procedures
- P3. Manage dangerous goods and substances according to company policy and relevant legislation.
- P4. Identify potential manual handling risks and manage manual handling tasks according to company policy.
- P5. Report work-related incidents and accidents to designated personnel.
- P6. Participate in consultative processes and procedures for WHS.

**You must be able to:**

- K1. Explain appropriate use of personal protective clothing.
- K2. Explain the procedure to eliminating hazards.
- K3. Explain first aid procedures.

**H3. Apply basic emergency procedures.**

**You must be able to:**

- P1. Follow fire and emergency procedures, including evacuation, according to company policy and legislation.
- P2. Identify designated personnel responsible for first aid and evacuation procedures.
- P3. .Accurately identifies safety alarms.

**You must be able to:**

- K1. Define fire, chemical and electrical hazards
- K2. Explain slip, trips and falls
- K3. Explain the procedure of storage of dangerous goods and hazardous substances and waste.
- K4. Define communication and consultation processes.
- K5. Explain manual handling procedures.