Sector: Gems and Jewellery
Sub-Sector: Diamond Processing
Occupation: Assorting
Reference ID: G&J/Q3603, Version 1.0
NSQF Level 4
Skilling is building a better India. If we have to move India towards development then Skill Development should be our mission.

Shri Narendra Modi
Prime Minister of India
Acknowledgements

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Sincerely,

Premkumar Kotnari
Chairman, GJSCI
About this Guide

This Facilitator Guide is designed to enable training for the specific Qualification Pack (QP). Each National Occupational (NOS) is covered across Unit/s. Key Learning Objectives for the specific NOS mark the beginning of the Unit/s for that NOS. The symbols used in this book are described below.

This book is about assorting diamonds. This book will introduce sorters to mining, 4Cs of diamond and its sorting steps.

Symbols Used

- **Steps**
- **Time**
- **Tips**
- **Notes**
- **Objectives**
- **Do**
- **Ask**
- **Explain**
- **Elaborate**
- **Field Visit**
- **Practical**
- **Lab**
- **Demonstrate**
- **Exercise**
- **Team Activity**
- **Facilitation Notes**
- **Learning Outcomes**
- **Say**
- **Resources**
- **Activity**
- **Summary**
- **Role Play**
- **Example**
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1. Introduction, Diamond Formation and Mining

Unit 1.1 – Icebreaker
Unit 1.2 – Introduction to the Gem and Jewellery Sector
Unit 1.3 – Introduction, Diamond Formation, Mining and Sources
Key Learning Outcomes

At the end of this module, students/Facilitator will be able to:

1. Introduce themselves to the trainer
2. Introduce yourself to the students
3. Build rapport with fellow students and the facilitator
4. Establish a positive classroom environment
5. Develop platform for positive facilitator/student relationship
6. Know about achievements of the facilitator or training centre in the gem and jewellery sector
7. List the different types of organizations in the gem and jewellery sector
8. Outline the different types of job roles in the gem and jewellery industry
9. Understand the evolution of the word diamond
10. Understand in detail the formation of diamond
11. Understand the properties of diamond
12. Understand the types of diamond sources
13. Understand the types of rough diamond
14. Understand the types of mining
15. Understand the recovery procedure of diamonds from ore
16. Know the various traditional and current sources of diamonds
17. Know the various mining companies
UNIT 1.1: ICEBREAKER

Unit Objectives

At the end of this unit, students/Facilitator will be able to:

1. Introduce themselves to the trainer
2. Introduce yourself to the students
3. Build rapport with fellow students and the facilitator
4. Establish a positive classroom environment
5. Develop platform for positive facilitator/student relationship
6. Know about achievements of the facilitator or training centre in the gem and jewellery sector

Resources to be Used

- Available objects/ aids such as Pen, Pencil, Eraser, white board, Marker, Notes, Slides, Videos, presentation etc
- Available equipments such as Laptop, Projector etc

Do

- Give the overview of this industries and how you as a trainer and your training centre as an organisation can guide you during the course and after the course, for best suited options of employability and entrepreneurship

Say

- Say welcome to the world of gem and jewellery
- Say Gem & jewellery sector is one of the most respected industries in the world
- Say Gem & jewellery sector is one of the most attractive, glamorous and royal sector in the world

Ask

- Ask the students that how they came to know about your organisation
- Ask the student why they chose gem & jewellery sector
- Ask the student why they chose this particular course
- Ask the student what are their plans in future
Summarize

- Summarize by confirming the students that this is one of the best career option they have chosen and this sector in itself is an ocean of opportunities and growth.

Facilitation Notes

- Involve the students by asking them simple general knowledge questions to link the topic and make it more interactive learning.
- Show them some slides / presentation on the various employability and entrepreneurship options in our country and rest of the world.
UNIT 1.2: Introduction to the Gem and Jewellery Sector

Unit Objectives
At the end of this unit, students/Facilitator will be able to:

1. List the different types of organizations in the gem and jewellery sector
2. Outline the different types of job roles in the gem and jewellery industry

Resources to be Used
- Available objects/ aids such as Pen, Pencil, Eraser, white board, Marker, Notes, Slides, Videos, presentation etc
- Available equipments such as Laptop, Projector etc

Do
- List the different types of organizations in the gem and jewellery sector
- Outline the different types of job roles in the gem and jewellery industry

Say
- Say welcome to the gem and jewellery sector
- Say that we shall be taking a tour of the gem and jewellery sector

Ask
- Ask the students what they know about the gem and jewellery sector
- Ask the student what kind of jobs do they think the gem & jewellery sector has
**Summarize**

- Summarize by confirming the students that this is one of the best career option they have chosen and this sector in itself is an ocean of opportunities and growth

**Facilitation Notes**

- Involve the students by asking them simple general knowledge questions to link the topic and make it more interactive learning.
- Show them some slides / presentation on the various employability and entrepreneurship options in our country and rest of the world
UNIT 1.3: Introduction, Diamond Formation, Mining and Sources

Unit Objectives

At the end of this unit, students/Facilitator will be able to:

1. Understand the evolution of the word diamond
2. Understand in detail the formation of diamond
3. Understand the properties of diamond
4. Understand the types of diamond sources
5. Understand the types of rough diamond
6. Understand the types of mining
7. Understand the recovery procedure of diamonds from ore
8. Know the various traditional and current sources of diamonds
9. Know the various mining companies

Resources to be Used

- Available objects/ aids such as Pen, Pencil, Eraser, white board, Marker, Notes, Slides, Videos, presentation etc
- Available equipments such as Laptop, Projector etc
- The word 'Diamond' and how it is derived from Greek word 'adamas' using the participant manual
- Understand in detail the formation of diamond

Formation of diamonds requires the following:
- High temperature (1500 to 1800°C)
- High pressure (45,000 to 60,000 kilobar)
- Most important, Carbon (99.95%)

Diamonds are formed at high temperature and pressure at depths of 120 to 190 kilometres in the Earth’s mantle. Carbon-containing minerals like eclogite and peridotite provide the carbon source, and the growth occurs over periods from 1 billion to 3.3 billion years (25% to 75% of the age of the Earth). Diamonds are brought close to the Earth’s surface through deep volcanic eruptions by a magma, which cools into rocks known as kimberlites and lamproites. They have form a carrot shaped structure called diamond pipes. Very few rocks in these diamond pipes have diamonds.

Properties of diamond:
- Chemical composition: Carbon
- Hardness: 10 on Mohs scale
- Specific gravity: 3.52
- Refractive index (RI - ratio of speed of light in air to speed of light in gem): 2.417

Following are the types of sources:

1. Primary
   - Once diamonds have been transported to the surface by magma in a volcanic pipe, they may erode out and be distributed over a large area. A volcanic pipe containing diamonds is known as a primary source of diamonds. For example, - dykes and veins.

2. Alluvial source
   - Secondary sources of diamonds include all areas where a significant number of diamonds have been eroded out of their kimberlite or lamproite block, and accumulated because of water or wind action.
   - These include alluvial deposits and deposits along existing and ancient shorelines, where loose diamonds tend to accumulate because of their size and density.
   - Marine source is a type of alluvial source.

Following are the types of diamond rough:
1. Gem quality:
   - These are those roughs which are used in jewellery.
2. Near gem quality:
   - They are those diamonds roughs which have borderline colour and clarity and can be used both in jewellery and industry depending on market conditions.
3. Industrial:
   - They are those roughs which are used for industrial purpose like cutting, polishing purpose.
Following are the types of mining:

1. **Open pit**
   - It is also called as surface mining.
   - The ground is removed in layers to create a pit.
   - Example: Big hole at Kimberley in South Africa. 1 mile in circumference and 440 yards deep.

2. **Shaft**
   - These are Deep or underground mining.
   - These are vertical stopes around the perimeter and pipe with horizontal shafts leading into pipe.

3. **Alluvial**
   - Secondary mining is done in rivers, streams, dry beds and ocean shores.
   - Primitive mining: Done with panning with pie thins and plastic buckets.
   - Mechanized mining: Done with giant earth movers to help shift over burden.
   - Marine mining is done in Namibia.

Recovery means extracting diamonds from ore.

1. **Early methods:**
   - In early days, we used to let blue ground weather into yellow ground, then using water and/or grease table diamonds were recovered.

2. **Modern trend:**
   - Mechanical: Crushes to break up the ore.
   - Water or heavy liquid to wash away gravels to concentrate higher sg materials.

3. **Grease tables:**
   - Taking advantage of diamond’s natural affinity for grease.

4. **Sortex machines:**
   - Sorting diamond using x-ray fluorescence.

India and Brazil are the historical / traditional source
South Africa, Namibia, Zaire, Botswana, Australia, Canada, Russia are the current sources and explain their relevance with respect to facts and importance

Following are the few world-famous diamond mining companies:
- De Beers
- Dominion Diamond Corporation
- Rio Tinto
- Debswana
- Alrosa
Ask

- Ask the students about the temperature at various levels of earth
- Ask the student what diamond is made up of and their average age
- Ask the various ways by which one can get diamonds from the earth
- Ask the students when and where were diamonds found first in the history of the earth
- Ask the students to name some countries known to have diamond deposits
- Ask the students about names of various mining companies

Do

- Explain the earth’s cross-section and diamond formation with traditional and current deposits
- Understand in detail the formation of diamond

Demonstrate

- Using the cross-section image of the earth showing various layers, demonstrate the earth’s mantle to describe the formation of diamonds with movement of carbon in eclogite and peridotite, formation of diamond pipes with the influence of temperature and pressure.
- Demonstrate the volcanic pipe for movement of kimberlite and lamproite
- Using the images in the participant manual demonstrate various countries with diamond deposits and their features.
- With the help of pictures demonstrate the types of sources, mining and recovery methods.
- Make them mark the unique features of every deposit.
Fig. 1.3.1. Types of mining: Alluvial
Summarize
- Summarize the diamond formation with various types of sources and deposits

Facilitation Notes
- Involve the students by asking them simple general knowledge questions to link the topic and make it more interactive learning.
- Show them the world map and ask them to position various countries where diamonds are found.
2. Facets

Unit 2.1 – Facet & Facet Arrangement
Unit 2.2 – Facet Arrangement of Standard Round Brilliant Cut
Key Learning Outcomes

At the end of this module, students will be able to:

1. Know what is a facet
2. Know the various types of cuts
3. Understand the arrangement of standard round brilliant cut
4. Understand the various parts of a diamond
5. Understand the various facet names and their arrangement
UNIT 2.1: Facet & Facet Arrangement

Unit Objectives

At the end of this unit, students/Facilitator will be able to:

1. Know what a facet is
2. Know the various types of cuts

Resources to be Used

- Available objects/aids such as Pen, Pencil, Eraser, white board, Marker, Notes, Slides, Videos, presentation etc
- Available equipments such as Laptop, Projector etc
- Available tools such as Diamond model
Facilitator Guide

Say

- Facet is a flat polished surface

Ask

- Ask the students to find and count the various facets in figure 2.2.2 and 2.2.3 in participant manual

Demonstrate

- Demonstrate kite and triangular shape facets in diamond
- Demonstrate parts of diamonds
Fig. 2.1.1 Parts of standard round brilliant cut diamond
Crown: Top part of the diamond above the girdle

- TABLE: 1
- BEZEL: 8
- STAR: 8
- UPPER GIRDLE: 16

Total: 33 facets

Fig. 2.1.2 Facets arrangement in crown

Pavilion: Lower part of the diamond below the girdle

- LOWER GIRDLE: 16
- PAVILION MAIN: 8
- CULET: 1

Total: 25/24 facets

Fig. 2.1.3 Facets arrangement in pavilion
Elaborate

- What facets are
- The difference between brilliant and step cut

Summarize

- What facets are

Facilitation Notes

- You can ask the students how thick girdle adds to the undesired weight
UNIT 2.2: Facet Arrangement of Standard Round Brilliant Cut

Unit Objectives

At the end of this unit, students/Facilitator will be able to:

1. Understand the arrangement of standard round brilliant cut
2. Understand various parts of diamond
3. Understand the various facet names and their arrangement

Resources to be Used

- Available objects/aids such as Pen, Pencil, Eraser, white board, Marker, Notes, Slides, Videos, presentation etc
- Available equipments such as Laptop, Projector etc
- Available tools such as Diamond model
**Say**

- The sharp point at the centre of the pavilion or bottom of the gem is known as CULET. To avoid abrasion or chipping of the diamond from the culet area, the culet is sometimes polished which in return creates an optional extra facet. Thus this optional facet on the pavilion, when present, changes the pavilion total.
- From 24 to 25 and grand total from 57 to 58 facets.
- Culet should be just large enough to prevent chipping. Very large culet becomes responsible for undesired light leakage from diamond.
- Two diamonds with same crown and same pavilion, the diamond with the thicker girdle has more weight retention. Thicker girdle not only adds undesired weight to the diamonds but also creates condition of undesired light leakage.
- With the help of laser we can inscribe anything on the diamond. The safest being the girdle area we can laser inscribe some quotes on the girdle.
- Few Laboratories offer a service to Laser Inscribe the certificate number on the girdle.

**Ask**

- Ask the students to find and count the various facets in figure 2.2.2 and 2.2.3 in participant manual

**Demonstrate**

- Demonstrate parts of diamonds
- Demonstrate various facets in crown and in pavilion with their standard count
Fig. 2.2.1 Parts of standard round brilliant cut diamond
**Crown: Top part of the diamond above the girdle**

Table:
- Table: 1
- Bezel: 8
- Star: 8
- Upper Girdle: 16

Crown Total: 33

*Fig. 2.2.2 Facets arrangement in crown*

**Pavilion: Lower part of the diamond below the girdle**

- Lower Girdle: 16
- Pavilion Main: 8
- Culet: 1

Pavilion Total: 25/24

Total: 58/57

*Fig. 2.2.3 Facets arrangement in pavilion*
Elaborate

- Elaborate the role of girdle and its role in weight retention and light leakage
- Elaborate the concept of laser inscription and its use

Summarize

- Summarize the arrangement of facets in standard Round Brilliant cut

Facilitation Notes

- You can ask the students how thick girdle adds to the undesired weight
3. Concept of 4Cs

Unit 3.1 – What is 4Cs
Concept of Carat, Clarity, Colour and Cut
Key Learning Outcomes

At the end of this module, students will be able to:

1. Understand the meaning of 4Cs
2. Know the various 4Cs
3. Know and understand the term carat
4. Know and understand the term clarity
5. Know and understand the term colour
6. Know and understand the term cut
UNIT 3.1: What is 4Cs
Concept of Carat, Clarity, Colour and Cut

Unit Objectives

At the end of this unit, students/Facilitator will be able to:

1. Understand the meaning of 4C’s
2. Know the various 4C’s
3. Know and understand the term carat
4. Know and understand the term clarity
5. Know and understand the term colour
6. Know and understand the term cut

Resources to be Used

• Available objects/ aids such as Pen, Pencil, Eraser, white board, Marker, Notes, Slides, Videos, presentation etc
• Available equipments such as Laptop, Projector etc
• Available tools such as Diamond model, prism or similar transparent model
• 4C’s are four value factors that start with alphabet C

CARAT
COLOUR
CLARITY
CUT

4 Cs

• Diamond Valuation is based on some features which are referred to as VALUE FACTORS.
• Diamond professionals value the diamonds using the system of Four Value Factors.

• All these value factors starts from letter ‘C’ namely:
  • CARAT
  • CLARITY
  • COLOUR
  • CUT

• These four factors describe the quality of a finished diamonds, which directly relates to the value of diamonds.

• Carat is a unit of weight which is derived from the carob seed. A diamond's weight is the simplest of its characteristics to measure, and from the earliest times has been used to calculate one aspect of the value of a diamond.
• In earlier days carob seed (Ratti) was used to measure the light weight products. Nature defined all carob seeds with almost constant weight.
• In the metric system of weight, carat weight is defined as the system of weighing major gemstones including diamonds.

• Diamonds are sold by weight, thus are quoted as per carat rate.

• Considering all other value factors as constant, the per carat rate increases faster than the rate at which diamond weight increases.
The surface features/characteristics known as Blemishes and internal features/characteristics known as Inclusions are collectively known as Clarity Characteristics.

Thus, the relative absence of blemishes or inclusions is referred to as Clarity.

Blemishes:
- These are external characteristics found on the surface, which can be removed by re-polishing (except for surface graining). They rarely determine clarity grade.
- These are internal characteristics found in the stone, which determine clarity grade. These can be breaking on the surface or extend into the stone.

Blemishes lower is the per carat rate. Compared to blemishes, inclusions have more impact on the diamond’s value. Blemishes being surface features are easy to remove by re-polishing and can often increase the diamond value.

On the other hand, inclusions can be removed only when they are close to the surface. This causes weight loss.

Thus the loss of weight by re-cutting or re-polishing has to be set off against improved clarity.

No two diamonds have exactly the same clarity characteristics, thus the clarity characteristics helps in identifying individual diamonds.

Diamonds come in many colours naturally. The most common available colours are near colourless with tint of yellow or brown.

Colourless diamonds are also available but they are quite rare and expensive.

Other than colourless and near colourless (with a tint of yellow or brown), diamonds are also available in other colours like green, blue, purple and red also. These are very rare.

Normal colour range:
- Diamonds ranging from colourless to near light yellows and brown fall in normal colour range.
- Colour grading scale was developed by Richard T. Liddicoat way back in 1950s.

He described the colour of diamonds in the normal range from D (colourless) to Z (light yellow or brown), where each letter from D to Z represents a range of colour.

Keeping all other value factors constant, in the normal colour range as we move from colourless diamonds to near colourless diamonds the value or the per carat rate of diamonds falls.

Ranging from colourless to near colourless range, the fall in per carat rate is quite noticeable, whereas the fall in the rate slows down between near colourless and faint colours.

Other than colourless and near colourless (with a tint of yellow or brown), diamonds in nature are also available in other colours like green, blue, purple and red which are beyond the normal colour range.
• These are called as 'Fancies' or Fancy Coloured Diamonds.
  On face up these Fancy coloured diamonds display more colour in yellow and brown than the 'Z' colour or any other hue.

• Out of all the 4C's 'CUT' is the only valuable factor that is totally a human contribution to a diamond's beauty. It not only modifies the stone value but affects the stone beauty. An excellent finish grade is very hard to get & thus it will have higher price. It is normally seen in better quality stones.
• A well cut diamond displays the best performance of light also referred to as optical properties of diamond.
• These optical properties of diamond together scientifically define the beauty of diamonds.

• Optical properties of diamond can be defined by the following four attributes:
  • Dispersion or fire
  • Brilliance or life
  • Scintillation or sparkle
  • Lustre or shine

• Proportions are the various angles and relative measurements of the cut and polished diamond and relationship between them.
• Proportion of the diamond affects the performance of light which in turn affects the overall beauty of the diamond.

• Girdle Diameter
  • To understand the relationship between all the proportions of diamond we consider girdle diameter as 100 or 100%. Thus, all proportions are expressed as percentage of the average girdle diameter.

  Average Girdle Diameter
  • Measuring various diameters of the diamond from several directions and then averaging the smallest and the largest girdle diameter.
  • Avg. Girdle Diameter = \( \frac{\text{Maximum Diameter} + \text{Minimum Diameter}}{2} \)

• Table Size / Table Percentage
  • Table Size / Table Percentage defines how large is the table in relationship to the average girdle diameter of the stone.

• Crown Angle
  • It is the angle formed by the bezel facet to the girdle.
  • Measured in degree.

• Crown Height
  • Expressed in percentage in relation to average girdle diameter of the stone.
  • Crown height is in relation to the crown angle of the diamond.
  • Being part of the crown if table size is constant then it has a direct relationship with crown angle.
  • More the crown angle more the crown height.
Say

- **Girdle Thickness**
  - Expressed in percentage in relation to average girdle diameter of the stone.
  - It is measured at the narrowest section where the upper and the lower girdle facet meet.

- **Pavilion Depth Percentage (or Pavilion Angle)**
  - Measured from the bottom of the girdle plane to the culet expressed in percentage in relation to average girdle diameter of the stone.

- **Total Depth Percentage**
  - Measured from the table to the culet expressed in percentage in relation to average girdle diameter of the stone.
  - It describes the final story of all the proportions.

- **Culet Size**
  - Culet is created by polishing the bottom tip of the pavilion to avoid chipping or abrasions.
  - Culet should be just large enough to prevent chipping.
  - A very large culet becomes responsible for undesired light leakage from diamond.
  - It represents the 58th facet of the round brilliant cut.

- **Dispersion** is the breaking up of white light into its constituent spectral colours. Eye visibility of these colours in the form of VIBGYOR is termed as fire.
  - Dispersion can be judged by naked eye, only few stones show dispersion.
  - It can be seen through side crown facets.
  - Crown Angle is one of the most important proportion of diamond which creates dispersion.
  - Brilliance is the total light coming from within the stone.
  - Diamond is potentially the most brilliant gemstone.
  - Brilliance can also be defined as total amount of white light seen through the crown from internal and external reflections.
  - Brilliance is best observed from table.
  - Can be affected by the cut, pavilion depth and size of the table of the diamond.

- **Pavilion depth affects brilliance / brightness.**
  - Good brilliance depends upon pavilion depth.
  - Look at the illustration below, all three diamonds have the same basic proportions like Girdle diameter, Crown angle, Table size.

- **Lustre** is the surface reflection of light. Or in other words lustre is the Quantity & quality of light reflected off the surface.
  - Diamond lustre is called adamantine (derived from the Greek word 'adamas' meaning unconquerable, diamond lustre is unconquerable).
  - Scintillation is the flash of light seen with the contrast of bright and dark areas due to the movement of the diamond, light source or the observers eye.
  - The external and internal reflection of light causes the contrast of dark and bright areas to create a pattern.
  - Scintillation is created by movement of the diamond, the light source or the observers eye.
  - Scintillation is affected by both size and number of facets.
Ask

- Ask the students if they are aware of 4C's and ask them to name them
- Ask the student what carat is (Is it the concept of weight or size)
- Ask the students if they have heard of carob seeds
- Ask the students what they understand by the clarity and its relevance in diamonds
- Ask the students what is the colour of commonly available diamonds
- Ask the students if they are aware of any other colour of diamonds beyond the normal range

Do

- Explain the derivation of the word carat
- Explain the concept of clarity with blemishes and inclusions
- Explain the concept of colour with colour grading scale
- Explain the concept of cut with various proportions
Fig. 3.1.2 Diamond’s Proportion

Fig. 3.1.3 Diamond’s Proportion in 45 degree tilted view
Elaborate mathematically how carat is derived from kilogram
Elaborate the role of carat weight in carat rate
Elaborate the role of clarity in carat rate
Elaborate the role of colour in carat rate
Elaborate the role of cut in context with dispersion

Fig. 3.1.4 Diamond with a shallow crown angle does not create good dispersion

Fig. 3.1.5 Diamond with the standard crown angle creates good dispersion

Fig. 3.1.6 Diamond with a steep crown angle does not create good dispersion
Fig. 3.1.7 Standard size of side crown facets provides reasonable area for light to fall and disperse.

Fig. 3.1.8 Smaller size of side crown facets provides less area for light to fall and disperse. This also changes the table size.
Elaborate the role of cut in context with Brilliance

**Standard Cut**

*Fig. 3.1.9 Diamond with standard pavilion depth creates good brilliance / brightness*

**Fish Eye**

*Fig. 3.1.10 Diamond with shallow pavilion depth causes light leakage thus no brilliance*

**Nail Head**

*Fig. 3.1.11 Diamond with deep pavilion depth causes light leakage again thus no brilliance*
Elaborate the role of cut in context with Lustre

*Fig. 3.1.12 Surface reflection of light is called as luster*
Elaborate

- Elaborate the role of cut in context with scintillation

*Fig. 3.1.13 Flashes of light seen due to movement*
Summarize complete 4C's and its role in carat rate

Fig. 3.1.14 Considering all other value factors as constant, the per carat rate increases faster than the rate at which diamond weight increases.
Fig. 3.1.15 Considering all other value factors as constant, cleaner the diamond, higher the diamond value

Fig. 3.1.16 Average price movement in normal colour range
Fig. 3.1.17 An ideal cut Diamond

Facilitation Notes

- You can ask the student the colours of fire to explain dispersion

**Breaking up of light into its constituent spectral colours.**

Fig. 3.1.18 Breaking up of the light into its constituent spectral colours

- You can ask the students the meaning of sparkle to explain scintillation
4. Clarity

Unit 4.1 – Clarity and its Concepts
At the end of this module, students will be able to:

1. Know what is clarity
2. Know and understand the various clarity characteristics in detail
3. Understand the role of clarity on carat rate
4. Understand the basics of clarity grading procedure
5. Learn the international grading standards
UNIT 4.1: Clarity and its Concepts

Unit Objectives

At the end of this unit, students/Facilitator will be able to:

1. Understand the concept of clarity
2. Understand the concept of clarity characteristics
3. Understand the concept of Blemishes
4. Understand the concept of Inclusions
5. Understand the concept of clarity Vs carat rate
6. Understand the concept of types of lighting
7. Understand the concept of Clarity Grading
8. Know the clarity grading scale
9. Understand the factors of clarity grading
10. Understand the international standard of clarity grading
11. Understand the use of loupe and tripod and its holding
12. Understand inclusions in detail
13. Understand blemishes in detail
14. Know the concept of plotting and its symbols
15. Understand the various clarity grades
16. Understand clarity as a value factor

Resources to be Used

- Available objects/ aids such as Pen (Blue, Black, Green and Red), Pencil, Eraser, white board, Marker, Notes, Slides, Videos, presentation etc
- Available equipments such as Laptop, Projector etc
- Available tools such as Diamond model
- Available tools such as:
  - Tweezers
  - Scoop
  - 10x eye glass
  - Tripod or Table loupe
  - Cleaning Cloth
  - Day light Lamp
  - Assortment Pads with white sheets
  - Paper Packets for Diamonds
Say

- Blemishes are on the surface and inclusions are inside the diamond.
- There are 11 grades in clarity grading scale
- Analyse the overall impact of characteristics and not individual ones
- Look for grade setters as the most prominent inclusions decide the grade

- Clarity characteristics have an inverse relationship with diamond’s value. Thus, more the inclusions and blemishes, lower is the per carat rate. Compared to blemishes, inclusions have more impact on the diamond’s value. Blemishes being surface features are easy to remove by re-polishing. Re-polishing can often increase the diamond's value.
- On the other hand, inclusions can be removed only when they are close to the surface. This causes weight loss.
- Thus, the loss of weight by re-cutting or re-polishing has to be set off against improved clarity.
- No two diamonds have exactly the same clarity characteristics, thus the clarity characteristics help in identifying individual diamonds.

- To look at diamonds and analyze its clarity grade, light and lighting techniques play a very important role.
- Following are the two types of lighting techniques to view a diamond:

  - Dark-Field
    - Light enters from the side through the pavilion. Best for viewing inclusions. Stone appears white on black background.

  - Reflected Light
    - Good for seeing surface characteristics and finished details. Good for seeing chips, cavities and intended natural at the girdle edge. Good for seeing chips, cavities & intended natural at the girdle edge.

- Clarity grading scale has eleven (11) grades ranging from Flawless, Internally Flawless, VVS1, VVS2, VS1, VS2, SI1, SI2 to included I1, I2, I3.

  - These grades are widely accepted internationally.
  - We are supposed to determine a diamond’s position on FL-I scale (consider size, nature, number, location and colour/ relief).
  - Make sure to analyse the overall impact of characteristics, not individual ones.
  - Most of the diamonds have grade setters that is the most prominent inclusion, try and look for grade setters.
  - Blemishes rarely effect the clarity grade lower than IF.
  - Clarity grade is usually set by most prominent inclusions.

  - Size refers to the size of clarity characteristics in the diamond. Bigger the clarity characteristics more it will effect the clarity grade of the diamond. Bigger the size easier it is to locate the inclusion. At the same time if the inclusion is too large it will effect the durability of diamond also.
  - If a diamond has multiple inclusions of different sizes, then the larger inclusions will be the grade setters and the smaller ones will rarely effect the clarity grade.
- Number refers to the quantity or counts of clarity characteristics in the diamond. More the clarity characteristics, more it will effect the clarity grade of the diamond. Clarity grading is not done by counting the inclusions, but rather how easily one can see the inclusions.

- Location / Position refers to where the clarity characteristic is located in the diamond. The area under the table of the diamond is also referred to as the heart of diamond. It makes a lot of difference that the inclusion is in the center of the diamond (under the table area) or is it under the side crown facets. More the clarity characteristics in the center of the diamond, more it will effect the clarity grade of the diamond.

- Factor termed as position can be easily understood by comparing the same to the human face. If there is any characteristic in the center of the face it will be more prominent rather than the one on the side.

- Sometimes the inclusion is at such a position that it starts reflecting in the other facets. All these facts in the pavilion act as a mirror and start reflecting multiple images of the inclusion. These are known as reflectors.

- Nature refers to the type of clarity characteristics in the diamond. Comparing all the clarity characteristics in the diamond, there are some clarity characteristics which are more prominent than the others. As we shall be learning about these clarity characteristics in detail, clarity characteristics like large feathers and cavities have more impact on the clarity grade of the diamond.

- Colour and relief is as important as size of the clarity characteristics because of the visibility. Whenever the colour of the clarity characteristics will be different or in contrast with the colour of the diamond, it will be more prominent. Hence, it will increase the relief and will be more prominent, thus reducing the clarity grade. In the normal range of diamonds, the coloured inclusions are easy to see, thus, will lower the grade.
**Inclusions**

- **Bearding:** tiny feathers extending in form of a bruited girdle
- **Bruise:** surface crumbling, often accompanied by tiny feathers
- **Cavity:** a large or deep opening
- **Chip:** often a small or shallow opening usually on girdle edge
- **Cloud:** a hazy or milky area made up of number of very small inclusions
- **Feather:** a break due to either cleavage or fracture often white or feathery in appearance
- **Included crystal:** a mineral crystal contained in diamond
- **Dark Included crystal:** a mineral (black or grey) crystal contained in diamond
- **Internal graining:** internal indication of irregular crystal growth
- **Knot:** an included crystal that reaches the surface of the cut stone
- **Laser drill hole:** a tiny tube made by laser, it usually resembles a needle
- **Needle:** a long, thin included crystal which looks like a tiny rod
- **Pinpoint:** a very small inclusion, under 10X, normally seen as a dot
- **Percussion mark:** small feather resulting from blow on the surface
- **Indented natural:** a natural that penetrates the stone

**Blemishes**

- **Abrasions:** tiny nicks along facet junctions
- **Extra facet:** a facet placed without regard to symmetry
- **Natural:** a part of original crystal surface remaining on the polished stone
- **Nick:** a notch near the girdle or facet edge
- **Pit:** a tiny opening
- **Polish lines:** parallel lines left by polishing; fine parallel ridges confined to a single facet
- **Polish marks:** surface clouding caused by excessive heat (also called burn marks or burnt facet)
- **Rough girdle:** a grainy or pitted girdle surface
- **Scratch:** a linear indentation, normally seen as a fine white line
- **Surface graining:** surface indication of structural irregularity, often crosses facet junctions

Flawless diamonds show no blemishes or inclusions of any kind when examined by a skilled and experienced grader under 10X.

The following do not disqualify a stone from flawless category:

- An extra facet on the pavilion which cannot be seen face up.
- Naturals totally confined to the girdle without thickening the girdle and without distorting the girdle outline.
- Internal graining which is not reflective, white or coloured and does not effect the transparency. Inscription that does not penetrate the surface under 10X.

- If a diamond shows no inclusions and only significant blemishes under 10X (blemishes that can be removed by minor re-polishing, like naturals and extra facet).
- Re-polishing though increases an Internally Flawless diamond’s clarity grade to Flawless, but it is rarely done.
Say

- VVS diamonds include minute inclusions that are difficult to locate by even a skilled and experienced grader under 10X. In VVS1, they are extremely difficult to see. Visible only from the pavilion or small or shallow enough to be removed by minor re-polishing. In VVS2 they are very difficult to see. Key word: extremely difficult and minute.

- VS diamonds contain minor inclusions ranging from difficult (VS1) to somewhat easy (VS2) to see by a skilled and experienced grader under 10X. Small-included crystal, small feather & distinct cloud are typical. They don't affect the beauty of the stone.

- SI diamonds contain noticeable inclusions which are easy (SI1) or very easy (SI2) to see by a skilled and experienced grader under 10X. In some SI diamonds inclusions, can be seen with the unaided eye. Naked eye inclusions are more often visible in SI 2 stone.

- I grade diamonds contain inclusions which are obvious to a trained grader under 10X magnification, which can often be seen face up with the unaided eye. It seriously affects the diamonds potential durability or are so numerous that they effect transparency and brilliance. Keyword: obvious, generally visible to naked eye. They can be seen face-up with unaided eye. They are numerous or large to affect transparency and brilliance. They seriously affect the diamonds durability also.
  I 1 Moderate effect on durability or brilliance
  I 2 Severe effect on durability or brilliance
  I 3 Severe effect on durability and brilliance
**Ask**

- Ask the students to revise the concept of clarity as done in Unit 3.3
- Ask the students if they have heard of any clarity grade and to spell them
- Ask the students to name the inclusions and blemishes looking at their pictures
- Ask the students how clarity affects the rate

**Do**

- Explain the concept of clarity grading diamonds by summarizing the clarity characteristics identified in context with their visibility and how to assign the grade.
- Explain the factors of clarity grading in detail taking the help of fig 2.2.4.1 to 2.2.4.5

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**Fig. 4.1.1 Size as a clarity grading factor**

**Fig. 4.1.2 Number as a clarity grading factor**
Fig. 4.1.3 Position of the clarity characteristics as a clarity grading factor

Fig. 4.1.4 Nature of the clarity characteristics as a clarity grading factor

Fig. 4.1.5 Colour/relief of the clarity characteristics as a clarity grading factor
Demonstrate

- The factors of clarity grading
- How to hold and use loupe to magnify diamonds

*Fig. 4.1.6 Triplet 10X loupe 20.5mm Diameter from popular brands*

- Demonstrate how various blemishes and inclusions look like with the help of fig 4.1.7 to 4.1.30.

*Fig. 4.1.7 Bearding / Bearded Girdle*
Fig. 4.1.8 Bearding / Bearded Girdle

Fig. 4.1.9 Cavity
Fig. 4.1.10 chip

Fig. 4.1.11 cloud
Fig. 4.1.12 cloud

Fig. 4.1.13 Feather
Fig. 4.1.14 Feather

Fig. 4.1.15 Feather
Fig. 4.1.16 Feather

Fig. 4.1.17 Included Crystals
Fig. 4.1.18 Included Crystals

Fig. 4.1.19 Dark Included crystals
Fig. 4.1.20 Internal Graining

Fig. 4.1.21 Laser Drill Hole
Fig. 4.1.22 Laser Drill Hole

Fig. 4.1.23 Laser Drill Hole visible from Pavilion
Fig. 4.1.24 Laser Drill Holes

Fig. 4.1.25 Pinpoint
Fig. 4.1.26 Abrasions

Fig. 4.1.27 Extra Facet
Fig. 4.1.28 Natural

Fig. 4.1.29 Natural
Fig. 4.1.30  Scratch
Demonstrate various clarity grades with the help of fig 2.2.4.31 to 2.2.4.41.

**Flawless (FL)**

- No Inclusions or blemishes
- Small Pinpoint not apparent in 10X
- Extra facet on pavilion cannot be seen face up

*Fig. 4.1.31 Flawless (FL)*
Internally Flawless (IF)

Small Nick in Upper Girdle facet

Extra facet on pavilion that can be seen face up

Natural in Crown & Pavilion

Fig. 4.1.32 Internally Flawless (IF)
Very Very Slightly Included (VVS1)

Bearded Girdle

Pinpoint in pavilion small & difficult

Faint Cloud Not Visible Table Up Invisible from Pavilion

Fig. 4.1.33 Very Very Slightly Included 1 (VVS 1)
Very Very Slightly Included (VVS2)

- Group of Pinpoints table Corner, Bruise
- Needle like Inclusion parallel to facet junction
- Fine Internal Twinning

Fig. 4.1.34 Very Very Slightly Included 2 (VVS 2)
Very Slightly Included (VS1)

Fig. 4.1.35 Very Slightly Included 1 (VS 1)
Very Slightly Included (VS2)

Dark Included Crystals

Feather

Included Crystals, Feather

Fig. 4.1.36 Very Slightly Included 2 (VS 2)
Slightly Included (SI1)

Group of Included Crystals, Nick and Natural

Feather

Cavity

Fig. 4.1.37 Slightly Included 1 (SI 1)
Slightly Included (SI2)

Laser Drill Holes, Dark Included Crystals

Feather

Cloud, dark Included Crystals

Fig. 4.1.38 Slightly Included 2 (SI 2)
Included / Pique (I1)/ (P1)

Feather, Large Included Crystals

Feather, Cloud

Laser drill Holes, Dark Included Crystals, Extra facet

Fig. 4.1.39 Included 1 (I 1)
Fig. 4.1.40 Included 2 (I2)
Included / Pique (I3)/ (P3)

Large Feather, Opaque

Numerous Feathers

Dead Stone
Cloud, Included Crystals

Fig. 4.1.41 Included 3 (I3)
Elaborate

- What are inclusions and the various types of inclusions
- What are blemishes and the various types of blemishes
- The factors of clarity grading
- The plotting symbols using coloured pens and plotting guidelines
- The clarity grades of diamond one by one from flawless to I3
- Clarity as a value factor

Clarity Vs Value

Fig. 4.1.42 Clarity vs value
Summarize

- Summarize the procedure of grading
- How to assign the grade by assessing the visibility of identified clarity characteristics
- Clarity grading scale with 11 grade

Activity

- Issue specimens to the students and while demonstrating holding and magnifying diamonds ask them to name the inclusions and blemishes present in them.

Facilitation Notes

- You can ask the students various names of inclusions and highest grade in which they can be commonly found as a grade setter.
5. Carat

Unit 5.1 – Carat and its Concepts
Key Learning Outcomes

At the end of this module, students will be able to:

1. Know what is carat.
2. Know the various terms related to carat.
3. Understand the technique to measure the diamond.
4. Understand in detail the calculations related to carat.
5. Learn the concept of sieves.
6. Know the various gauges and instruments used.
UNIT 5.1: Carat and its Concepts

Unit Objectives

At the end of this unit, students/Facilitator will be able to:

1. Understand the concept of Carat in detail
2. Understand the derivation of carat and other terms
3. Understand the concept of carat as a value factor
4. Understand the concept of measurement
5. Understand the concept of diameter measurement
6. Understand the concept of depth measurement
7. Understand the weight and measurement analysis
8. Understand the concept of measurement vs identification
9. Understand the concept of measurement vs cut
10. Understand the concept of sieves
11. Understand how to use sieves
12. Understand the sieve reference chart
13. Understand various types for gauge

Resources to be Used

- Available objects/ aids such as Pen, Pencil, Eraser, white board, Marker, Notes, Slides, Videos, presentation etc
- Available equipments such as Laptop, Projector etc
- Available tools such as:
  - Tweezers
  - Scoop
  - Cleaning Cloth
  - Day light Lamp
  - Assortment Pads with white sheets
  - Calculator
  - Diamond Sieve
  - Gauge
  - Diamond Weighing Scale.
  - Paper Packets for Diamonds
Carat is the most significant value factor.

Fig. 5.1.1 Considering all other value factors as constant, the rate at which diamond weight increases, the price per carat increases faster than that.
Carat is derived from the word carob

Fig. 5.1.2 Carob seed

- In jewellery, most of the diamonds are under one carat. Thus they are very small and very small diamonds studded in jewellery are commonly called as melee. In Indian market melee generally means diamond weighing more than two points and less than eight points.
  Melee = 0.02 carat to 0.08 carat
- In the international market melee has different meaning for different people. The understanding of melee varies from two points to eighteen points.
  Melee = 0.02 carat to 0.18 carat

- Considering their all measurement and proportions same and variation in the actual weight depicts something unusual. This unusual concern with specimen B and C is probable because they are not Natural Diamonds.
- Considering their girdle diameters same and variation in the actual weight depicts something unusual. This unusual concern with specimen B and C is because of variations in the proportions like girdle thickness or pavilion depth.

- Sieves are plates with holes of different sizes that are in relation with diameter of diamonds/stones. There are two attachable cups and two lids generally supplied with the whole set of sieves. Sieve plates are made up of brass or steel and some manufacturers make professional sieves out of titanium. Titanium sieves are resistant to normal wear and tear and has more number of wholes per sieve. This provides professionals to work fast and accurately.
- Sieves have number starting from 000 to 20, 000 being the smallest hole size sieve and 20 being the biggest hole size sieve.
  Full set of sieves has 42 plates numbered as 000, 00, 0, 1, 1.5, 2, 2.5, 3, 3.5, ........ 18, 18.5, 19,19.5, 20
- Some sieves plates are very important as they define the range of loose diamond lots as per sieve sizes sold in the domestic market.
  - Diamonds which pass from sieve no 20 but do not pass through sieve no 15 are called as plus 15.
  - Diamonds which pass from sieve no 15 but do not pass through sieve no 11 are called as plus 11.
  - Diamonds which pass from sieve no 11 but do not pass through sieve no 6.5 are called as mellee.
  - Diamonds which pass from sieve no 6.5 but do not pass through sieve no 2 are called as stars.
  - Diamonds which pass from sieve no 2 but are bigger than sieve no 000 are called as minus 2.
Ask

- Ask the students to revise the concept of clarity as done in Unit 3.2
- Ask the students various units of weight measurements both metric and non metric
- Ask the students questions like: how many grams are in a kilogram, how many milligrams make a gram

Demonstrate

- Demonstrate the calculation of average girdle diameter
- Demonstrate the sieves and show the students various numbers inscribed on sieves
- Demonstrate how to use sieves
- Demonstrate how to refer to the diamond sieve reference chart

Fig. 5.1.3 Different Diameters of Diamond

Fig. 5.1.4 Depth of Diamond
Elaborate

- The mathematical derivation of the metric carat from kilogram
- Common terms like grain
- Trade terms like mellee, light half and light carat
- With mathematical formula, how to calculate the estimated weight of diamonds by average girdle diameter and depth measurements.
- FTC and world federation of diamond bourses procedure to round off the decimals in weight and its comparison
- The analysis of measurement and weight of diamonds with regards to identification of diamonds and cut analysis of diamond

Fig. 5.1.5 Diamonds with same Diameter but variable proportions
The concept of sieves and how do they work and market related terms for naming the lots.

- You get one range of stones i.e. size between two sieves.
- Stones that come out are smaller than the sieve No. A Stones that remain are bigger than sieve No. B
- Stones that come out are Smaller than sieve B

Fig. 5.1.6 Working with Diamond Sieves set
Summarize

- Summarize by explaining the carat weight of diamonds with respect to diameter in case of ideal cut

Facilitation Notes

- Involve the students to pen down 5 units of measurements used in ancient days and currently
6. Colour

Unit 6.1 – Colour and its Concepts
Key Learning Outcomes

At the end of this module, students will be able to:

1. Know what is colour.
2. Know the colour nomenclature.
3. Understand the role of colour on carat rate.
4. Understand in detail the colour grading procedure and fluorescence.
5. Learn to grade colour practically, complying to the international grading standards.
UNIT 6.1: Colour and its Concepts

**Unit Objectives**

At the end of this unit, students/Facilitator will be able to:

1. Understand the concept of colour
2. Understand the components of colour
3. Understand the causes of colour
4. Understand the concept of trace element
5. Understand the concept of diamond types
6. Understand the colour nomenclature and master stones
7. Understand the colour grading procedure
8. Understand the master eye effect
9. Understand the international standard of colour grading

**Resources to be Used**

- Available objects/ aids such as Pen, Pencil, Eraser, white board, Marker, Notes, Slides, Videos, presentation etc
- Available equipments such as Laptop, Projector etc
- Available tools such as:
  - Tweezers
  - Scoop
  - Shade card
  - 10x eye glass
  - Tripod or Table loupe
  - Cleaning Cloth
  - Day light Lamp
  - Assortment Pads with white sheets
  - Zip lock
  - Plastic bags
  - Paper Packets for Diamonds
The most common available colours are near colourless with a tint of yellow or brown.

This is also known as normal colour range.

Components of colour includes the following three components:
- **HUE**: Hue is the basic sensation of spectral colour; V, I, B, G, Y, O, R.
- **TONES**: Tone refers to lightness to darkness of a hue, very light to very dark.
- **SATURATION**: Saturation means the strength or purity of a hue, dull to vivid.

Colour nomenclature was originally designed to avoid confusion with other grading terms.
- Now is internationally recognized.
- Grading scale is D-Z.
- Fancy yellow (darker than Z).
- Every colour depicts a range of colour.

Master stones are a set of colour comparisons specimens that defines a grade from D to Z in the normal colour range.

Humans have limited colour memory, so they need a colour comparator.
- Master comparator represents a range of colours. In the range, they are the highest end / lightest colour.

Following is the Colour grading procedure:
- Clean the diamond to be graded.
- Grade the diamond for clarity along with plotting, so you can identify the diamond later.
- Check the fluorescence, note as strong, medium, faint or none.
- Use cool white fluorescent light (UV free) in a dark room.
- Use a dull white background.
- For setting up the master stones, arrange them from left to right, lightest to darkest colour.
- Place the master stone on the grading surface so that you can look at their pavilions either parallel to girdle or perpendicular to pavilion facets.
- To colour grade a stone, place the stone in the face down position place and compare the colours from the pavilion.
- Keeping the stone in the face down position, move it as close as possible to the master stone, but do not let them touch.
- Compare the stones by placing them on both sides of the master stones; find the master stone with colour closest to that of the stone and assign a colour grade.
- Check the stone with the plot to be sure that the stone has not be exchanged with the master stone.
Say

- Say Fluorescence is the emission of visible light stimulated by invisible radiation.
- LWUV- Long wave ultra violet is used to check fluorescence. The most common colour is blue and not all diamonds fluoresce (30-50%).
- Record strength and colour.
- Fluorescence sometimes affects diamond in adverse way by making it look milky / oily and sometimes fluorescence is so good that it makes a yellow tint diamond look less coloured.

Ask

- Ask the students to revise the concept of colour as done in Unit 3.4
- Ask the student, normally what is the colour of diamond and what other colours are possible in diamonds

Do

- Explain the colour grading chart and how every colour represents a range of colour
- Explain the colour grading procedure
Demonstrate

- Demonstrate the master stone set

*Fig. 6.1.1 Master stones from E to L*

- Demonstrate the colour grading procedure with master stone set and shade card
- Demonstrate the concept of fluorescence in long wave ultra violet lamp

*Fig. 6.1.2 Different intensity of fluorescence*

*Fig. 6.1.3 Different colours of fluorescence*
Elaborate

- The concept of colour
- The components of colour
- The causes of colour
- Diamond types
- The colour nomenclature

```
| FACE UP  | FACE UP  | FACE UP   | FACE UP   |
| TABLE DOWN | TABLE DOWN | TABLE DOWN | TABLE DOWN |
| NO  | -NO     | -SL TINT  | -OBVIOUS  |
| COLOUR | COLOUR  | COLOUR    | COLOUR    |
| DEF | D to Z | NEAR       | FAINT     |
| LESS | LESS   | COLOURLESS | YELLOW    |
| KLM | LogiM | Faint  | Very  |
| YELLOW YEL | LIGHT YEL | LIGHT | YEL |
| Z+ |  |  |  |
```

*Fig. 6.1.4 Colour grading scale*

- The colour grading procedure
- The colour grading scale: D to Z
- The concept of fluorescence
Summarize

- The colour grades as part of various groups like colourless, near-colourless, faint yellow, very light yellow and light yellow

Activity

- Issue specimens to the students and while demonstrating holding and analysing colour in diamonds on shade card and comparing with the master stones
7. Cut

Unit 7.1 – Cut Grading and its Concepts
Key Learning Outcomes

At the end of this module, students will be able to:

1. Know what is cut
2. Know and understand the various cut grading proportions in detail
3. Understand the role of proportions on cut grade
4. Understand in detail the various proportions and their grading procedures
5. Know and understand the various cut grading proportions in detail
UNIT 7.1: Cut Grading and its Concepts

Unit Objectives

At the end of this unit, students/Facilitator will be able to:

1. Understand the concept of Cut Grading
2. Understand diamond proportions in detail
3. Understand the concept of average girdle diameter and its measurement
4. Understand the concept of total depth and its calculation
5. Understand the concept of table percentage
6. Understand the estimation of table percentage
7. Understand the concept of crown angle
8. Understand the estimation of crown angle
9. Understand the concept of girdle thickness
10. Understand the estimation of girdle thickness
11. Understand the concept of pavilion depth
12. Understand the estimation of pavilion depth
13. Understand the concept of pavilion angle
14. Understand the concept of culet size
15. Understand the concept of crown height
16. Understand the concept of total depth percentage
17. Understand the analysis of cut
18. Understand the concept of symmetry
19. Understand the concept of polish
20. Understand the concept of fancy shapes
21. Understand the grading systems of fancy shapes

Resources to be Used

- Available objects/ aids such as Pen, Pencil, Eraser, white board, Marker, Notes, Slides, Videos, presentation etc
- Available equipments such as Laptop, Projector etc
- Available tools such as:
  - Tweezers
  - Scoop
  - 10x eye glass
  - Tripod or Table loupe
  - Cleaning Cloth
  - Day light Lamp
  - Assortment Pads with white sheets
  - Calculator
  - Gauge
  - Diamond Weighing Scale.
  - Zip lock
  - Plastic bags
  - Paper Packets for Diamonds
Cut is the only 'C' which is a human contribution to the diamonds beauty
An excellent cut grade is normally seen in better quality stones
Marcel Tolkowsky: the father of modern round brilliant cut
It was derived from a two-dimensional mathematical calculation that considered both brilliance and fire of the stone. Marcel Tolkowsky found that if a diamond was cut too deep or shallow then light would escape out from the sides or bottom of the diamond, resulting in a loss of brilliance (white light reflected up through the top of a diamond), fire (coloured light reflected from within a diamond), and sparkle (combination of fire and brilliance).
The modern research owes a debt of gratitude for paving the way of diamond cut.

As we have understood various diamond proportion in section 7.3, all the other measurements are in relation to the average girdle diameter.
The result is achieved by adding the smallest and the largest girdle measurements of a round brilliant cut and dividing the sum by 2.

Total depth percentage is measured as the relative measurement of the total depth to average girdle diameter.
Continuing the same example, let us assume the depth of diamond is 3.91 mm
Diameter of the stone.

Majority of the cutters in the trade make a table between 55% to 65%.

Ratio Method
This is a sight estimation method in which diamond has to viewed face up. The face up position should be such that the culet should be placed right in the center of the table under 10x magnification.
Imagine a horizontal line running from the girdle, through middle of the table edge, to the culet.
The table edge divides the line in two parts.
The outer part has a value of 1 (girdle to table edge)
Compare the inner part of the line to the outer part to estimate how many times the inner part is longer than the outer part.

Adjustments required:
- Add 1-2% if the table is not regular octagon.
- Always center the culet to check ratio on opposite side before setting your estimate.
**Bowing Method**

This is another sight estimation method in which diamond has to be viewed face up. The face up position should be such that one should be able to see stars and table.

Identify the line running from the point of one star, along the straight table edge to the point of another star facet.

Estimate the table percentage according to how the line bows, interpolating as necessary.

Adjustments Required:
- Add 1-2% if the table is not regular octagon.
- Cutters do usually make Bigger or Smaller STAR FACETS, to hide very big or small table. By doing this they give the illusion of having a normal table formed by square polygons.
- Thus, Add 1-6% if the star facets are long: reaching more than half way of girdle.
- Or Subtract 1-6% if the star facets are short; reaching less than half way to the girdle.

**Crown angle** is the angle formed by the bezel facet to the girdle plane. Crown angle is one of the most important proportion responsible for dispersion and fire. Majority of the cutters in the trade make crown angle between 25 degree to 40 degree. Crown angle in relation to the other proportions of the diamond effects the fire of the diamond. (As learnt in module 3.5).

Though cutters make different crown angles, a shallow crown angle can cause durability concern whereas a steep crown angle affects diamond’s appearance.

**Face Up Method**
- Magnification of pavilion mains through table and bezel.
- Estimate the crown angle while viewing the stone face up.
- Look through the crown to compare the pavilion main’s width at table corner to its width at the top point of the bezel.

**Crown height** is in relation to the crown angle of the diamond. Being part of the crown, if table size is constant, it has a direct relationship with crown angle.

**Girdle** is the narrowest section between the crown and pavilion. It provides a setting edge to the diamond to be studded in a piece of jewellery.

**Girdle Thickness**
- It is expressed in percentage in relation to average girdle diameter of the stone.
- It is measured at the narrowest section where the upper and the lower girdle facet meet. Examine the entire circumference of the girdle.
- Record minimum, maximum and overall average girdle thickness.
Pavilion Depth Percentage
Measured from the bottom of the girdle plane to the culet expressed in percentage in relation to average girdle diameter of the stone.
Pavilion depth is the most important proportion which is directly responsible for the brilliance of the diamond.

Measuring Pavilion Depth Percentage
- Look for the reflection of star facets (bow ties), then form a ring around the culet in the pavilion main.
- Use the distance from the culet to the corner of actual table to judge pavilion depth.
- Estimate how far the table reflection extends towards the corner of actual table itself.

Pavilion angle is in relation to the pavilion depth of the diamond. Being part of the pavilion if culet size is constant then it has a direct relationship with pavilion depth.

The culet of all well-made diamonds should be just large enough to prevent abrasions or chipping. If the culet is very large, it will cause light leakage from the bottom and create an unattractive spot in the diamond.

Ask
- Ask the students to revise the concept of clarity as done in Unit 3.5
- Ask the students if they have heard anything about cut grading
- Ask the students about the difference between reflection and refraction
Demonstrate how to use the measuring gauge
Demonstrate how to measure the various diameters of diamond and its depth
Demonstrate how to calculate average girdle diameter
Demonstrate how to calculate total depth percentage
Demonstrate the ratio method for estimating table size percentage
Demonstrate the bowing method for estimating table size percentage
Demonstrate the profile method for estimating crown angle
Demonstrate the face-up method for estimating crown angle
Demonstrate how to calculate crown height
Demonstrate how to measure girdle thickness
Demonstrate the technique of estimating pavilion depth
Demonstrate how to calculate pavilion angle
Demonstrate the technique of estimating culet size
Demonstrate the symmetry and polish concepts
Demonstrate how to calculate crown height

Steps

Estimate all the proportion of diamonds
Analyse the cut grade based on the above and estimated the cut grade
Elaborate

- How to calculate total depth percentage and its analysis

*Fig. 7.1.1 Diamond millimeter gauge*

- The ratio method for estimating table size percentage

*Fig. 7.1.2 Understanding the ratio method*
Fig. 7.1.3 understanding the ratio method chart

- **Ratio 1:1**
  - table 54%

- **Ratio 1:1\(^{1/4}\)**
  - table 60%

- **Ratio 1:1\(^{1/3}\)**
  - table 63%

- **Ratio 1:1\(^{1/2}\)**
  - table 65%

- **Ratio 1:2**
  - table 72%
Elaborate

- The bowing method for estimating table size percentage

![Diagram of concave, straight, and convex edges]

60+6

**concave edges**

**straight edges**

**Convex edges**

*Fig. 7.1.4 understanding the bowing method*
Fig. 7.1.5 understanding the bowing method chart
Elaborate

- The profile method for estimating crown angle

**Correct**

**Wrong**

*Fig. 7.1.6 profile view of correct crown angle*
Fig. 7.1.7 profile view of crown angle with same pavilion depth, girdle diameter and table size at 60%
- The face-up method for estimating crown angle

Fig. 7.1.8  face up view of crown angle
Elaborate

• How to calculate crown height
• How to measure girdle thickness

![Girdle thickness chart]

- Extremely Thin 1%
- Very Thin 2%
- Thin 3%
- SI Thick 5%
- Thick 7%
- Very Thick 8%
- Extremely Thick 10%

Fig. 7.1.9 Girdle thickness chart
Elaborate

- The technique of estimating pavilion depth

![Fig. 7.1.10 Pavilion depth appearance chart](image)

<table>
<thead>
<tr>
<th>Depth Percentage</th>
<th>Appearance</th>
</tr>
</thead>
<tbody>
<tr>
<td>39% and less</td>
<td>&quot;fish-eye&quot;</td>
</tr>
<tr>
<td>41%</td>
<td></td>
</tr>
<tr>
<td>43%</td>
<td></td>
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<tr>
<td>45%</td>
<td></td>
</tr>
<tr>
<td>47%</td>
<td></td>
</tr>
<tr>
<td>49%</td>
<td>&quot;Nail-head&quot;</td>
</tr>
</tbody>
</table>

*Fig. 7.1.10 Pavilion depth appearance chart*
Elaborate

- How to calculate pavilion angle
- The technique of estimating culet size
- The symmetry and polish concepts
- How to analyse cut grade out of 5 grades available

### Table size percentage

| Table size | 53 | 54 | 55 | 56 | 57 | 58 | 59 | 60 | 61 | 62 | 63 | 64 | 65 | 66 | 67 | 68 | 69 | 70 | 71 | 72 |
|------------|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|
| Excellent  |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |
| Very Good  |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |
| Good       |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |
| Fair       |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |
| More than 72 % |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |
| Poor       |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |

*Fig. 7.1.11 Cut Grade as per Table Size*

<table>
<thead>
<tr>
<th>Table size percentage</th>
<th>23</th>
<th>24</th>
<th>25</th>
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<th>39</th>
<th>40</th>
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<th>42</th>
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<td>Excellent</td>
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<td>More than 42</td>
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<td>Poor</td>
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*Fig. 7.1.12 Cut Grade as per Crown Angle*

<table>
<thead>
<tr>
<th>Girdle thickness</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
<th>7</th>
<th>8</th>
<th>9</th>
<th>10</th>
</tr>
</thead>
<tbody>
<tr>
<td>Excellent</td>
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<tr>
<td>Very Good</td>
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<tr>
<td>Fair</td>
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</tbody>
</table>

*Fig. 7.1.13 Cut Grade as per Girdle thickness*

| Pavilion Depth    | 39.0 | 39.5 | 40.0 | 40.5 | 41.0 | 41.5 | 42.0 | 42.5 | 43.0 | 43.5 | 44.0 | 44.5 | 45.0 | 45.5 | 46.0 | 46.5 | 47.0 | 47.5 | 48.0 | 48.5 |
|-------------------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|
| Excellent         |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |
| Very Good         |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |
| Good              |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |
| Fair              |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |
| More than 49 %    |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |
| Poor              |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |

*Fig. 7.1.14 Cut grade as per pavilion depth*
Summarize

- Summarize all the estimated proportion by assigning it a cut grade

Activity

- Issue specimens to the students and while demonstrating the estimation of diamond proportion explain good and bad proportions
8. Fancy Shapes

Unit 8.1 – Fancy Shapes and its Grading Concepts
At the end of this module, students will be able to:

1. Know about fancy shapes.
2. Know the various components of fancy shapes.
3. Understand in detail the grading procedure of fancy shapes.
UNIT 8.1: Fancy Shapes and its Grading Concepts

Unit Objectives

At the end of this unit, students/Facilitator will be able to:

1. Understand the concept of Fancy shapes
2. Understand the names of most popular fancy shapes
3. Understand the various components of fancy shapes
4. Understand the grading concept of fancy cut
5. Understand the symmetry issues in fancy cuts
6. Understand the shape appeal of fancy cuts

Resources to be Used

- Available objects/ aids such as Pen, Pencil, Eraser, white board, Marker, Notes, Slides, Videos, presentation etc
- Available equipments such as Laptop, Projector etc
- Available tools such as:
  - Tweezers
  - Scoop
  - Shade card
  - 10x eye glass
  - Tripod or Table loupe
  - Cleaning Cloth
  - Day light Lamp
  - Assortment Pads with white sheets
  - Calculator
  - Gauge
  - Zip lock
  - Plastic bags
  - Paper Packets for Diamonds
• Fancy shapes are fancy cut

• Grade clarity like rounds.
  • Inclusions may be easy to see in step cuts, but is difficult to see in shapes with corners and points.
  • Plot fancy shapes similar to round plotting.

• To colour grade Place the stone face down similar to round diamond colour grading method and estimate the colour grade through the pavilion facets.
  • Round master stones can be used to grade colour of fancy shapes.
  • Colour grading length wise will make the colour look dark and grading from the width will make it look light.
  • Hence, place the stone diagonally to grade the colour.

• All fancy shapes have a given length to width ratio as an important part of the shape appeal. Emerald cut with a proportionately longer length than width, takes away the bold look of an emerald cut. Similarly, marquise with a proportionately longer length than width, looks skinny and less durable. Also, in heart shape a proportionately longer length than width, takes away the true heart shape. Oval with a proportionately shorter length than width gives it an off-round shape rather than the oval look.

Ask

• Ask the students various names of shapes, diamonds are commonly available in the market

Demonstrate

• Demonstrate the concept of Fancy shapes
• Demonstrate the names of most popular fancy shapes
• Demonstrate the various components of fancy shapes
• Demonstrate the grading concept of fancy cut
• Demonstrate the symmetry issues in fancy cuts
• Demonstrate the shape appeal of fancy cuts
Elaborate

- The concept of Fancy shapes
- The names of most popular fancy shapes
- The various components of fancy shapes

Emerald Cut

![Emerald Cut Diagram](image1)

Princess cut

![Princess cut Diagram](image2)
Fig. 8.1.3 Marquise Cut

Fig. 8.1.4 Heart
Fig. 8.1.5 Pear cut

Fig. 8.1.6 Oval
Fig. 8.1.7 Triangular Cut

Triangular Cut

Point

Sides

Base
Elaborate

- The grading concept of fancy cut
- The symmetry issues in fancy cuts
- The shape appeal of fancy cuts
- The concept of length to width ratio

**Fig. 8.1.8 Length to width ratio**

![Figures of Oval, Emerald, and Triangular cuts with their respective length to width ratios.]

**OVAL**
1.33:1.66:1

**EMERALD**
1.50:1.75:1

**TRIANGULAR**
1.00:1.00
Fig. 8.1.9 Length to width ratio contd

PEAR
1.50:1.75:1

MARQUISE
1.75:2.25:1

HEART
1.00:1.00
Summarize

- Summarize the concept of evaluating fancy shaper thru symmetry and shape appeal
GJSCI
Gem & Jewellery Skill Council of India

9. Fancy Colour

Unit 9.1 – Fancy Colour Diamonds
Key Learning Outcomes

At the end of this module, students will be able to:

1. Know what is fancy colour
2. Know the various characteristics and features of fancy colour
UNIT 9.1: Fancy Colour Diamonds

Unit Objectives

At the end of this unit, students/Facilitator will be able to:

1. Understand the concept of fancy colour
2. Understand the various colour options in diamond
3. Understanding rarity and colour
4. Understanding the grading concepts of fancy colour

Resources to be Used

- Available objects/ aids such as Pen, Pencil, Eraser, white board, Marker, Notes, Slides, Videos, presentation etc
- Available equipments such as Laptop, Projector etc
Fancy coloured diamonds are also called as fancies.

Rarity is one of the most important factors that affect the diamond value. In case of fancy coloured diamonds, colours like fancy yellow and fancy browns are comparatively common than colours like green, blue and reds. Diamonds in the reddish tone are the rarest in the world. Blue diamonds are also rare. In 1980’s brown diamonds were considered as industrial diamonds. As they were found in good quantities in Australia, they were named and marketed as cognac and champagne diamonds. These are quite popular in the medium priced jewellery.

Brown
Brown diamonds are the most common fancy colour diamonds in the jewellery industry. It is the most recently added colour to be sold as fancy colour diamond. It used to be considered in industrial quality lots. It was when these diamonds started appearing in abundance in Argyle, the Australians marketed them as champagne and cognac diamonds. It is the internal graining present in the diamond which creates the brown tone. They can be very light to very dark brown. They can be available in different shades like yellowish, greenish, orangish modifying colours also.

Yellow
Being the second most common colour, it is marketed as canary. Diamonds are yellow because of nitrogen. More than 99% of diamonds have nitrogen in them.

Grey
There are grey diamonds also, which are probably grey because of high hydrogen content.

Blue
Blue diamonds are quite rare. Blue is caused due to the presence of boron as the trace element. Boron in diamonds makes them conduct electricity.

Green
When in nature diamonds are deposited near radioactive rocks, the radiation causes the surface of the rough diamonds to become green. These radiations have a very shallow penetration. That is why the cutters try and leave maximum natural areas on the girdle to give more green colour to a cut and polished diamond.

Pink
Pink diamonds also called as rose diamonds, were very rare before the Australian Argyle mines. Pink diamonds are pink due to the presence of pink graining. More the pink graining more saturated the pink. Colour Diamonds with purple tone are called as mauve diamonds.

Red
Distortion in the crystal lattice can produce a red diamond.
Ask
- Ask the students if they have heard or seen any colour in diamond beyond the normal range

Elaborate
- What are fancy coloured diamonds
- The qualification of fancy colours
- The order of rarity in fancy coloured diamonds
- The causes of colour in fancy coloured diamonds

Facilitation Notes
- Show some pictures / slides of world famous fancy coloured diamonds
10. Sorting Small Diamonds

Unit 10.1 – Sorting Small Diamonds and its Steps
At the end of this module, students will be able to:

1. Understand the concept of sorting
2. Know the various equipment used for sorting
3. Understand in detail the steps of sorting
UNIT 10.1: Sorting Small Diamonds and its Steps

Unit Objectives

At the end of this unit, students/Facilitator will be able to:

1. Understand the concept of sorting
2. Understand the classification of diamonds based on size
3. Understand the company policy to distribute diamonds in groups
4. Understand the concept of whites and natts
5. Understand the concept of LB and LC
6. Understand the concept of OWLB and OWLC
7. Understand the concept of TTLB, TLB, LB, DB
8. Understand the concept of TTLC, TLC, LC
9. Understand the correlations between grading and sorting
10. Understand the clarity divisions of loose small diamonds in whites
11. Understand the clarity divisions of loose small diamonds in natts
Understand the use of tripod, sieve, scoop and optivisor

Resources to be Used

- Available objects/ aids such as Pen, Pencil, Eraser, white board, Marker, Notes, Slides, Videos, presentation etc
- Available equipments such as Laptop, Projector etc
- Available tools such as:
  - Tweezers
  - Scoop
  - Shade card
  - 10x eye glass
  - Tripod or Table loupe
  - Cleaning Cloth
  - Day light Lamp
  - Assortment Pads with white sheets
  - Calculator
  - Diamond Sieve
  - Gauge
  - Diamond Weighing Scale.
  - Zip lock
  - Plastic bags
  - Paper Packets for Diamonds
As we start from a mixed packet of diamonds, we eventually categorize them into 600 packets on the basis of colour, clarity and carat.

Whenever diamonds are cut and polished in factories, especially small size diamonds, there is usually a mixed lot of diamonds. These mixed lots of diamonds contain almost every combination of colour and clarity. In this assignment of sorting of diamonds, we shall be starting with a mixed lot of diamonds and eventually categorizing it into 600 packets based on colour, clarity and carat.

Ask

- Ask the students if they have heard the term sorting and what does it mean
- Ask the students if they have heard about terms like TTLB, LC etc

Steps

- Stage 1: Categorise into two groups of whites and natts
- Stage 2: Categorise them further into 4 lots named whites, off-whites, LB's and LC's
- Stage 3: Categorise OW further into 2 categories namely OWLB and OWLC
- Stage 4: Categorise LB further into 4 categories namely TTLB, TLB, LB and DB
- Stage 5: Categorise LC further into 3 categories namely TTLC, TLC, LC
- Stage 6: Categorise all lots further into 5 categories namely Minus 2, Stars, Mellee, Plus 11, Plus 15
- Stage 7: Categorise all lots further into clarity groups as mentioned in figure 10.1.16 and 10.1.17
Elaborate

- Elaborate the concept of sorting
- Elaborate the classification of diamonds based on size
- Elaborate the company policy to distribute diamonds in groups
- Elaborate the concept of whites and natts
- Elaborate the concept of LB and LC
- Elaborate the concept of OWLB and OWLC
- Elaborate the concept of TTLB, TLB, LB, DB
- Elaborate the concept of TTLC, TLC, LC
- Elaborate the correlations between grading and sorting
- Elaborate the clarity divisions of loose small diamonds in whites
- Elaborate the clarity divisions of loose small diamonds in natts
- Elaborate the use of tripod, sieve, scoop and optivisor
Fig. 10.1.1 combination of 600 packets

DIAMOND LOT

WHITES

NATTS

WHITE (F-I)
OFF WHITE (I-K)
LB (L-)
LC (L-)

WHITE (F-I)
OFF WHITE (I-K)
LB (L-)
LC (L-)

OWL (I-K)
OWLC (I-K)
TILB (L)
TLB (M)
LB (N)
DB (OP)
TTLB (L)
TLC (M)
LC (N-)

OWL (I-K)
OWLC (I-K)
TILB (L)
TLB (M)
LB (N)
DB (OP)
TTLB (L)
TLC (M)
LC (N-)

MINUS 2
STARS
MELEE
PLUS 11
PLUS 15

VVS1 - VVS2
VS1 - VS2
VS2 - SI1
SI1 - SI2
SI2 - I1
I1-13
I3 (DEAD)

MINUS 2
STARS
MELEE
PLUS 11
PLUS 15

VVS2 - SI1
SI1 - SI2
SI2 - I1
I1-13
I3 (DEAD)
Summarize

- Summarize by saying how a mixed lot is divided into 600 packets on the basis of carat, colour and clarity

Activity

- Involve the students as assorter in different levels of sorting to make them analyse the whole concept

Facilitation Notes

- Use final figure 10.1.8 to analyse the whole system of sorting
11. Treatments

Unit 11.1 – Diamond Treatments and its Identification
Key Learning Outcomes

At the end of this module, students will be able to:

1. Know what are treatments.
2. Understand clarity and colour based treatments.
3. Understand how to identify treated diamonds.
UNIT 11.1: Diamond Treatments and its Identification

Unit Objectives

At the end of this unit, students/Facilitator will be able to:
1. Understand the concept of treatment
2. Understand the various types of treatment
3. Understand the differentiation technique to identify treatments

Resources to be Used

- Available objects/ aids such as Pen, Pencil, Eraser, white board, Marker, Notes, Slides, Videos, presentation etc
- Available equipments such as Laptop, Projector etc
Say

- Treatments in diamond means that we take a natural diamond from nature and expose it to some controlled environment to change/alter its colour or clarity appearance. Thus, treatments can be divided into two categories - clarity treatment and colour treatment.

  - These common treatments are:
    - Fracture filling (also termed as crack filling)
    - Laser drill hole (LDH)

Ask

- Ask the students what they understand by the term treatments

Do

- Explain the pros and cons of treatments

Elaborate

- The concept of treatment
- The various types of treatment
- The advantages and disadvantages of treatments
- The differentiation technique to identify treatments

Summarize

- Summarize by saying that treatments are good techniques to alter the colour and clarity but it is important and ethical to disclose the treatment before making a sale
12. Simulants and Synthetics

Unit 12.1 – Simulants, Synthetics and its Identification
Key Learning Outcomes

At the end of this module, students will be able to:

1. Know the various synthetics and simulants of diamond
2. Understand how to identify them
UNIT 12.1: Simulants, Synthetics and its Identification

Unit Objectives

At the end of this unit, students/Facilitator will be able to:
1. Understand the concept of simulants
2. Understand the identification techniques to distinguish between diamonds and simulants
3. Understand the difference between synthetic diamond and diamonds

Resources to be Used

- Available objects/aids such as Pen, Pencil, Eraser, white board, Marker, Notes, Slides, Videos, presentation etc
- Available equipments such as Laptop, Projector etc
- Available tools such as:
  - Tweezers
  - Scoop
  - Shade card
  - 10x eye glass
  - Tripod or Table loupe
  - Cleaning Cloth
  - Day light Lamp
  - Assortment Pads with white sheets
  - Paper Packets for Diamonds
This is one of the most important topics to understand as this make the student skilled to distinguish a diamond with its counterparts. We are aware that diamonds are one of the most popular gemstone of the world. Lot of people are inspired by its beauty and appeal. This has inspired people to create less expensive look alikes. These look alike or imitations are called simulants. These simulants are less priced and available in abundance. In case of simulants, the physical, chemical and optical properties vary a lot. Thus, its properties help us to distinguish between diamonds and its simulants.

Ask
- Ask the students if they are aware of the term simulants and synthetics
- Ask the students if they have heard of any simulant and if yes, then to name it

Demonstrate
- Demonstrate the identification techniques to distinguish between diamonds and simulants
- Demonstrate the difference between synthetic diamond and diamonds

Elaborate
- Elaborate the identification techniques to distinguish between diamonds and simulants
- Elaborate the difference between synthetic diamond and diamonds

Summarize
- Summarize by saying this is one of the most important topics to understand as this make the student skilled to distinguish a diamond with its counterparts

Activity
- Issue specimens to the students and while demonstrating the identification techniques to distinguish between diamonds and simulants
13. Pricing

Unit 13.1 – Understanding Pricing and its Concepts
At the end of this module, students will be able to:

1. Understand the pricing system and price guide
2. Understand the various calculation systems
UNIT 13.1: Understanding Pricing and its Concepts

Unit Objectives

At the end of this unit, students/Facilitator will be able to:

1. Understand the concept of pricing
2. Understand the concept of price guides
3. Understand the difference between stone value and stone rate / per carat rate

Resources to be Used

- Available objects/ aids such as Pen, Pencil, Eraser, white board, Marker, Notes, Slides, Videos, presentation etc
- Available equipments such as Laptop, Projector etc
- Available tools such as:
  - Calculator
Say

- In India we all diamond merchants follow Rapaport as price guide
- Say Price Guides
- There are price guides available in the market (some of them are subscribed and paid for) which usually states only 3Cs, that is clarity, colour and carat weight.
- These price guides describe the rate depending on the market conditions at the time when they are printed.
- These rates mentioned in the price guides tend to fluctuate on regular basis.
- Rapaport is one of the most acceptable and followed price list issued every Friday from New York (U.S.A).
- Rapaport shows a tabular chart rate stating carat, colour and clarity. The figures mentioned in the list are in hundred US dollars per carat.
- Thus if a combination of carat, colour and clarity shows '60' in the chart, it means the rate per carat is $6000 (60*100).
- Now let us assume that the carat weight of diamond is 1.06 ct, then the diamond value would be calculated as below:
  \[
  \text{Value} = 6000 \times 1.06 = 6360 \text{ dollar}
  \]
  which is the stone value.

Ask

- Ask the student if they have heard of any price guide
- Ask the student if they have heard of names like Rapaport, Polygon etc

Do

- Explain the calculation of price from price guides

Demonstrate

- Demonstrate with copy of rapaport to make students familiar with the price guides

Elaborate

- Elaborate the calculation of price from price guides
Summarize
- Summarize by explain about pick price

Facilitation Notes
- Showing any price guides to the students, read aloud the news mentioned in that price guide. Relate that news to the market condition prevailing at that time.
14. Assort Diamonds for Jewellery Manufacturing

Unit 14.1 Assorting Diamonds for Jewellery Manufacturing
At the end of this module, students will be able to:

1. Know the system of receiving diamond packets and the chain involved in the work flow
2. Know the concepts of facets
3. Know the basic concepts of 4C’s
4. Know the concept of clarity
5. Know the concept of carat
6. Know the concept of carat w.r.t assorting diamonds for different types of jewellery
7. Know the concept of colour
8. Know the concept of cut
9. Know the concept of fancy shapes
10. Know the concept of assorting diamonds for jewellery
11. Know the Identification techniques of diamond’s common simulants like cubic zirconia and synthetic moissanite
12. Know the concept of pricing and value determination after sorting
UNIT 14.1: Assorting Diamonds for Jewellery Manufacturing

Unit Objectives

At the end of this unit, students/Facilitator will be able to:

1. Understand the system of receiving diamond packets and the chain involved in the work flow
2. Understand the concepts of facets
3. Understand the concepts of basic 4C’s
4. Understand the concept of clarity w.r.t assorting diamonds for jewellery
5. Understand the concept of carat w.r.t assorting diamonds
6. Understand the concept of carat w.r.t assorting diamonds for different types of jewellery
7. Understand the concept of colour w.r.t assorting diamonds for jewellery
8. Understand the concept of cut w.r.t assorting diamonds for jewellery
9. Understand the concept of fancy shapes w.r.t assorting diamonds for jewellery
10. Understand the concept of assorting diamonds for jewellery
11. Identification of diamond’s common simulants like cubic zirconia and synthetic moissanite
12. Know the concept of pricing and value determination after sorting

Resources to be Used

- Available objects/ aids such as Pen (Blue, Black, Green and Red), Pencil, Eraser, white board, Marker, Notes, Slides, Videos, presentation etc
- Available equipments such as Laptop, Projector etc
- Available tools such as Diamond model
- Available tools such as:
  - Tweezers
  - Scoop
  - Shade card
  - 10x eye glass
  - Tripod or Table loupe
  - Cleaning Cloth
  - Day light Lamp
  - Assortment Pads with white sheets
  - Calculator
  - Diamond Sieve
  - Gauge
  - Diamond Weighing Scale.
  - Zip lock
  - Plastic bags
  - Paper Packets for Diamonds
An assorter of diamonds for jewellery manufacturing serves as one of the important role in jewellery manufacturing. Assorting is one of the process in the workflow of diamonds received from processing unit or trader and after completion of the job the same has to be transferred to the next department for setting diamonds into jewellery.

Some jewellery designs are very unusual because of the size of diamonds to be used with them. Diamond jewellery like the following requires plus 15.
- Single line bangle is also called as running diamond bangle
- Tennis Bracelet
- Diamond strings etc.

Diamond jewellery like the following requires plus 11.
- Single line bangle is also called as running diamond bangle
- Wedding rings
- Gents rings with 9 or 12 diamonds
- Nakshatra style tops etc.

Diamond jewellery like the following requires melee.
- Regular rings, pendants, necklace sets, tops etc.
- These are one of the hottest selling sizes in the market

Diamond jewellery like the following requires stars.
- Light weight jewellery with more design oriented concepts
- All types of jewellery are available in this size
- After melee, this is the next hottest selling size

Diamond jewellery like the following requires minus 2.
- Fine jewellery, god and goddess pendants etc.
• Ask the students to find and count the various facets in figure 2.2.2 and 2.2.3 in participant manual
• Ask the students if they are aware of 4C’s and ask them to name them
• Ask the student what carat is (Is it the concept of weight or size)
• Ask the students if they have heard of carob seeds
• Ask the students what they understand by the clarity and its relevance in diamonds
• Ask the students what is the colour of commonly available diamonds
• Ask the students to revise the concept of clarity as done in Unit 3.3
• Ask the students if they have heard of any clarity grade and to spell them
• Ask the students to name the inclusions and blemishes looking at their pictures
• Ask the students how clarity affects the rate
• Ask the students to revise the concept of clarity as done in Unit 3.2
• Ask the students various units of weight measurements both metric and non metric
• Ask the students questions like: how many grams are in a kilogram, how many milligrams make a gram
• Ask the students to revise the concept of colour as done in Unit 3.4
• Ask the student, normally what is the colour of diamond and what other colours are possible in diamonds
• Ask the students to revise the concept of clarity as done in Unit 3.5
• Ask the students if they have heard anything about cut grading
• Ask the students various names of shapes, diamonds are commonly available in the market
• Ask the students if they have heard the term sorting and what does it mean
• As the students if they have heard about terms like TTLB, LC etc
• Ask the students if they have heard of any simulant and if yes, then to name it
• Ask the student if they have heard of any price guide
• Ask the student if they have heard of names like Rapaport, Polygon etc
Do

- Explain the derivation of the word carat
- Explain the concept of clarity with blemishes and inclusions
- Explain the concept of colour with colour grading scale
- Explain the concept of cut with various proportions

Fig. 14.1.1 Diamond’s Proportion

Fig. 14.1.2 Diamond’s Proportion in 45 degree tilted view
Demonstrate

- Demonstrate kite and triangular shape facets in diamond
- Demonstrate parts of diamonds
- Demonstrate various facets in crown and in pavilion with their standard count

Fig. 14.1.3 Parts of standard round brilliant cut diamond
Crown: Top part of the gem above the girdle

![Diagram of crown facets]

- **TABLE**: 1
- **BEZEL**: 8
- **STAR**: 8
- **UPPER GIRDLE**: 16
- **CROWN TOTAL**: 33

Fig. 14.1.4 Facets arrangement in crown

Pavilion: Lower part of the gem below the girdle

![Diagram of pavilion facets]

- **LOWER GIRDLE**: 16
- **PAVILION MAIN**: 8
- **CULET**: 1
- **PAVILION TOTAL**: 25/24
- **TOTAL**: 58/57

Fig. 14.1.5 Facets arrangement in pavilion
• The factors of clarity grading
• How to hold and use loupe to magnify diamonds

![Figure 14.1.6 Triplet 10X loupe 20.5mm Diameter from popular brands](Image)

• Demonstrate how various blemishes and inclusions look like with the help of fig 14.1.7 to 14.1.30

![Figure 14.1.7 Bearding / Bearded Girdle](Image)

![Figure 14.1.8 Bearding / Bearded Girdle](Image)
Fig. 14.1.9 Cavity

Fig. 14.1.10 chip
Fig. 14.1.11 cloud

Fig. 14.1.12 cloud
**Fig. 14.1.15 Feather**

**Fig. 14.1.16 Feather**
Fig. 14.1.17 Included Crystals

Fig. 14.1.18 Included Crystals
Fig. 14.1.19 Dark Included crystals

Fig. 14.1.20 Internal Graining
Fig. 14.1.21 Laser Drill Hole

Fig. 14.1.22 Laser Drill Hole
Fig. 14.1.23 Laser Drill Hole visible from Pavilion

Fig. 14.1.24 Laser Drill Holes
Fig. 14.1.25 Pinpoint

Fig. 14.1.26 Abrasions
Fig. 14.1.27 Extra Facet

Fig. 14.1.28 Natural
Demonstrate the sieves and show the students various numbers inscribed on sieves
Demonstrate how to use sieves
Demonstrate how to refer to the diamond sieve reference chart
Elaborate

- The system of receiving diamond packets and the chain involved in the work flow
- The concepts of facets
- The concepts of basic 4C’s
- The concept of clarity w.r.t assorting diamonds for jewellery
- The concept of carat w.r.t assorting diamonds
- The concept of carat w.r.t assorting diamonds for different types of jewellery
- The concept of colour w.r.t assorting diamonds for jewellery
- The concept of cut w.r.t assorting diamonds for jewellery
- The concept of fancy shapes w.r.t assorting diamonds for jewellery
- The concept of assorting diamonds for jewellery
- The Identification of diamond's common simulants like cubic zirconia and synthetic moissanite
- The concept of pricing and value determination after sorting

Summarize

- Summarize what facets are
- Summarize the arrangement of facets in standard Round Brilliant cut
- Summarize complete 4C’s and its role in carat rate
- Summarize the Clarity grading scale with 11 grades
- Summarize the colour grades as part of various groups like colourless, near-colourless, faint yellow, very light yellow and light yellow
- Summarize by saying how a mixed lot is divided into 600 packets on the basis of carat, colour and clarity
Fig. 14.1.31 Considering all other value factors as constant, the per carat rate increases faster than the rate at which diamond weight increases.
Considering all other value factors as constant, cleaner the diamond, higher the diamond value.

Fig. 14.1.32 Considering all other value factors as constant, cleaner the diamond, higher the diamond value

Fig. 14.1.33 Average price movement in normal colour range
Facilitation Notes

- You can ask the students how thick girdle adds to the undesired weight
- You can ask the students the colours of fire to explain dispersion
- Use final figure 10.1.8 to analyse the whole system of sorting

Breaking up of light into its constituent spectral colours.

White Light

VIOLET
INDIGO
BLUE
GREEN
YELLOW
ORANGE
RED

Fig. 14.1.35 Breaking up of the light into its constituent spectral colours
15. Assort Rough Diamonds

Unit 15.1  Assorting Rough Diamonds and its Concepts
At the end of this module, students will be able to:

1. Know the system of receiving diamond packets and the chain involved in the work flow
2. Know the concepts of formation & mining
3. Know the concepts of hardness, toughness and facets
4. Know the basic concepts of 4C's
5. Know the concept of clarity
6. Know the concept of carat and cut
7. Know the concept of colour
8. Know the concept of crystal system, diamond rough and cutting steps
9. Know the concept of fancy shapes
10. Know the concept of sorting
11. Know the concept of Kimberley process
UNIT 15.1: Assorting Rough Diamonds and its Concepts

Unit Objectives

At the end of this unit, students/Facilitator will be able to:

1. Understand the system of receiving diamond packets with number and weight mentioned
2. Understand the concepts of formation and mining of diamond roughs
3. Understand the concepts in crystal system
4. Understand the concepts of facets
5. Understand the concepts of basic 4C’s
6. Understand the concept of clarity
7. Understand the concept of carat
8. Understand the concept of colour
9. Understand the crystal habit and growth marks
10. Understand the diamond rough classification and its sorting
11. Understand the types of rough before cutting
12. Understand the cutting steps of diamond rough
13. Understand the concept of cut
14. Understand the concept of fancy shapes and fancy colour
15. Understand the process of rough procurement

Resources to be Used

- Available objects/ aids such as Pen (Blue, Black, Green and Red), Pencil, Eraser, white board, Marker, Notes, Slides, Videos, presentation etc
- Available equipments such as Laptop, Projector etc
- Available tools such as Diamond model
- Available tools such as: Tweezers, Scoop, Shade card, 10x eye glass, Tripod or Table loupe, Cleaning Cloth, Day light Lamp, Assortment Pads with white sheets, Calculator, Diamond Sieve, Gauge, Diamond Weighing Scale, Zip lock, Plastic bags, Paper Packets for Diamonds
An assorter of rough diamonds serves as one of the important roles in diamond manufacturing. It is the internal policy of the company whether the information are to be shared with the assorter or not.

Always verify the total weight and or total number of pieces in the packet before starting working on the same. If in any case there is a discrepancy in the total weight or number of pieces, the same should be communicated to the supervisor or processing unit or trader as applicable.

The word 'Diamond' and how it is derived from Greek word 'adamas' using the participant manual.

Understand in detail the formation of diamond

Ask the students about the temperature at various levels of earth
Ask the student what diamond is made up of and their average age
Ask the various ways by which one can get diamonds from the earth
Ask the students when and where were diamonds found first in the history of the earth
Ask the students to name some countries known to have diamond deposits
Ask the students about names of various mining companies
Ask the students to find and count the various facets in figure 2.2.2 and 2.2.3 in participant manual
Ask the students if they are aware of 4C’s and ask them to name them
Ask the student what carat is (Is it the concept of weight or size)
Ask the students if they have heard of carob seeds
Ask the students what they understand by the clarity and its relevance in diamonds
Ask the students what is the colour of commonly available diamonds
Ask the students to revise the concept of clarity as done in Unit 3.3
Ask the students if they have heard of any clarity grade and to spell them
Ask the students to name the inclusions and blemishes looking at their pictures
Ask the students how clarity affects the rate
Ask the students to revise the concept of clarity as done in Unit 3.2
Ask the students various units of weight measurements both metric and non metric
Ask the students questions like: how many grams are in a kilogram, how many milligrams make a gram
Ask the students to revise the concept of colour as done in Unit 3.4
Ask the student, normally what is the colour of diamond and what other colours are possible in diamonds
Ask the students to revise the concept of clarity as done in Unit 3.5
Ask the students if they have heard anything about cut grading
Ask the students various names of shapes, diamonds are commonly available in the market
Ask the students if they have heard the term sorting and what does it mean
As the students if they have heard about terms like TTLB, LC etc
Ask the students if they have heard of any simulant and if yes, then to name it
Ask the student if they have heard of any price guide
Ask the student if they have heard of names like Rapaport,, Polygon etc
Do

- Explain the earth’s cross-section and diamond formation with traditional and current deposits
- Understand in detail the formation of diamond
- Explain the derivation of the word carat
- Explain the concept of clarity with blemishes and inclusions
- Explain the concept of colour with colour grading scale
- Explain the concept of cut with various proportions
Demonstrate

- Using the cross-section image of the earth showing various layers, demonstrate the earth’s mantle to describe the formation of diamonds with movement of carbon in eclogite and peridotite, formation of diamond pipes with the influence of temperature and pressure.
- Demonstrate the volcanic pipe for movement of kimberlite and lamproite
- Using the images in the participant manual demonstrate various countries with diamond deposits and their features.
- With the help of pictures demonstrate the types of sources, mining and recovery methods.
- Make them mark the unique features of every deposit.

Fig. 15.1.3 Alluvial
- Demonstrate kite and triangular shape facets in diamond
- Demonstrate parts of diamonds
- Demonstrate various facets in crown and in pavilion with their standard count

Fig. 15.1.4 Parts of standard round brilliant cut diamond
**Crown: Top part of the gem above the girdle**

- TABLE: 1
- BEZEL: 8
- STAR: 8
- UPPER GIRDLE: 16

CROWN TOTAL: 33

*Fig. 15.1.5 Facets arrangement in crown*

**Pavilion: Lower part of the gem below the girdle**

- LOWER GIRDLE: 16
- PAVILION MAIN: 8
- CULET: 1

PAVILION TOTAL: 25/24

TOTAL: 58/57

*Fig. 15.1.6 Facets arrangement in pavilion*
• The factors of clarity grading
• How to hold and use loupe to magnify diamonds

Fig. 15.1.7 Triplet 10X loupe 20.5mm Diameter from popular brands

• Demonstrate how various blemishes and inclusions look like with the help of figures 15.1.8 to 15.1.31

Fig. 15.1.8 Bearding / Bearded Girdle

Fig. 15.1.9 Bearding / Bearded Girdle
Fig. 15.1.10 Cavity

Fig. 15.1.11 chip
Fig. 15.1.12 cloud

Fig. 15.1.13 cloud
Fig. 15.1.14 Feather

Fig. 15.1.15 Feather
Fig. 15.1.16 Feather

Fig. 15.1.17 Feather
Fig. 15.1.18 Included Crystals

Fig. 15.1.19 Included Crystals
Fig. 15.1.20 Dark Included crystals

Fig. 15.1.21 Internal Graining
Fig. 15.1.22 Laser Drill Hole

Fig. 15.1.23 Laser Drill Hole
Fig. 15.1.24 Laser Drill Hole visible from Pavilion

Fig. 15.1.25 Laser Drill Holes
Fig. 15.1.26 Pinpoint

Fig. 15.1.27 Abrasions
Fig. 15.1.28 Extra Facet

Fig. 15.1.29 Natural
Demonstrate the sieves and show the students various numbers inscribed on sieves
Demonstrate how to use sieves
Demonstrate how to refer to the diamond sieve reference chart
Elaborate

- Elaborate the system of receiving diamond packets with number and weight mentioned
- Elaborate the concepts of formation and mining of diamond roughs
- Elaborate the concepts in crystal system
- Elaborate the concepts of facets
- Elaborate the concepts of basic 4C’s
- Elaborate the concept of clarity
- Elaborate the concept of carat
- Elaborate the concept of colour
- Elaborate the crystal habit and growth marks
- Elaborate the diamond rough classification and its sorting
- Elaborate the types of rough before cutting
- Elaborate the cutting steps of diamond rough
- Elaborate the concept of cut
- Elaborate the concept of fancy shapes and fancy colour
- Elaborate the process of rough procurement

Summarize

- Summarize the diamond formation with various types of sources and deposits
- Summarize what facets are
- Summarize the arrangement of facets in standard Round Brilliant cut
- Summarize complete 4C’s and its role in carat rate
- Summarize the Clarity grading scale with 11 grades
- Summarize the colour grades as part of various groups like colourless, near-colourless, faint yellow, very light yellow and light yellow
- Summarize by saying how a mixed lot is divided into 600 packets on the basis of carat, colour and clarity
Considering all other value factors as constant, the per carat rate increases faster than the rate at which diamond weight increases.
Considering all other value factors as constant, cleaner the diamond, higher the diamond value.

Fig. 15.1.34 Average price movement in normal colour range
Involve the students by asking them simple general knowledge questions to link the topic and make it more interactive learning.

Show them the world map and ask them to position various countries where diamonds are found.

You can ask the students how thick girdle adds to the undesired weight.

You can ask the student the colours of fire to explain dispersion.

Use final figure 10.1.8 to analyse the whole system of sorting.

**Facilitation Notes**

- Breaking up of light into its constituent spectral colours.

*Fig. 15.1.35 An ideal cut Diamond*

*Fig. 15.1.36 Breaking up of the light into its constituent spectral colours*
16. Assort Gemstones

Unit 16.1  Assorting Gemstones and its concepts
Key Learning Outcomes

At the end of this module, students will be able to:

1. Know the system of receiving diamond packets and the chain involved in the work flow
2. Know the concepts of formation & mining
3. Know the concepts of hardness, toughness and facets
4. Know the basic concepts of 4C’s
5. Know the concept of clarity
6. Know the concept of carat and cut
7. Know the concept of colour
8. Know the concept of crystal system, diamond rough and cutting steps
9. Know the concept of fancy shapes
10. Know the concept of sorting
11. Know the concept of Kimberley process
UNIT 16.1: Assorting Gemstones and its Concepts

Unit Objectives

At the end of this unit, students/Facilitator will be able to:

1. Understand the system of receiving diamond packets and the chain involved in the work flow
2. Understand the concepts of precious stones
3. Understand the names of common semi-precious stones
4. Understand the basic identification techniques between precious & semi precious stones
5. Understand the concept of facets
6. Understand the concept of carat
7. Understand the concept of clarity
8. Understand the concept of colour wrt gemstones
9. Understand the concept hue, tone & saturation
10. Understand the concept of evaluating gemstones by colour
11. Understand the concept of transparency
12. Understand the concept of measurement
13. Understand the different types of cutting styles
14. Understand the sorting technique in gemstones
15. Understand the concept of sorting of gems by picture illustration

Resources to be Used

- Available objects/ aids such as Pen (Blue, Black, Green and Red), Pencil, Eraser, white board, Marker, Notes, Slides, Videos, presentation etc
- Available equipments such as Laptop, Projector etc
- Available tools such as:
  - Tweezers
  - Scoop
  - Shade card
  - 10x eye glass
  - Cleaning Cloth
  - Day light Lamp
  - Assortment Pads with white sheets
  - Calculator
  - Gauge
  - Gem/ Diamond Weighing Scale.
  - Zip lock
  - Plastic bags
  - Paper Packets for Gemstones
An assorter of gemstones serves as one of the important role in gem industry. It is the internal policy of the company whether the information is to be shared with the assorter or not. Always verify the total weight and total number of pieces in the packet before start working on the same. If in any case there is a discrepancy in the total weight or number of pieces, the same should be communicated to the supervisor or processing unit or trader as applicable.

The word Ruby comes from the Latin word 'ruber' meaning red. They are the red coloured variety of the mineral species corundum (Al₂O₃). Corundum in any other colour is termed as sapphire (another precious gemstone). Corundum being the second hardest mineral, ruby has the hardness of 9 under Mohs scale of hardness. Ruby is traditionally termed as King of Gems. Indian Name: Manak. The red colour of ruby can have colour modifiers like orange, purple, brown or pink colour. Generally, rubies come from Burma, Sri Lanka, India and Thailand / Cambodia. Burmese rubies are considered to be the best because of their purplish red colour defined as 'pigeon's blood red colour'. Rubies are red due to the presence of Chromium.

The word Sapphire comes from the Greek word 'sappheiros' meaning blue. They are the variety of the mineral species corundum (Al₂O₃) other than red. Corundum being the second hardest mineral, sapphires also have the hardness of 9 under Mohs scale of hardness. The non-blue sapphires are called as Fancy Sapphires. Generally, sapphires come from Burma, Sri Lanka, India (Kashmir) and Thailand/Australia. Kashmir sapphires are considered to be the best because of their blue colour defined as 'cornflower blue'. Fancy sapphires are available in many colours like yellow, pink, orange, purple etc. The medium toned orange-pink coloured sapphires are called as Padparadscha. Sapphires are blue due to the presence of iron and titanium. Indian Name of blue sapphire is Neelam. Indian Name of yellow sapphire is Pukhraj.

The word Emerald comes from the Latin word 'smaragdus' meaning green. It is the variety of the mineral species beryl. Emerald has the hardness of 7.5 - 8 under Mohs scale of hardness. Generally, emeralds come from Columbia, Brazil, Zambia, Russia, Afghanistan. Columbian emeralds are considered to be the best because of their green colour defined as 'parrot green'. Emeralds are green due to the presence of chromium / vanadium. Most emeralds are highly included. The green colour of emerald can have colour modifiers such as yellow or blue colour. Indian Name of emerald is Panna.

Semi-Precious Gemstones
The term semi - precious is used for all naturally occurring coloured gemstones other than ruby, sapphire and emerald. Semi - precious gemstones can fetch high prices if found in a rare size and near perfect clarity and colours.

Firstly, one should sort the lot as per the cutting shapes. Secondly, according to the requirement of the design, one should sort the size of the gems.
Once we have required the shape(s) and size(s) out of the lot then we should sort by colour. If you look at the above lot you will find gems with different shades and transparency. Now we should sort these gems as per colour and transparency.

**WHAT IS IPR?**

Intellectual property rights (IPR) give exclusive rights to a company or person to use its intellectual property without the threat of competition, at least for a specific time period.

Intellectual Property (IP) refers to creations of mind: plans, ideas, designs, inventions and other intangible assets.

IPR are protections granted by law to the creators of IPR, and include patents (for inventions), copyright (for creative, intellectual or artistic forms or works: usually for a limited time), trademarks (for recognizable sign, design or expression), trade secrets (for formula, process, pattern, etc giving an economic edge over competitors or customers), etc.

The main reason for granting IPR is to encourage innovators and promote progress without the fear of competition.

A lot of effort, time and money go into developing new designs, processes, and strategies. This gives companies an edge over competitors.

Financial incentives are directly linked to the protection of these intangible assets.

If the manufacturing process designed by a company (on its own) is leaked, it may result in loss of competitive edge over those who copy the process.

Exclusive or unique designs should not be copied or shared with unauthorized persons without the company's approval.

Other business information, inclusive of but not limited to plans, ideas, concepts, formulae, trade secrets, employee data, etc, the sharing of which makes a company lose its economic edge over others, should be kept confidential.

The gem grader should have complete knowledge of the company's patents, copyrights, trademarks and other intellectual property rights.

He should be able to identify the information that needs to be prevented from being leaked to competitors.

He/she should protect IPR in the following manner:

- Prevent leakage of new orders of the company to its competitors: This may lead to loss of profit that the company can earn from its innovative and unique designs.
- Prevent leakage of company's manufacturing process and policies: Every company has a particular manufacturing process as well as policies. This information should not be leaked.
- Should not be involved in IPR violations and should report IPR violations, if any: He/She should not disclose any confidential information and should report IPR violations to the management.
- Should be aware of company's intellectual property rights: This is essential in order to prevent intellectual property of the company and be able to identify violations.
- The diamond grader should know his/her role and importance in the organization. Also, he/she should know the patents and IPR laws.
- In case of violations, he/she should know how to effectively communicate the same to the concerned person in the management so that adequate action may be taken against the violator.
Ask

- Ask the students what are precious gemstones
- Ask the student to name some gemstones
- Ask they if they have heard of ruby, emerald and sapphire
- Ask the students what do they understand by semi-precious gemstones and to name them
- Ask the students to find and count the various facets in figure 2.2.2 and 2.2.3 in participant manual
- Ask the students if they are aware of 4C’s and ask them to name them
- Ask the student what carat is (Is it the concept of weight or size)
- Ask the students if they have heard of carob seeds
- Ask the students how clarity affects the rate
- Ask the students questions like: how many grams are in a kilogram, how many milligrams make a gram
- Ask the students various names of shapes, gemstones are commonly available in the market
- Ask the students if they have heard the term sorting and what does it mean

Demonstrate

- Demonstrate the system of receiving diamond packets and the chain involved in the work flow
- Demonstrate the concepts of precious stones
- Demonstrate the names of common semi-precious stones
- Demonstrate the basic identification techniques between precious & semi precious stones
- Demonstrate the concept of facets
- Demonstrate the concept of carat
- Demonstrate the concept of clarity
- Demonstrate the concept of colour wrt gemstones
- Demonstrate the concept hue, tone & saturation
- Demonstrate the concept of evaluating gemstones by colour
- Demonstrate the concept of transparency
- Demonstrate the concept of measurement
- Demonstrate the different types of cutting styles
- Demonstrate the sorting technique in gemstones
- Demonstrate the concept of sorting of gems by picture illustration
Elaborate

- Elaborate the system of receiving diamond packets and the chain involved in the work flow
- Elaborate the concepts of precious stones
- Elaborate the names of common semi-precious stones
- Elaborate the basic identification techniques between precious & semi precious stones
- Elaborate the concept of facets
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- Elaborate the different types of cutting styles
- Elaborate the sorting technique in gemstones
- Elaborate the concept of sorting of gems by picture illustration

Summarize

- Summarize complete 4C's and its role in carat rate
17. Co-ordinate with Others

Unit 17.1 – Importance of Interaction and Coordination
Unit 17.2 – Interacting with Supervisor
Unit 17.3 – Interacting with Colleagues and Other Departments
Unit 17.4 – Interacting with Outside Parties
Key Learning Outcomes

At the end of this module, students will be able to:

1. Identify the importance of co-ordination with others.
2. Understand that co-ordination is an essential part of their job.
3. Identify the key requirements for co-ordination amongst co-workers.
4. Identify the key requirements for co-ordination between them and their supervisor.
UNIT 17.1: Importance of Interaction and Coordination

Unit Objectives
At the end of this unit, students/Facilitator will be able to:
1. Know the importance of interaction and coordination
2. Identify gap areas in their interaction and coordination with co-workers, supervisor and others
3. Identify key elements required for coordination and interaction
4. Implement the learnings in their job role

Resources to be Used
- Whiteboard, whiteboard markers, notepads, pens
- LCD Projector attached to computer or laptop
- Blank sheets of paper
## 17.1.1: Answer These Questions (Exercise)

**Exercise**
- Ask students to fill in the questionnaire given in their participant handbook
- Elaborate on the opinions mentioned and the highlighted words

<table>
<thead>
<tr>
<th>Sr. No</th>
<th>Question</th>
<th>Tick the Answer as per your Opinion</th>
</tr>
</thead>
</table>
| 1      | How Often do people in your team or department speak with you about the job work or process? | o Never  
         |                                                                            | o Sometimes  
         |                                                                            | o Always      |
| 2      | How Much Time do people in your team or department take to solve an issue or get new information to you about the job work or process? | o Never on time  
         |                                                                            | o Sometimes on time  
         |                                                                            | o Always on time |
| 3      | How Precise is their communication with you about the issue or the new information given to you? | o Never Precise  
         |                                                                            | o Sometimes Precise  
         |                                                                            | o Always Precise |
| 4      | When there is a Problem do people in your department or team blame each other or do they try and solve the problem/ issue together? | o Never  
         |                                                                            | o Sometimes  
         |                                                                            | o Always      |
| 5      | How many of the people in your team or department Share the Same Goals as you regarding the progress of the company? | o None  
         |                                                                            | o Some  
         |                                                                            | o All         |
| 6      | How many of the people in your team or department know what your Job Work Actually is? | o None  
         |                                                                            | o Some  
         |                                                                            | o All         |
| 7      | How much do these people Respect you for the work you are doing?         | o Never  
         |                                                                            | o Sometimes  
         |                                                                            | o Always      |
17.1.2: Solving the Gap Areas

**Explain**

- Students who have ticked “Never”, “None”, “Sometimes” or “Some” in most of the questions previous exercise need to solve the gap areas.
- Elaborate on the following gap areas:
  - Provide honest opinions
  - Report problems early
  - Focus on defect prevention than detection
  - Give appropriate feedback
  - Respect for ourselves, others and their time
  - Be friendly and a team player
  - Be problem solving
  - Have determination
  - Have willingness to learn and volunteer
  - Be accountable and take responsibility for our mistakes
  - Deliver work on time
  - Work well under pressure
  - Meet deadlines
  - Be open to ideas and suggestions
  - Keep personal information personal
  - Restrict ourselves from giving out company information to others
  - Focus on quality and quantity of work
  - Create a clear-cut division between personal and work life, no involving the two
  - Communicate differences respectfully and in an appropriate manner
17.1.3: Importance of Interaction and Coordination

Elaborate

- Interaction and coordination establishes effective leadership thus giving the worker an opportunity to move up in his/her career.
- They both help in motivation and morale development which is essential for the growth of a person in their career.
- Helps in smooth working of the organization.
- Interaction and coordination help in promoting cooperation and peace in the organization.
- It acts as a basis for coordination and cooperation which aids in resolving team issues.
- It acts as a basis for making decisions based on the feedback and interaction with the employee.
- Increases managerial competence by creating a healthy work environment.

Tips

- It’s always important that one should be honest about their thoughts, suggestions, opinions when it is concerning the company.
- Advise not to involve personal opinions with professional opinions.
- Advise not to involve personal life with professional life.
UNIT 17.2: Interacting with Supervisor

Unit Objectives
At the end of this unit, students/Facilitator will be able to:
1. Know the importance of interaction with their supervisor
2. Identify gap areas in their interaction and coordination with their supervisor
3. Identify key elements required for coordination and interaction
4. Implement the learnings in their job role

Resources to be Used
- Whiteboard, whiteboard markers, notepads, pens
- LCD Projector attached to computer or laptop
- Blank sheets of paper
17.2.1: Interaction with Supervisor

Elaborate

- Interaction with supervisor is about communicating with supervisor to achieve a smooth and hazard-free work flow.
- Interaction with supervisor includes but is not limited to:
  - Raw material and work instruction by report supervisor
  - Communication regarding improvements required in working process or defects received from previous process
  - Communication with supervisor on maintenance of tools and machinery if required
  - To resolve conflicts
  - Informing about potential hazards in workplace
  - Reporting about operation details
  - To know company's policies on language of communication, reporting and escalation policies, quality delivery standards and personnel management
  - Facial expressions and body language add non-verbal indicates if information received by worker is understood or not.
  - If you do not understand a part of the work instruction, always ask your supervisor for more information.
17.2.2: Try the PDCA Method with your Supervisor's Help

**Elaborate**

- On how the PDCA method can help with improvements in the process flow, reporting product defects, informing about repairs and maintenance of equipment and tools.

![PDCA Method of Interaction Diagram]

**Fig 17.2.2.1: PDCA Method of Interaction**

**Tips**

- Tell students to respect their supervisor and learn to trust him/her.
- If there is any conflict of thoughts, discuss the same with the supervisor in a humble manner and do not spread bad rumours about your supervisor because of this conflict.
UNIT 17.3: Interacting with Colleagues and Other Departments

Unit Objectives

At the end of this unit, students/Facilitator will be able to:

1. Know the importance of interaction with colleagues and other departments
2. Identify gap areas in their interaction and coordination with colleagues and other departments
3. Identify key elements required for coordination and interaction
4. Implement the learnings in their job role

Resources to be Used

- Whiteboard, whiteboard markers, notepads, pens
- LCD Projector attached to computer or laptop
- Blank sheets of paper
17.3.1: Interact with Colleagues Within and Outside the Department

Elaborate

- Interaction with colleagues and other departments is about working as a team with colleagues and sharing work and work load.
- It also means:
  - Sharing team and individual goals
  - Sharing proper communication regarding work flow and finding out solutions for problems occurring in working together
  - Communication with each other, receiving feedback from Quality checker to achieve best work in time
  - Team coordination
  - Proper work process by interacting with others and adopting best practices

Fig 17.3.1.1: Interaction with Colleagues and Other Departments
17.3.2: Non-Verbal Communication

Elaborate

- When interacting with colleagues and other department personnel’s, one should also remember the non-verbal communication or body language they are portraying to others.
- Sometimes, a wrong body language sign might create conflicts or create opinions about you and others.
- Tell students to always remember, what they do not speak may show in their actions, so be careful about what body language sign they are communicating to others.

Tips

- The wrong body language can create a different impression on one’s colleagues and other departments.
- If there is something that one would like to share with their colleagues or other departments but cannot due to certain reasons, they should inform their supervisor to communicate the same.
UNIT 17.4: Interacting with Outside Parties

Unit Objectives

At the end of this unit, students/Facilitator will be able to:

1. Know the importance of interaction with outside parties
2. Identify gap areas in their interaction and coordination with outside parties
3. Identify key elements required for coordination and interaction
4. Implement the learnings in their job role

Resources to be Used

- Whiteboard, whiteboard markers, notepads, pens
- LCD Projector attached to computer or laptop
- Blank sheets of paper
17.4.1: Intellectual Property (IPR)

Elaborate

- Intellectual Property or IPR is very important for an organization.
- One should restrict or avoid giving such information to outsiders including customers of the company unless decided by the management otherwise.
- IPR includes but is not limited to:
  - Patents
  - Trade Marks
  - Industrial Designs
  - Plant Varieties (Factory Types)
  - Copyrights
  - Geographical Indications
  - Layout Design of an Integrated Circuit
  - Confidential Information

<table>
<thead>
<tr>
<th>Type of Intellectual Property</th>
<th>Rights Covered</th>
</tr>
</thead>
<tbody>
<tr>
<td>Copyright</td>
<td>Use or performance of original works of any type including any form of expression and literature</td>
</tr>
<tr>
<td>Patent</td>
<td>The use, manufacture or the sale of company inventions</td>
</tr>
<tr>
<td>Trademark</td>
<td>The use of symbols, words, names, picture, designs, logo or combination of all the above used by companies to identify particular products, brands or services</td>
</tr>
<tr>
<td>Trade Secrets</td>
<td>The privacy of data, documents, formulas or anything that is mentioned or maintained as confidential information</td>
</tr>
</tbody>
</table>

Tips

- Outsiders can include customers, family members, friends and competitors.
- If you leave the company, then too you are required to follow the confidential agreement of not sharing information about the company with your new employer.
- In case, student finds someone leaking confidential information, they should inform their supervisor or a higher authority in the company.
18. Maintain Health and Safety at Workplace

Unit 18.1 Understand Potential Sources of Accidents
Unit 18.2 Understand Safety Signs and Appropriate Requirements to Be Safe
Unit 18.3 Understand Ergonomics or Bad Posture of Body
Unit 18.4 Fire Safety Rules
Unit 18.5 Understand How to Deal with Emergency Situations
Key Learning Outcomes

At the end of this module, students will be able to:

1. Understand safety procedures
2. Identify potential work hazards
3. Handle an emergency situation at work
4. Conduct CPR in an emergency situation
5. Identify type of fire
6. Identify the right fire extinguisher for different types of fires
7. Use a fire extinguisher
8. Realize the importance of complying with company safety rules and regulations
UNIT 18.1: Understand Potential Sources of Accidents

Unit Objectives
At the end of this unit, students/Facilitator will be able to:
1. Identify the potential sources of accidents at their work place
2. Identify types of potential accidents
3. Prepare themselves to avoid the potential accident
4. Identify rectification measures for avoiding the potential accidents

Resources to be Used
- Whiteboard, whiteboard markers, notepads, pens
- LCD Projector attached to computer or laptop
- Blank sheets of paper
18.1.1: Understand Potential Sources of Accidents

**Elaborate**

- Accidents or hazards mean an incident involving loss of life inside or outside the workplace, suffering injuries internally and/or externally, or release of toxic chemical or explosion or fire, or spilling of hazardous chemical resulting in 'on-site' or 'off-site' emergencies or damage to equipment's leading to stoppage of process or adverse effects to the environment.

- Accidents or hazards usually occur due to:
  - Faulty equipment
  - Improper working conditions
  - Faulty inspection or repairing an equipment or tool without the proper instructions
  - Irregular maintenance of equipment and tools
  - Repairing of faulty equipment by someone who is not qualified to repair
  - Lack of concentration or bringing personal tensions to work
  - Unsafe practices such as plugging wires directly into sockets without a plug
  - Not reading voltage instructions for imported equipment
  - Improper or insufficient safety training
  - Smoking in non-smoking zones
  - Storage of chemicals near heat emitting machines
  - Improper storage of chemicals
  - Improper work clothing or lack of protective gears
  - Exposed wires or wires bitten by rats or other animals
  - Wires with bad insulation
  - Improper electric connections
  - Using wrong tools and equipment in wrong place or plugging into wrong socket
  - Using too many wires in one spike guard or electric socket
  - Bad housekeeping which includes wet floors, sweeping not done, papers thrown on floor, dustbins not covered or emptied
  - Tools and equipment not stored properly after day's work
  - Not unplugging tools and equipment after day's work or during breaks
  - Leaving main switch on of tools and equipment after day's work
  - Non-reporting of hazards to supervisor or ignoring potential dangers

**Field Visit**

- Take students on a tour of their company or work department.
- Ask them to identify potential sources of accidents such as live wires, faulty equipment, chemicals stored incorrectly etc.
Fig 18.1.1.1: Example of a Potential Accident Area

This man was safe ... UNTIL NOW!

Fig 18.1.1.2: Example of a Potential Accident Area
UNIT 18.2: Understand Safety Signs and Appropriate Requirements to be Safe

**Unit Objectives**
At the end of this unit, students/Facilitator will be able to:
1. Identify safety signs at their work place
2. Act in time of emergency situations based on the safety signs and appropriate requirements
3. Identify safety gears that need to be used or worn while working and use it
4. Identify various types of safety signs
5. Refer to safety instructions to avoid any potential accidents
6. Understand importance of cleanliness of their work place

**Resources to be Used**

- Whiteboard, whiteboard markers, notepads, pens
- LCD Projector attached to computer or laptop
- Various safety signs used in factories
- Blank sheets of paper
18.2.1: Understanding Safety Signs

Elaborate

- The meaning and importance of different safety signs.
- To reduce risk of electric shock, always unplug tools and equipment after use.
- Always unplug tool and equipment before changing parts or servicing.
- Do not service tools and equipment if not trained to do so.
- A clean place is a safe place.
- Wear safety gear always such as eye goggles, gloves, apron, face masks, dust masks etc.
- Wash body part or eyes thoroughly with plenty of water if chemical spills on body or if chemical goes into the eyes.
- Use only known medicines, one should not act as a doctor unless trained in first aid.
- In an emergency situation, do not run, only walk to avoid hurting yourself and others.
- Use the stairs in an emergency and not the elevator.
- Know the routes to the emergency exits and flow the safety floor plan of your company.
- Do not rush back into an area which is dangerous for picking up your bag, leave it and exit as directed.
- Follow the evacuation steps provided by your company.

### Physical Hazards

- Explosives
- Flammable Liquids
- Oxidizing Liquids
- Compressed Gases
- Corrosive to Metals

### Health Hazards

- Acute Toxicity
- Skin Corrosion
- Skin Irritation
- CMR STOP Aspiration Hazard

### Env. Hazards

- Hazardous to the Aquatic Environment

*Fig 18.2.1.1: Safety Signs*

**Field Visit**

- Take students on a tour of their company or work department.
- Ask them to identify safety signs and ask them to list the meaning of it.
18.2.2: Safety First

Elaborate

- It is important to wear safety gear while working with tools and equipment.
- Safety gear includes eye goggles, gloves, apron, face mask, dust mask etc.
- Check the voltage instructions before using equipment and tools that are imported to avoid short circuit.
- Follow housekeeping rules such as keeping the work place and work bench clean, unplugging electrical equipment and tools before going on breaks and after finishing the day’s work.
- Use the right plug with the right pin for example if the equipment has been imported from the US, then the plug type will be different, do not use the Indian round plug point with this equipment, get a convertor.
- Circuits and spike guards should not be overloaded than its capacity.
- Check for wires that are running near areas where there is water or other chemicals that may cause a short circuit or potential fire.
- Check for wires that are twisted or the outer layer is torn making the inner wires visible.
- Wipe your hands dry before using any electric equipment or tool.
- Avoid wearing any metal jewellery as they can cause you to get a shock if there is a short circuit in an electric tool or equipment.
- Do not try to be a hero and try to contain the situation all by yourself.
- Work in teams to combat emergency situations.

Field Visit

- Take students on a tour of their company or work department.
- Ask them to identify the safety gears that are used in their company.
- Ask them to check their workplace and identify any areas that may be a threat to them in terms of safety.
UNIT 18.3: Understand Ergonomics or Bad Posture of Body

Unit Objectives

At the end of this unit, students/Facilitator will be able to:
1. Identify the right body postures that will not affect their health
2. Learn to relax their body and not put strain on it while working
3. Identify right body postures while working with certain tools and equipment
4. Understand the need for right body posture
5. Identify areas where they constantly have pain during work
6. Understand importance of ergonomics and its effects on their health

Resources to be Used

- Whiteboard, whiteboard markers, notepads, pens
- LCD Projector attached to computer or laptop
- Blank sheets of paper
18.3.1: Understand Ergonomics or Bad Posture of Body

**Demonstrate**
- Method to hold soldering pen or heat pen correctly to avoid strain on the shoulders.
- Correct and incorrect working postures for example: back bent, neck in the front, computer not at eye level, chair not having a proper back rest, high desk and low chair etc.

**Say**
- If there is constant pain in one area of the neck or head, one should get themselves checked by an orthopaedic.
- The wrong body postures can create health problems such as stiff necks, pain in the entire body, stiff shoulders, cervical spondylosis and many other problems.
- Drink a lot of water to keep yourself hydrated.
- If one is using the washroom often and is drinking a lot of water, then he/she needs to check for any swelling of legs which could be the result of sitting in a wrong posture for a long time.

**Do**
- Show some easy stretching exercises to relax the muscles that can be done sitting on the chair.
UNIT 18.4: Fire Safety Rules

Unit Objectives

At the end of this unit, students/Facilitator will be able to:
1. Identify the different types of fire
2. Identify the causes of fire
3. Identify right type of fire extinguisher and use it on different types of fire
4. Read if the fire extinguisher is refilled or not
5. Understand basic firefighting concepts
6. Know what to do if they are trapped in a fire situation

Resources to be Used

- Whiteboard, whiteboard markers, notepads, pens
- LCD Projector attached to computer or laptop
- All types of fire extinguishers
- Towels, water, fire blankets
- Blank sheets of paper
18.4.1: Fire Safety Rules

**Explain**
- The different types, classes and symbols for fire that can occur in a factory or company.
- The fire safety rules that applies in general and specific to the company the students represent.
- The fire extinguisher codes and what type of fire are they used for.
- The importance of installation date, date of refilling and next due date mentioned on a fire extinguisher.
- RACE  Rescue, Alarm, Contain, Extinguish; basic concepts of firefighting upon discovery of fire or smoke.
- Stairs should be used during a fire rather than the elevator as the stairs are a safer option.
- The other materials that can be used if one is trapped in a fire such as towels or cloth soaked in water and placed on the edge of the door, placing a soaked napkin or cloth over the nose and mouth, lie low to avoid the smoke, torch and use of fire blankets.
- Things that should be avoided during a fire such as switching on the lights, using water on an electrical fire, running, blocking an exit, carrying bags or purses, hiding below wooden benches or near electrical areas.

**Demonstrate**
- How to raise a fire alarm using a sample fire alarm.
- How to use a soaked towel on the edge of the door and on oneself.
- How to lie low in a fire situation to avoid breathing the fumes.

**Do**
- Ask students to go through their company's fire evacuation plan.
- Fire drill with the company codes for fire response.
18.4.2: Using the Fire Extinguisher

**Demonstrate**
- How to hold a fire extinguisher using the PASS method: Pull, Aim, Squeeze, Sweep

**Do**
- Ask students for the fire emergency numbers that they are aware of.

**Lab**
- Ask students to demonstrate how to use a fire extinguisher individually.
- Give a fire type and ask students to give the type of extinguisher that needs to be used.
UNIT 18.5: Understand How to Deal with Emergency Situations

Unit Objectives

At the end of this unit, students/Facilitator will be able to:

1. Identify the different types of emergency
2. Perform CPR
3. Use the first aid kit
4. Check the health of a person who has collapsed and follow the basic steps before medical help arrives
5. Contact the emergency numbers in India
6. Identify solutions to avoid similar emergencies in the future

Resources to be Used

- Whiteboard, whiteboard markers, notepads, pens
- LCD Projector attached to computer or laptop
- First aid kit
- CPR kit
- Blank sheets of paper
18.5.1: Emergency Situations

**Explain**

- Different types of emergency situations that can occur such as:
- Fire or smoke: Is it fire or is it smoke, evaluate situation before taking next step.
- Evacuation: Earthquakes, building unstable are evacuation situations.
- Bomb threat: A bomb threat needs to be dealt by the police, do not try to be a hero, suspect any unknown objects that are not part of the daily work requirements.
- External emergency: Riots are the most common type of external emergency, always check with the local police station if it is safe to go outside, if it is not safe, stay within the company premises after keeping all the valuables in the safe.
- Internal emergency: Any fight between colleagues leading to a fist fight will come under internal emergency.
- Personal threat: Any person who is holding others as hostage with the aid of a weapon will be considered as a personal threat. Do no try to be a hero and disarm the assailant as this may result in injury or death to oneself or others.
- Medical emergency: If a person has collapsed or has had a heart attack, take necessary steps to ensure that medical help is on its way, don’t try to move the person as this may result in complications, do not try to play doctor unless you have been trained to do CPR or first aid. Do not try to give medicines as you may never know what allergic complications may take place.
18.5.2: Dealing with Emergency Situations

Steps – Basic First Aid

- **STEP 1:** Evaluate situation
- **STEP 2:** Call for help
- **STEP 3:** Care for the person
- **STEP 4:** Check response

*Fig 18.5.2.1: Basic First Aid*

**Tips**

- Always participate in emergency drills organized by your company, you may never know when the knowledge will come in use.
- Ask company for a live demonstration of first aid administration.
- Check with company the contents of the first aid box and where it is kept.
- Always report an incident to your supervisor or others, rather than hiding it.
Steps – Basic CPR

Role Play

- Ask 4 students to volunteer for the role play of CPR.
- 2 students will act as the patient and 2 students will follow the basic first aid and the basic CPR steps.
18.5.3: Solving the Issue

- How to solve the emergency issues to avoid the same in the future.

**Incident Priorities**
1. Life Safety
2. Incident Stabilization
3. Proper Conservation

**Explanation:**
- Site Management and Control
- Identify the Problem
- Hazard and Risk Evaluation
- Select Personal Protective Equipment
- Information Management and Resource Coordination
- Implement Response Objectives
- Decontamination
- Terminate the Incident

*Fig 18.5.3.1: Solving the Issue*
19. Employability & Entrepreneurship Skills

Unit 19.1 – Personal Strengths & Value Systems
Unit 19.2 – Digital Literacy: A Recap
Unit 19.3 – Money Matters
Unit 19.4 – Preparing for Employment & Self Employment
Unit 19.5 – Understanding Entrepreneurship
Unit 19.6 – Preparing to be an Entrepreneur
This Facilitator’s guide includes various activities which will help you as a facilitator to make the sessions participative and interactive.

Ice breaker
- You can begin the module with the following ice breaker:

Five of Anything Ice Breaker Steps:
- Divide the participants into groups of four or five by having them number off. (You do this because people generally begin a meeting by sitting with the people they already know best.)
- Tell the newly formed groups that their assignment is to share their five favourite movies of all time, their five favourite novels or their five least liked films. The topic can be five of anything - most liked or disliked.
- This ice breaker helps the group explore shared interests more broadly and sparks lots of discussion about why each person likes or dislikes their selected five.
- Tell the groups that one person must take notes and be ready to share the highlights of their group discussion with the class upon completion of the assignment.

Expectation Mapping
1. During the first session and after ice breaker session, ask the participants to answer the following question: "What do I expect to learn from this training?"
2. Have one of the participants write their contributions on a flip chart sheet.
3. Write down your own list of covered material in the training on another flip chart sheet.
4. Compare the two sheets, commenting on what will and what will not be covered during the training.
5. Set some ground rules for the training sessions. Ask the participants to put these rules on a flipchart and display it in the class.
6. You may get back to those sheets once again at the end of the last session of the training.
7. Benefits of doing this activity:
   - Participants feel better as their opinions are heard.
   - Participants get to know what they should expect from the training.
   - The facilitator gets to know which points to emphasize, which to leave out, and which to add during the training.
8. Expectations from the participants:
   - Must sign the attendance sheet when they arrive for class.
   - Conduct themselves in a positive manner
   - Be punctual, attentive, and participative
9. Explain the contents that are going to get covered one by one and connect it with the expectation mapping done earlier.
10. By the end of this exercise, the participants should have a clear understanding of what to expect from the session and what are the areas that will not get covered.

Defining Objectives
1. Defining the objectives in the beginning of the units sets the mood for the unit.
2. To begin with the end in mind sets the expectations of the participants as what could be the important takeaways from the session.
3. It is also a way of making participants take responsibility of their own learning process.
4. For the facilitator, the objectives decide a designed path to progress on so that the learning stays aligned and on track.
5. Read the objectives slowly, one by one, and ask the participants to explain what they think it means.
6. At the end of the session, you could again revisit the objectives to find out from the participants about how many objectives have been achieved.

In order to effectively facilitate this workshop:

1. You must have thorough knowledge of the material in the Participant Handbook, and be prepared to answer questions about it.
2. You may also wish to read other material to enhance your knowledge of the subject.
3. There may be issues raised with which you are not able to deal, either because of lack of time or knowledge. You can either state that you will obtain answers and get back to the participants with the information. Incase the query can be turned to an assignment to the class, do so. You can work with the the participants on the assignement.
4. You must have a very clear understanding of what the participants want to accomplish by the end of the workshop and the means to guide the participants.
5. As the facilitator, it is your responsibility to make sure that all logistical arrangements are made for the workshop. This may involve doing it yourself or confirming that someone else has made all necessary arrangements associated with the workshop. Assume nothing and check everything before the workshop begins.
6. To break the monotony and boredom during sessions, introduce mini breaks in the form of stretching exercises, jokes, some group songs or games.
7. Invite discussion from the participants.
8. Probe the participants further and lead them to come to affirmative conclusions.
9. Let the participants answer. No answer is incorrect.
10. Ask one participant to write all the points on the whiteboard.
11. Build the sessions from the answers provided by the class.
12. Prepare for the sessions in advance so that the resources like flipcharts, handouts, blank sheets of paper, marker pens, etc. can be kept ready.
13. Ensure that resources like board, markers, duster etc. is available before your session starts.

General instructions for role playing:

1. You are not being asked to be an actor or to entertain. The purpose of the role play is to provide a situation in which you can practice certain skills.
2. When you read the brief, try to imagine yourself in the situation described and behave in a way you feel to be natural, but be conscious of the fact that your role may require a different approach from that which you might normally use.
3. You (and others) may benefit from the change in approach and behaviour. Therefore, try to use the approach you feel to be most appropriate for the circumstances described in your brief.
4. The brief is just the starting point. It simply sets the scene and the tone of session or activity. Try not to keep referring to the brief as this will affect the spontaneity of the meeting. Allow the role play to develop as you think it might in real life and change your reactions in line with the behaviour and responses of others involved.
5. If you find that you have too little information to answer questions or to describe what has happened in the situation, do feel free to add your own thoughts and ideas. Try to keep these within the framework of the role you are taking and try to make your improvisations as realistic as possible.
Key Learning Outcomes

At the end of this unit, students/Facilitator will be able to:

1. Explain the meaning of health
2. List common health issues
3. Discuss tips to prevent common health issues
4. Explain the meaning of hygiene
5. Discuss the purpose of Swacch Bharat Abhiyan
6. Explain the meaning of habit
7. Discuss ways to set up a safe work environment
8. Discuss critical safety habits to be followed by employees
9. Explain the importance of self-analysis
10. Discuss motivation with the help of Maslow’s Hierarchy of Needs
11. Discuss the meaning of achievement motivation
12. List the characteristics of entrepreneurs with achievement motivation
13. List the different factors that motivate you
14. Discuss the role of attitude in self-analysis
15. Discuss how to maintain a positive attitude
16. List your strengths and weaknesses
17. Discuss the qualities of honest people
18. Describe the importance of honesty in entrepreneurs
19. Discuss the elements of a strong work ethic
20. Discuss how to foster a good work ethic
21. List the characteristics of highly creative people
22. List the characteristics of highly innovative people
23. Discuss the benefits of time management
24. List the traits of effective time managers
25. Describe effective time management technique
26. Discuss the importance of anger management
27. Describe anger management strategies
28. Discuss tips for anger management
29. Discuss the causes of stress
30. Discuss the symptoms of stress
31. Discuss tips for stress management
19.1.1: Health, Habits, Hygiene: What is Health?

**Unit Objectives**
At the end of this unit, students/Facilitator will be able to:
- Explain the meaning of health
- List common health issues
- Discuss tips to prevent common health issues
- Explain the meaning of hygiene
- Discuss the purpose of Swachh Bharat Abhiyan
- Explain the meaning of habit

**Resources to be Used**
- Participant Handbook

**Ask**
- What do you understand by the term “Health?”
- According to you, who is a healthy person?

**Say**
- Discuss the meaning of health and a healthy person as given in the Participant Handbook.

**Ask**
- When did you visit the doctor last? Was it for you or for a family member?

**Say**
- Discuss the common health issues like common cold, allergies etc. Refer to the Participant Handbook.
- Let us do a small activity. I will need some volunteers.

**Role Play**
- Conduct a small skit with volunteers from the class. Consider one of the villagers has been appointed as a health representative of the village, what measures will you as a health representative suggest to the common villagers to prevent common health issues discussed.
- You will need at least 4 volunteers (Narrator, Health Representative, Head of the Village, Doctor).
- Explain the health concerns of the village to the Narrator. The Narrator will brief the class about the skit.
- Give the group of volunteers 5 minutes to do discuss.
- At the end of 5 minutes, ask the group to present the skit to the class assuming them as the villagers.
- The class can ask questions to the group as a common villager.

**Summarize**
- Through this activity we got some tips on how can we prevent these common health issues.
Say 🎤

- Let us now see how many of these health standards we follow in our daily life.

Activity 🎤

- Health Standard Checklist from the Participant Handbook.

Ask 🎤

- How many of you think that you are healthy? How many of you follow healthy habits?

Say 🎤

- Let’s do an exercise to find out how healthy you are.
- Open your Participant Handbook section ‘Health, Habits, Hygiene: What is Health?’, and read through the health standards given.
- Tick the points which you think are true for you.
- Try to be as honest as possible as this test is for your own learning.

Do ✅

- Ensure that all the participants have opened the right page in the Participant Handbook.
- Read aloud the points for the participants and explain if required.
- Give them 5 minutes to do the exercise.
- At the end of 5 minutes, ask the participants to check how many ticks have they got.

Summarize 🎨

- Tell them that they need to follow all the tips given in this checklist regularly in order to remain healthy and fit.

Ask 🎤

Discuss:

- Is it necessary to practice personal hygiene every day? Why?
- How does a person feel when they do not practice good personal hygiene? Why?
- Can good personal hygiene help a person feel good about his/her self? How?

Say 🎤

- Discuss the meaning of hygiene as given in the Participant Handbook.

Activity 🎤

- Health Standard Checklist: Hygiene
Say
- Let's do an exercise to find out if we maintain good hygiene habits or not.
- Open the Participant Handbook and read through the Health Standard checklist given.
- Tick the points which you think are true for you.
- Try to be as honest as possible as this test is for your own learning.

Do
- Ensure that all the participants have opened the right page in the Participant Handbook.
- Read aloud the points for the participants and explain if required.
- Give them 5 minutes to do the exercise.
- At the end of 5 minutes, ask the participants to check how many ticks have they got.
- Ask them to calculate their score.
- Tell them what each score indicates by reading aloud what has been mentioned in the Participant Handbook.

Ask
- How many of you have heard about “Swachh Bharat Abhiyan”?
- Can you tell the class what it is about?

Summarize
- Tell them about Swachh Bharat Abhiyan as given in the Participant Handbook and request them to take a pledge to keep our country clean.

Ask
- What is a habit?

Say
- Discuss some good habits which can become a way of life.

Summarize
- Tell them about good and bad habits and the reasons to make good habits a way of life.
19.1.2: Safety

Unit Objectives
At the end of this unit, students/Facilitator will be able to:
- Discuss ways to set up a safe work environment
- Discuss critical safety habits to be followed by employees

Resources to be Used
- Participant Handbook
- Safety signs and symbols
- Safety equipments
- Blank papers
- Pens

Say
- There are many common safety hazards present in most workplaces at one time or another. They include unsafe conditions that can cause injury, illness and death.
- Safety Hazards include:
  - Spills on floors or tripping hazards, such as blocked aisles or cords running across the floor.
  - Working from heights, including ladders, scaffolds, roofs, or any raised work area.
  - Unguarded machinery and moving machinery parts; guards removed or moving parts that a worker can accidentally touch.
  - Electrical hazards like cords, missing ground pins, improper wiring.
  - Machinery-related hazards (lockout/tag out, boiler safety, forklifts, etc.)

Team Activity
Safety Hazards
- There are two parts to this activity.
- First part will cover the potential safety hazards at work place.
- Second part will cover a few safety signs, symbols and equipments at work place.
- Use this format for the first part of the activity.

<table>
<thead>
<tr>
<th>PART 1</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hazard</td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td></td>
</tr>
</tbody>
</table>

Ask
- How could you or your employees get hurt at work?
• Let's understand it better with the help of an activity. You will be given a handout within your groups. You have to think about the possible hazards of your workplace, what damage these hazards could cause and about the corrective action.

• Divide the class into five to six groups of four participants each.
• Put the format on the board for the activity.
• Give blank papers and pens to each group.
• The group is expected to think and discuss the potential safety hazards in the workplace.
• Ask the group to discuss and fill the format using the blank sheet.
• Give the groups 5 minutes for the activity.
• For the second part of the activity, show the class some pictures of safety signs, symbols and equipments.
• Now they will put down a few safety symbols, signs or equipment against the safety hazards identified.
• Give them 5 to 10 minutes to discuss and draw/note it.
• At the end of 10 minutes the groups will present their answers to the class.

• Now, let's discuss the answers with the class.
• All the groups will briefly present their answers.

• Ask the audience to applaud for the group presentation.
• Ask de-brief questions to cull out the information from each group.
• Keep a check on time.
• Tell the group to wind up the discussion quickly if they go beyond the given time limit.

• What did you learn from the exercise?
• As an entrepreneur, is it important to ensure the safety of your employees from possible hazards? Why?

• Ask the participants what they have learnt so far.
• Ask if they have any questions related to what they have talked about so far.
• Close the discussion by summarizing the tips to design a safe workplace and non-negotiable employee safety habits.
19.1.3: Self Analysis - Attitude, Achievement Motivation: What is Self Analysis?

Unit Objectives
At the end of this unit, students/Facilitator will be able to:
- Explain the importance of self-analysis
- Discuss motivation with the help of Maslow's Hierarchy of Needs
- Discuss the meaning of achievement motivation
- List the characteristics of entrepreneurs with achievement motivation
- List the different factors that motivate you
- Discuss the role of attitude in self-analysis
- Discuss how to maintain a positive attitude
- List your strengths and weaknesses

Resources to be Used
- Participant Handbook
- Old newspapers
- Blank papers
- Pencils/ pens

Activity
- This is a paper pencil activity.
  
<table>
<thead>
<tr>
<th>Question</th>
</tr>
</thead>
<tbody>
<tr>
<td>What are the three sentences that describe you the best?</td>
</tr>
<tr>
<td>What do you need to live happily?</td>
</tr>
<tr>
<td>What are your strengths and weaknesses?</td>
</tr>
</tbody>
</table>

Do
- Write the three questions on the board/flipchart before the session begins.
- Give plain papers and pencils/pens to each participant.
- Tell participants to write the answer for the three questions on the paper.
- Tell them the purpose of this activity is not to judge anyone but to understand more about self.

Say
- Discuss the concept of Self Analysis and motivation with reference to Maslow's Hierarchy of Needs as discussed in the Participant Handbook.

Team Activity
- Tower building
  - Each group which will create tower using the old newspapers.
Do

- Divide the class into groups.
- Give them some old newspapers.
- The task is to create a tower out of the newspapers.
- The group which will create the highest tower standing on its own will be considered the winning group.
- Groups can use as many newspapers as they want to and in any way they want.

Ask

- What did the winning group do differently?
- If you were given a chance, how would you have made the tower differently?
- How did you feel while making the tower?
- Did you feel motivated?

Say

- Discuss the concept of achievement motivation and characteristics of entrepreneurs with achievement motivation as discussed in the Participant Handbook.

Ask

- Is your attitude positive or negative?

Say

- Let me tell you a story:

**It's Little Things that Make a Big Difference.**

There was a man taking a morning walk at the beach. He saw that along with the morning tide came hundreds of starfish and when the tide receded, they were left behind and with the morning sun rays, they would die. The tide was fresh and the starfish were alive. The man took a few steps, picked one and threw it into the water. He did that repeatedly. Right behind him there was another person who couldn't understand what this man was doing. He caught up with him and asked, “What are you doing? There are hundreds of starfish. How many can you help? What difference does it make?” This man did not reply, took two more steps, picked up another one, threw it into the water, and said, “It makes a difference to this one.” What difference are we making? Big or small, it does not matter. If everyone made a small difference, we’d end up with a big difference, wouldn’t we?

Ask

- What did you learn from this story?

Activity

**What Motivates You?**

- This is an individual activity.
- It is an exercise given in the Participant Handbook.

Do

- Ask the class to open their Participant Handbook and complete the exercise given in the section What Motivates You?
- Ensure that the participants have opened the correct page for the activity.
- Give the class 5 minutes to complete the activity.
- Discuss the concept of attitude and how to cultivate a positive attitude as discussed in the Participant Handbook.

- Close the discussion by summarizing how self-analysis, knowledge about what motivates you and your positive attitude can help in your business as well in life.
19.1.4: Honesty & Work Ethics

Unit Objectives
At the end of this unit, students/Facilitator will be able to:
- Discuss the qualities of honest people
- Describe the importance of honesty in entrepreneurs
- Discuss the elements of a strong work ethic
- Discuss how to foster a good work ethic

Resources to be Used
- Participant Handbook

Ask
- What do you understand by honesty?
- Why is it important for entrepreneurs to be honest?
- Do you remember any incident where your honesty helped you in gaining confidence?
- Do you remember any incident where someone lost business due to dishonesty?

Say
- Talk about honesty, qualities of an honest person, and the importance of honesty in entrepreneurs as discussed in the Participant Handbook.
- “Let’s understand it better with the help of some case scenarios. You will be given some cases within your groups. You have to analyse the case scenario that has been given to you and then find an appropriate solution to the problem.
- Keep your discussion focussed around the following:
  - What went wrong?
  - Who was at fault?
  - Whom did it impact- the customer or the businessman?
  - How would it impact the business immediately? What would be the long term impact?
  - What could be done?
  - What did you learn from the exercise?

Do
- Divide the class into four groups of maximum six participants depending on the batch size.
- Give one case study to each group.
- Instruct them to read the case carefully.
- Put down the de-brief questions on the board and ask the groups to focus their discussion around these questions.
- The group is expected to analyse and discuss the case amongst them and find a solution to the given problem. Give the class 5-10 minutes to discuss the case and note down their solutions.
- At the end of 10 minutes the team should present their case solution to the class. The presentation can be a narration or a role play.
- Ask the group to select a group leader for their group. The group leader to discuss and assign roles to the group members for the presentation.
Team Activity

Case Study Analysis

Scenario 1
Aakash has a small mobile retail sales and repair shop in Allahabad. He has one of the most popular outlets and has great rapport with his customers.

It’s around 11 AM when a customer barges in to the shop and starts shouting at Aakash for giving her a faulty instrument. The screen of her mobile is cracked from one side. Aakash remembered thoroughly checking the handset before handing it over to the customer. The customer threatens to sue him and to go to Consumer Court for cheating her. Now, the problem occurred somewhere outside the shop but as other customers were listening to the conversation, it might impact his business. The situation needs to be managed very sensitively. What would you do if you were in Aakash’s place?

Scenario 2
Rajni does beautiful Phulkari embroidery on suits and sarees. She has a small home-based business. She has a huge list of customers on Facebook and WhatsApp who give her orders regularly. Smita is one of her old and regular customers. As her sister-in-law’s wedding was around the corner, Smita wanted to buy few handcrafted Phulkari duppattas. She placed an order for three duppattas via WhatsApp and requested Rajni to send them as soon as possible. When the parcel reached Smita through courier she found that out of the three duppattas, only one was hand embroidered and the other two had machine embroidery on them. Even the length and the quality of the material was not as desired. Smita was heartbroken. It was a complete waste of money and moreover she couldn’t wear what she had planned to during the wedding functions. She sent a message to Rajni on WhatsApp, expressing her anger and disappointment.

Smita has also sent a feedback and expressed her disappointment on the social media... this will directly affect Rajni’s business. What would you do if you were in Rajni’s place?

Scenario 3
Shankar is a tattoo artist who has a small tattoo showroom in a big, reputed mall in New Delhi. Mr Saksham had an appointment for today, at 11:00 am but he reached at 11:50 am. Meanwhile, Shankar had to reschedule his next appointment. After availing Shankar’s services, Mr Saksham started yelling in an abusive language, refusing to pay the requisite amount, and finding faults in the services provided by him. Who was at fault in this case? What should Shankar do? Should he confront Saksham or give in to the demands of the client?

Scenario 4
Shailender is an online cloth reseller who does business through social networking sites such as Facebook and WhatsApp. Priyanka made online payment for a dress to Shailander. But she did not receive the dress for a month. When she asked for a cancellation, Shailander started misleading her. For almost 45 days, he kept promising her that he will pay the amount today, tomorrow, day after etc. Even after repeated calls and messages when she did not receive the payment or the dress, she decided to write a post against him on a popular social media platform. As a result, Shailender lost lots of customers and his flourishing business faced a major crisis. How could this situation have been managed?

Say

• Now, let's discuss the problem and solution with the larger group.
• The group will first briefly describe the case to the class.
• Then discuss the issue identified and the proposed solution.
• Once the presentation is over, the class can ask their questions.
Do

- Congratulate each group for the group presentation.
- Ask the audience to applaud for them.
- Ask de-brief questions to cull out the information from each group.
- Keep a check on time. Tell the group to wind up the discussion quickly if they go beyond the given time limit.

Summarize

- Ask the participants what they have learnt from the exercise/activity.
- Ask if they have any questions related to what they have talked about so far.
- Close the discussion by summarizing the importance of honesty and work ethics for entrepreneurs.
19.1.5: Creativity and Innovation

Unit Objectives
At the end of this unit, students/Facilitator will be able to:
• List the characteristics of highly creative people
• List the characteristics of highly innovative people

Resources to be Used
• Participant Handbook
• Chart papers
• Marker pens

Ask
• You must be aware of the term 'Rags to riches' and heard stories related to the term.
• What do these stories tell us?
• What was so special about these people?

Say
• Let’s have a look at these stories.
• There are some inspiring stories about people which I would like to share with you.
• Narrate these stories to the class.

A.P.J. Abdul Kalam
Who has not heard of A.P.J. Abdul Kalam: Avul Pakir Jainulabdeen Abdul Kalam hailed from a very humble background. His father was a boat owner. To help his family, Kalam would work as a newspaper vendor. With limited resources, he graduated in Physics and studied aerospace engineering. He was instrumental in India’s step towards nuclear energy. In 2002, he became the 11th President of India.

Water filter/purifier at source
Two young boys studying in classes 4 and 5, from Lingzya Junior High School, Sikkim designed a simple innovative low cost water purifier.
Inspiration behind the idea: Most people today prefer to use a water filter/purifier at their home.
Both the children have given idea to have filter/purifier at the source of water so that everyone has access to clean water without having to make an investment in purchasing a filter/purifier.
Soring’s idea is to have a centralised purification system at the point of distribution like water tank while Subash’s idea is to have such purifiers attached to public taps.

Solar seeder
This is a story of a innovative solar seeder and developed by Subash Chandra Bose, a class 8, student from St Sebasthiyar Matriculation School, Pudukkottai, Tamil Nadu. Subash has developed a solar powered seed drill, which can undertake plantation for different size of seeds at variable depth and space between two seeds.
Looms for physically challenged

Now this is really inspiring of two sisters, Elakkiya a Class 6 student and Pavithra a Class 9 student of SRC Memorial Matriculation, Erode, Tamil Nadu.

The two sisters have come up with loom for lower limbed physically challenged. In their loom they have replaced the pedal operated system with a motor and a gearbox attached to a pulley mechanism.


Ask

• If they can, why can't you?
• Discuss concepts related to ‘Creativity and Innovation’ with the participants as given in the Participant Handbook.

Say

• Recall the stories on motivation.
• What is the inner drive that motivates people to succeed?
• Let’s learn more about such creative and innovative entrepreneurs with the help of an activity.

Team Activity

• This is a group activity.

  Activity De-brief
  • Why did you choose this particular entrepreneur?
  • What is his/her brand name?
  • What creativity does he/she possess?
  • What was innovative about their ideas?

Do

• Instruct the participants that this is group work.
• Divide the class into small groups of 4 or 6 depending on the batch size.
• Give each group a chart paper.
• Tell the participants they have to write a few lines about any one famous entrepreneur.
• Give the participants 10 minutes to discuss and write.
• Keep a check on time. Tell the group to wind up quickly if they go beyond the given time limit.
• Ask each group to read out what they have written.
• Ask the de-brief questions.
Summarize

- Summarize the unit by asking participants if they know of some people who are highly creative and innovative in their approach.
- Ask them to share some experiences about these people with the class.

Notes for Facilitation

- Source for stories on innovations:
19.1.6: Time Management

Unit Objectives

At the end of this unit, students/Facilitator will be able to:

- Discuss the benefits of time management
- List the traits of effective time managers
- Describe effective time management techniques

Resources to be Used

- Participant Handbook

Ask

Does this sound like you?

- I can never get enough time to finish what I am doing in a day.
- I have so many things to do that I get confused.
- I want to go for a walk and exercise, but I just do not have the time.
- I had so much to do, so I could not deliver that order on time.
- I would love to start my dream business; but, I just do not have the time.

Example

Let's look at these two examples:

Example 1:
Ankita works from home as a freelance writer. She says she can easily put in 8 hours of dedicated work in a day. Because she works from home, she saves money on travel and has a comfortable work routine. But there is a challenge and it is distraction. As she works from home, she can easily just get up and sit down on the sofa to watch TV, wasting valuable time. She may have chores to do, errands to run and bills to pay. She ends up working only two to three hours a day and the result is, her work gets piled up. She is unable to take on more work due to this. Even though her quality of work is appreciated her clients are not very happy about the delay in submission.

Example 2:
Javed has started a successful online selling company from home and makes a good living from his sales. He has set up a small office space in his living room. As both his parents are working full-time, he also has the role of taking care of his two younger siblings. He almost spends half of his day with the younger kids. He does not mind it but it means taking time away from the work. He is still able to manage his online business with these commitments. He wants to spend some more dedicated hours so as to increase his profits. He also wants to look into new business avenues. What should he be doing.

Ask

- Does this happen with you too?
- Do you find it difficult to prioritize your work?
- Are you able to manage your time effectively?
Activity

- Conduct a group discussion based on the above examples.
- Direct the discussion on how to prioritize work and manage time effectively.

Say

- Time management is not only about how hard you work but also about how smart you work.
- Discuss “What is Time Management” with the participants as given in the Participant Handbook.

Ask

- Why is it important to manage time? How does it help?
- What happens when you don’t manage your time effectively?
- Do you find it difficult to prioritize your work?

Say

- Discuss the benefits of time management given in the Participant Handbook.
- Let’s learn effective time management with the help of an activity.

Activity

Effective Time Management

- This activity has two parts:

  **PART 1**
  **TO-DO LIST**
  - You have to make a to-do list.
  - List all of the activities/tasks that you have to do.
  - Try to include everything that takes up your time, however unimportant it may be.
  - If they are large tasks, break them into action steps, and write this down with the larger task.
  - You can make one list for all your tasks or have separate to-do lists for personal and professional tasks.

  **PART 2**
  **URGENT-IMPORTANT GRID**
  - You have to make a grid as shown on the board here.
  - This grid has four boxes. As you can see, each box has a different heading.
  - At the heart of the urgent-important grid, are these two questions:
    - Is this task important?
    - Is this task urgent?
  - Now, you have to think about each activity that you have written in your to-do list and put it into one of the four categories.
  - **What do these categories depict?**
  - **Category 1: Urgent/Important**
    - This category is for the highest priority tasks. They need to get done now.
• **Category 2: Not Urgent/Important**
  - This is where you want to spend most of your time.
  - This category allows you to work on something important and have the time to do it properly.
  - This will help you produce high quality work in an efficient manner.
  - The tasks in this category are probably the most neglected ones, but also the most crucial ones for success.
  - The tasks in this category can include strategic thinking, deciding on goals or general direction and planning all vital parts of running a successful business.

• **Category 3: Urgent/Not Important**
  - This is where you are busy but not productive. These tasks are often mistaken to be important, when they’re most often busywork.
  - Urgent but not important tasks are things that prevent you from achieving your goals.
  - However, some may be activities that other people want you to do.

• **Category 4: Not Important and Not Urgent**
  - This category doesn’t really include tasks, but rather habits that provide comfort, and a refuge from being disciplined and rigorous with your time management.
  - Some may be activities that other people want you to do.
  - These might include unplanned leisure activities as well.

### TO-DO list format

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<td>15</td>
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</tbody>
</table>
URGENT-IMPORTANT GRID

URGENT/ IMPORTANT
- Meetings
- Last minute demands
- Project deadlines
- Crisis

NOT URGENT/ IMPORTANT
- Planning
- Working towards goals
- Building relationship
- Personal commitments

URGENT/ NOT IMPORTANT
- Interruptions
- Phone calls/ E-mails
- Other people’s minor demands

NOT URGENT/ NOT IMPORTANT
- Internet surfing
- Social media
- Watching TV
- Not URGENT/ NOT IMPORTANT

URGENT/ IMPORTANT GRID format
**Do**

- Put down the formats for the to-do list and the urgent/important grid on the board.
- Instruct the participants to prepare their to-do list first.
- Give the participants 10 minutes to prepare the list.
- Once done, instruct them to divide the tasks in to-do list into the four categories.
- Explain the four categories to the participants giving examples specific to their context.
- As you explain the categories fill the grid with the type of tasks.
- Give the participants 40 minutes to fill the grid.
- Then explain how to balance the tasks between the four categories.
- Keep a check on time. Tell the group to wind up quickly if they go beyond the given time limit.

**Say**

**Activity De-brief:**

**How can we balance tasks between the four categories?**

**How to manage time through this grid?**

- **Category 1: Urgent/Important**
  - Try to keep as few tasks as possible here, with the aim to eliminate.
  - If you spend too much of your time in this category, you are working solely as a trouble shooter, and never finding time to work on longer-term plans.

- **Category 2: Not Urgent/Important**
  - Plan these tasks carefully and efficiently as they are most crucial ones for success.
  - If necessary, also plan where you will do these tasks, so that you're free from interruptions.
  - Include strategic thinking, deciding on goals or general direction and planning in your planning process.

- **Category 3: Urgent/Not Important**
  - Ask yourself whether you can reschedule or delegate them.
  - A common source of such activities is other people. Sometimes it's appropriate to say "no" to people politely, or to encourage them to solve the problem themselves.

- **Category 4: Not Important and Not Urgent**
  - You also want to minimize the tasks that you have in this category.
  - These activities are just a distraction avoid them if possible.
  - You can simply ignore or cancel many of them.
  - Politely say "no" to work assigned by others, if you can, and explain why you cannot do it.
  - Schedule your leisure activities carefully so that they don't have an impact on other important tasks.
- Discuss the traits of effective time managers and effective time management techniques as given in the Participant Handbook.

**Summarize**

- Discuss the traits of effective time managers and effective time management techniques as given in the Participant Handbook.
Notes for Facilitation

- Here is a short story. You can conclude the session narrating the story. To make it more interesting you can perform the demonstration described and discuss the short story.

- One day an expert in time management was speaking to a group of students. As he stood in front of the group, he pulled out a large wide-mouthed glass jar and set it on the table in front of him. Then he took out a bag of about a dozen rocks and placed them, one at a time, into the jar. When the jar was filled to the top and no more rocks would fit inside, he asked, "Is this jar full?" Everyone in the class said, "Yes." Then he said, "Really?"

- He reached under the table and pulled out a bucket of gravel (small stones). He dumped some gravel in and shook the jar causing pieces of gravel to work themselves down into the space between the rocks. Then he asked the group once more, "Is the jar full?" By this time, the class began to understand. "Probably not," one of them answered. "Good!" he replied.

- He reached under the table and brought out a bucket of sand. He started dumping the sand in the jar and it went into all of the spaces left between the rocks and the gravel. Once more he asked the question, "Is this jar full?" No!" the class shouted. Once again he said, "Good." Then he grabbed a jug of water and began to pour it in until the jar was filled to the brim. Then he looked at the class and asked, "What is the point of this illustration? "One student raised his hand and said, "No matter how full your schedule is, if you try really hard you can always fit some more things in it!" "No," the speaker replied, "that's not the point. The truth this illustration teaches us is: If you don’t put the big rocks in first, you’ll never get them in at all." What are the 'big rocks' in your life? Your children; your loved ones; your education; your dreams; a worthy cause; teaching or mentoring others; doing things that you love; time for yourself; your health; your mate (or significant other). Remember to put these BIG ROCKS in first or you’ll never get them in at all. If you sweat about the little stuff (the gravel, sand, and water) then you’ll fill your life with little things you worry about that don’t really matter, and you’ll never have the time you need to spend on the big, important stuff (the big rocks).

- End the story with these lines...

So, tonight, or in the morning tomorrow, when you are reflecting on this short story, ask yourself this question: What are the 'big rocks' in my life? Then, put those in your jar first
19.1.7: Anger Management

Unit Objectives
At the end of this unit, students/Facilitator will be able to:

- Discuss the importance of anger management
- Describe anger management strategies
- Discuss tips for anger management

Resources to be Used
- Participant Handbook

Ask
- What is anger? Is anger good or bad?
- Is anger normal or an abnormal behaviour? How can anger harm you?
- Why is it important for entrepreneurs to manage their anger?

Say
- Talk about anger and the importance of anger management in entrepreneurs as discussed in the Participant Handbook.
- Let us do a small activity. This is an individual activity.
- Think of the incidents and situations that angered you and hurt you.

Do
- Instruct them to note down these situations under different categories (as given in the Activity).
- Give the class 3-5 minutes to think and note down their answers.
- At the end of 5 minutes, ask some participants to volunteer and present their answers.
- They can also share these situations with their fellow participants if they do not wish to share it with the entire class.

Activity
- Do you remember any incident which has hurt
  - you physically
  - you mentally
  - your career
  - your relationships.

Ask
- Do you ever get angry?
- What are the things that make you angry?
- Do you remember any incident where your anger management helped you in maintaining healthy relationship?
- Do you remember any incident where someone lost business/friend/relationship due to temper (anger)?
Say

- There are a few strategies which can help in controlling your anger. Let’s do an activity to understand the anger management process better.
- This is an individual activity.
- Think of the incidents/ situations which trigger your anger (the cause).
- Then think what happened as a result of your anger (the effect).
- You need to come up with some techniques to manage your anger.

Do

- Give the class the anger triggers (the cause) as listed in the activity.
- Put down the activity format (Anger Triggers, Result of your Anger, Anger Management Techniques) on the board and instruct the class to write the answers under different categories.
- Give the class 3-5 minutes to think and note down their answers.
- At the end of 5 minutes, ask the participants who wish to volunteer and present their answers.

Activity

Trigger points and Anger Management Techniques Activity

**Anger Triggers**

<table>
<thead>
<tr>
<th>List of triggers that make you angry:</th>
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<tbody>
<tr>
<td>Someone says you did something wrong.</td>
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<tr>
<td>You want something you can’t have now.</td>
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<tr>
<td>You get caught doing something you shouldn’t have been doing.</td>
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<tr>
<td>You are accused of doing something you didn’t do.</td>
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<tr>
<td>You are told that you can’t do something.</td>
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<tr>
<td>Someone doesn’t agree with you.</td>
</tr>
<tr>
<td>Someone doesn’t do what you tell him to do.</td>
</tr>
<tr>
<td>Someone unexpected happens that messes up your schedule.</td>
</tr>
</tbody>
</table>

**Result of your anger:**
Write the techniques that you use to manage your anger:

Anger Management Techniques

Say

- Now, let's discuss the problems and solution with all.
- The individual will first briefly describe trigger points to the class.
- Then discuss the result of the anger. Other participants are requested to remain quiet while one is making the presentation.
- Post presentation, other participants may ask questions.

Do

- Congratulate each individual for sharing their points.
- Ask the audience to applaud for them.
- Ask de-brief questions after the presentation to the class.
- Keep a check on the time. Ask the participants to wind up the activity quickly if they go beyond the given time limit.

Ask

De-brief questions:

- In the situation described by the presenter, who was at fault?
- How could you have handled this situation alternatively?

Summarize

- Close the discussion by summarizing the strategies and tips of anger management for entrepreneurs.
- Ask the participants what have they learnt from this exercise/activity.
- Ask if they have any questions related to what they have talked about so far.

Notes for Facilitation

- Encourage the participants to share information about them while presenting the situations to the class.
- Keep the format of the Activity prepared in a chart paper so that it can be displayed during the session.
19.1.8: Stress Management: What is stress?

**Unit Objectives**

At the end of this unit, students/Facilitator will be able to:

- Discuss the causes of stress
- Discuss the symptoms of stress
- Discuss tips for stress management

**Resources to be Used**

- Participant Handbook

**Ask**

- You are waiting in the reception for an interview or a very important meeting, suddenly your legs are shaky, your hands are cold, you are feeling nervous. Have you ever been in this kind of situation?
- Have you had days when you had trouble sleeping?
- Have you ever been so worried about something that you ended up with a terrible headache?

**Say**

- You’ve probably heard people say, I’m really stressed out” or ”This is making me totally stressed.”

**Ask**

- What do you understand by stress?
- What gives you stress?
- How do you feel when you are stressed or what are the symptoms of stress?
- How can stress harm you?
- Why is it important for entrepreneurs to manage stress?

**Say**

- When we feel overloaded or unsure of our ability to deal with certain challenges, we feel stressed.
- Discuss about stress, causes of stress, and symptoms of stress as discussed in the Participant Handbook.
- Let’s understand the causes of stress and how to deal with them with the help of some case scenarios.
- You will be given some cases.
- You have to analyse the case scenario and then find an appropriate solution to the problem.
- This will be a group activity.

**Do**

- Divide the class into four groups of 5-6 participants (depending on the batch size).
- Assign one case scenario to each group.
- Instruct them to read the case carefully.
- The group is expected to analyse and discuss the case amongst them and find a solution to the given problem.
- Explain their discussion should result in getting answers for the following questions:
Case Study Analysis

Scenario 1
Akash’s alarm doesn’t go off and he gets late getting out of the house. He hits traffic and ends up 15 minutes late to work, which his boss notices. He gets to his desk and finds he has to complete 2 reports in next one hour. Just when he is about to begin work, a message pops up “Telecon with the client begins in 10 minutes. Please be in the conference room in 5 minutes.”

His is not prepared for the call. He is stressed. He does not want to speak to his boss about this. He is stressed, feeling uncomfortable and sick. Not in a position to attend the call or finish the reports on time.

Scenario 2
While paying his overdue bills, Rahul realised that it’s the middle of the month and he has only Rs 500 left in his account. He has already asked all of his friends, and family for loans, which he hasn’t paid back yet. He is still contemplating over the issue when his phone rings. His sister’s birthday is due next week and she has seen a beautiful dress which she wants to buy but cannot tell the parents as it is a bit expensive. She wishes if Rahul could buy the dress for her. Rahul has promised to buy her the dress for her birthday.

Rahul is stressed, does not understand what to do. He is unable to concentrate on his work and unable to complete the tasks assigned. His team leader has already warned him of the delay.

Scenario 3
Sheela calls the cable company as she has unknown charges on her bill. She has to go through the automated voice mail menu three times and still can’t get through to a customer care executive. After 15 minutes of repeated efforts, her call is answered. She explains the entire issue to the customer care executive but before the person could suggest a way out, the call drops.

Now Sheela has to call back and repeat the whole process all over again with a new customer care executive. She is very angry and calls again but cannot connect this time.

She has to leave to office so she decides to call from office and check. When she connects this time she is angry and argues with the executive on the call. All her co-workers around are looking at her as her volume has suddenly increased. She bangs the phone and ends the call.

Her co-worker Neelam enquires what has happened to her. She ignores her and just walks off. She has become irritable and her behaviour and tone with other co-workers is not acceptable.

Team Activity

- What was/were the cause(s) of stress?
- Was the stress avoidable or manageable under the given circumstances?
- If yes, how do you think that the stress could be avoided (managed)?
- If no, then why not?
- Give the class 10-12 minutes to discuss the case and note down their solutions.
- At the end of 12 minutes, the team should present their case solution to the larger group.
- Ask the group to select a group leader for their group.
- The group leader to discuss and assign roles to the group members for the presentation.
Ask

De-brief questions:
• What was/were the cause(s) of stress?
• Was the stress avoidable or manageable under the given circumstances?
• If yes, how do you think that the stress could be avoided (managed)?
• If no, then why not?

Say

• Now, let’s discuss the problem and solution with the larger group.
• The group will first briefly describe the case to the class.
• Then discuss the issue identified and the proposed solution.
• Post presentation, the other groups may ask questions to the group that has presented.

Do

• Congratulate each group for sharing their points.
• Ask the audience to applaud for them.
• Ask de-brief questions to cull out the information from each group.
• Keep a check on time. Tell participants to wind up the discussion quickly if they go beyond the given time limit.

Say

• While it is common and normal to feel some tension. This feeling nervous and tensed can interfere with your thinking process and can have a negative impact on your performance.
• Stress can deplete the most vibrant of souls. It can have a negative effect on every aspect of a person’s life including their health, emotional well-being, relationships, and career. However, one needs to understand the causes and types of stress before looking for ways to manage it.

De-brief:

Scenario 1
The cause of stress was lack of time management and the habit of procrastinating. If Akash would have managed his time well, planned alternate ways to get up on time, finished prior tasks on time and planned for client meetings in advance then he wouldn’t have faced stress.

Scenario 4
Arpit is a young entrepreneur who started doing business through Facebook few weeks back. He had always been into a job. Although Arpit has very few financial liabilities, it wasn’t an easy decision to leave a comfortable job at once and look for newer pastures. Arpit’s boss warned him of the consequences and the challenges of starting a business when nobody ever in his family had been in business.

He has not been able to get a good deal till now. This is an important life shift for him which comes with unknown variables. Arpit is nervous and is wondering if he has what it takes to fulfill the requirement of his new role, or the new experiences he’s likely to face.
Scenario 2
The cause of stress was lack of financial planning. Rahul should have planned his financial resources well in advance and saved some money for the rainy day. Also, differentiating between needs and wants and keeping a check on non-essential expenditure would have saved Rahul from this situation.

Scenario 3
Sometimes, stress is caused due to external factors instead of internal ones. In this case, the stress was unavoidable because we have no control over this customer care system. Every time, you will get in touch with a new executive and will have to explain all over again. This might cause stress but despite being frustrated and angry there is little that we can do about it. All Sheela could do was to find ways to calm herself down through some breathing exercises and meditation, reading some good book or listening to music and then start afresh.

Scenario 4
A positive, major life change can be a source of good stress. Regardless of how good the change is, it can be stressful. Stress caused by a positive and major life change can be beneficial because it causes a person to step out of their comfort zone and learn new skills. Here, Arpit may become a successful entrepreneur or learn new ways to do things differently.

Now let us see this scenario, can I have a volunteer to read out this case to the class.

Do

- Ask one of the participant who can volunteer and read out this scenario to the class.

Scenario 5
Rakesh lives in Kathmandu with his wife and two beautiful daughters Sarah and Sanya. Nepal was hit by a massive earthquake and Rakesh’s building collapsed during the earthquake. During evacuation, Rakesh realised that though his wife and Sarah were fine and suffered only minor bruises, Sanya was nowhere in the scene. Panic stricken, he started calling her name and searching her frantically. A little later, he heard a meek voice from beneath the debris. He quickly removed the rubble to find a huge bed. Rakesh was pretty sure that Sanya was trapped underneath. Though he was badly bruised, he gathered all his courage and with all his might, he lifted the several-ton bed to save Sanya’s life. Everyone was relieved to see Sanya alive and also extremely surprised to see this father’s ability to access superhuman strength.

- Ask the audience to applaud for the participant after the scenario is read completely.
- Discuss the scenario, ask de-brief questions:
  - What kind of stress was Rakesh undergoing in this case?
  - Was the stress avoidable or manageable under the given circumstances?
  - What was the result of the stress?

Say

De-brief:

- Not all stress is harmful; good stress is actually energizing. This was a case of lifesaving stress, or hero stress, which is an important example of good stress. You may have heard stories in which a person performs an impossible feat of physical strength in order to save their life or the life of someone they love. This type of stress causing a surge of adrenaline is good for us.
Summarize

- Close the discussion by summarizing the tips to manage stress as given in the Participant Handbook.
- Ask the participants what they have learnt from this exercise/activity.
- Ask if they have any questions related to what they have talked about so far.

Notes for Facilitation

- Keep printed copies of the activities/scenarios ready for the session.
- Put down the de-brief questions on a flip chart so that it can be displayed in the class during the activity.
- Encourage participation and make the discussions interactive.
UNIT 19.2: Digital Literacy: A Recap

Key Learning Outcomes

At the end of this unit, students/Facilitator will be able to:
1. Identify the basic parts of a computer
2. Identify the basic parts of a keyboard
3. Recall basic computer terminology
4. Recall the functions of basic computer keys
5. Discuss the main applications of MS Office
6. Discuss the benefits of Microsoft Outlook
7. Identify different types of e-commerce
8. List the benefits of e-commerce for retailers and customers
9. Discuss Digital India campaign will help boost e-commerce in India
10. Describe how you will sell a product or service on an e-commerce platform
19.2.1: Computer and Internet Basics: Basic Parts of a Computer

Unit Objectives
At the end of this unit, students/Facilitator will be able to:
- Identify the basic parts of a computer
- Identify the basic parts of a keyboard
- Recall basic computer terminology
- Recall the functions of basic computer keys

Resources to be Used
- Participant Handbook
- Computer Systems with the required applications

Say
- Let’s take a quick recap of the basic computer parts.
- Discuss ‘Basic Parts of Computer’ and ‘Basic Parts of a Keyboard’ with the class as given in the Participant Handbook.

Explain
- Explain all the parts of the computer and the keyboard by demonstrating on the real system.

Ask
- Do you know about internet?
- Have you ever used internet?
- Why do you think internet is useful?
- What was the last task you performed on internet?

Say
- Let’s look at some basic internet terms.
- Discuss ‘Basic Internet Terms’ with the participants as given in the Participant Handbook.

Summarize
- Ask the participants what they have learnt from this exercise/activity.
- Ask if they have any questions related to what they have talked about so far.
- Close the discussion by summarizing the importance of computer and internet for entrepreneurs.
Practical

- Conduct a practical session.
- Ask the participants to assemble in the computer lab.
- Give some hands on practice exercises.

Do

- Group the participants for the activity depending on the batch size and the number of computer systems available in the lab.
- Explain the purpose and duration of the activity.
- Ensure the participants complete the practical exercises assigned.
Resources to be Used

- Participant Handbook
- Computer Systems with MS Office

Ask

- What is the most frequent activity that you do on the computer?
- Do you know how to make presentations on the computer?

Say

- Give a brief introduction of MS Office as given in the Participant Handbook.
- Discuss the most popular office products. Explain in brief their application, benefits and working.
- **Microsoft Word** is a word processing program that allows for the creation of documents. The program is equipped with templates for quick formatting. There are also features that allow you to add graphics, tables, etc.
- **Microsoft Excel** is a tool for accounting and managing large sets of data. It can also simplify analysing data. It is also used to create charts based from data, and perform complex calculations. A Cell is an individual data box which will have a corresponding Column and Row heading. This gives the cell a name, referred to as the Cell Reference. There can be multiple pages in each workbook. Each page, or sheet, is called a Worksheet. When you open a new Excel file, it automatically starts you with three worksheets, but you can add more.

Explain

- Explain the working and frequently used features of Office on a real system.

Ask

- What do you know about e-mails?
- Do you have an email id?
- How often do you check your e-mails?

Say

- Communication is vital for every business. The fastest and the safest way to communicate these days are through emails. MS Outlook helps to manage your emails in a better way and also offers a host of other benefits.
- Discuss “Why Choose Microsoft Outlook?” with the participants as given in the Participant Handbook.
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<td>• Ask the participants to assemble in the computer lab.</td>
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<tr>
<td>• Explain the working of Outlook on a real system.</td>
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<th>Demonstrate</th>
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<td>• Demonstrate how to create email id.</td>
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<td>• Demonstrate how to write new mails, send mails.</td>
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<tr>
<td>• Demonstrate how to use MS Office application to create a letter and send it as attachment in an email.</td>
<td></td>
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<tr>
<td>• Demonstrate how to use other MS Office applications.</td>
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<th>Practical</th>
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<td>• Give some hands on practice exercises</td>
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<td>• Group the participants for the activity depending on the batch size and the number of computer systems available in the lab.</td>
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<td>• Explain the purpose and duration of the activity.</td>
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<th>Summarize</th>
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<tr>
<td>• Ask the participants what they have learnt from this exercise/ activity.</td>
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<td>• Ask if they have any questions related to what they have talked about so far.</td>
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19.2.3: E-Commerce

Unit Objectives
At the end of this unit, students/Facilitator will be able to:
- Identify different types of e-commerce
- List the benefits of e-commerce for retailers and customers
- Discuss Digital India campaign will help boost e-commerce in India
- Describe how you will sell a product or service on an e-commerce platform

Resources to be Used
- Computer System with internet connection
- Participant Handbook

Ask
- How many of you have done shopping online?
- Can you name at least five shopping websites?
- What is the product that you most frequently buy online?
- Why do you do shopping online instead of going to the market?

Say
- Give a brief introduction of “What is E-commerce”. Refer to the Participant Handbook.
- E-commerce emerged in the early 1990s, and its use has increased at a rapid rate. Today, many companies sell their products online. Everything from food, clothes, entertainment, furniture and many other items can be purchased online.

Ask
- What other types of transactions have you performed on the internet other than buying products?

Say
- Give examples of e-commerce activities from Participant Handbook.

Team Activity
- Instruct the participants to list some of the payment gateways that they have used for e-commerce activities.
- Give them 5 minutes to make this list.
- Discuss payment gateways and transaction through payment gateways.
- Conclude the discussion by mentioning how important e-commerce has become in our day to day transactions.
Say
- E-commerce activities can be classified based on the types of participants in the transaction.
- Discuss “Types of E-commerce” from the Participant Handbook.

Do
- Discuss all types of E-commerce by giving examples and names of some popular websites which use them.
- Make the discussion interactive by asking the class to share some popular e-commerce sites of each type.

Say
- E-commerce activities bring a host of benefits for both, retailers and customers.
- Discuss benefits of E-commerce from the Participant Handbook.

Explain
- The majority of the population that uses E-commerce activities lives in tier-1 and tier-2 cities. To encourage the use of digital money in tier-3 and 4 areas, PM Mr. Modi launched the “Digital India Campaign”.
- Discuss “Digital India Campaign” from the Participant Handbook.
- By Digital India project the government will deliver services via mobile connectivity and in doing so, is expected to bring the internet and broadband to remote corners of the country. This connectivity will in turn enhance e-commerce activities also. Furthermore, the Indian Government is also modernizing India Post and aims to develop it as a distribution channel for e-commerce related services.

Say
- Now let us discuss how to sell a product using E-commerce.
- Every product has to be sold on a platform on the internet. Think of it as a shop that you have to sell your product. Now this shop can be your own or shared or rented. If the shop is your own or rented there will be only your products in that shop. If the shop is shared, there will be products of multiple sellers in that shop. A common example is a departmental store which has products from multiple brands in the shop.
- Similarly, in E-commerce the shop is the website where your products are displayed. If it is your own website it will exclusively showcase your products. In this case the cost that you will incur will be:
  - Developing the website
  - Hosting the website
  - Maintenance of the website
- If you rent a website it will also showcase your own products but the development, hosting and maintenance parts goes to the owner. This saves time and the cost to manage these activities.
- Smaller companies usually go for renting a website and the bigger ones develop their own website.
- The concept of shared platforms has become very popular in recent times. In this platform the sellers have to register and then they can sell their goods on a common platform. Among the most popular of these are Amazon, Myntra, Flipkart, etc.

Role Play
- Tell the participants to choose a product or service that they want to sell online.
- Tell them to write a brief note explaining how they will use existing e-commerce platforms, or create a new e-commerce platform to sell their product or service.
Demonetization has made carrying cash in the wallet very difficult. People either shop through cards or some other form of digital money.

So what do you think is digital money?

In this form the money is both paid and received digitally. There is no hard cash involved. It is an instant and convenient way to make payments.

There are various types of digital payments. Let us discuss some of them in brief here.

The first one is the most commonly used system i.e. the cards. Debit card, credit card, prepaid card, all fall under this category.

Then is the e-wallet or the mobile wallet. This has become the most used form of digital money after demonetization. Examples are Paytm, state bank buddy, Freecharge, etc.

Many other forms of digital money are also coming up in market like mobile apps, Aadhar card based payment, etc.

Digital money gives a lot of advantages over the conventional hard cash. Some of them are:

- Digital payments are easy and convenient. You do not need to take loads of cash with you, a mobile phone or a card will suffice.
- With digital payment modes, you can pay from anywhere anytime.
- Digital payments have less risk.

Ask:
- How much money are you carrying in your wallet?
- Do you have a credit/debit card?
- How do you make payments while doing online shopping?

Ask:
- Why do you think people have started using digital money instead of hard cash? Is demonetization the only reason?

Summarize:
- Ask the participants what they have learnt from this exercise/ activity.
- Ask if they have any questions related to what they have talked about so far.
- Close the discussion by summarizing the importance of e-commerce and digital money.
UNIT 19.3: Money Matters

Key Learning Outcomes

At the end of this unit, students/Facilitator will be able to:
1. Discuss the importance of saving money
2. Discuss the benefits of saving money
3. Discuss the main types of bank accounts
4. Describe the process of opening a bank account
5. Differentiate between fixed and variable costs
6. Describe the main types of investment options
7. Describe the different types of insurance products
8. Describe the different types of taxes
9. Discuss the uses of online banking
10. Discuss the main types of electronic funds transfer
19.3.1: Personal Finance – Why to Save?

Unit Objectives
At the end of this unit, students/Facilitator will be able to:
• Discuss the importance of saving money
• Discuss the benefits of saving money

Resources to be Used
• Participant Handbook

Ask
• How many of you save money?
• Why do you feel the need to save it?
• Do you plan your savings?
• Where do you keep the money you save?
• How do you use the money that you have saved?

Example
• Let’s look at these two examples:

Example 1:
Suhani works in a good company and earns Rs.30,000 month. She always saves 5000 per month and keeps it aside as a personal saving. She keeps the money at home and has saved quite a lot. One day her mother has a medical emergency and has to be taken to the hospital. Her family is worried about the amount they have to spend for the treatment. It will cost them at least 40,000.
Suhani says tells her family not to worry and that she has about 50,000, which she has saved over the months.

Example 2:
Jasmeet works in the same company and earns the same as Suhani. She is very fond of shopping and spends most of her money on buying new clothes. At the end of the month, she is always asking her father for money as her pay is finished.

Ask
• Who do you identify with Suhani or Jasmeet?
• How do you think Suhani manages to save money which Jasmeet is unable to do?

Say
• We should always set aside some and save some money from our monthly pay. The future is unpredictable. Saving money not only gives you a sense of financial security but it can be used in case of emergencies.
• Discuss “Importance of Saving” with the participants as given in the Participant Handbook.

Ask
• What are the benefits of saving money?
• What does being financially independent mean to you?
Discuss “Benefits of Saving” with the participants as given in the Participant Handbook.

Now let us continue with Suhani's story. Suhani has told her family not to worry and that she has about 50,000, which she has saved over the months. The family is happy about Suhani’s decision of saving money, which will be of great help for them now.

Suhani is going to the hospital today to pay the first instalment for the treatment. Suddenly finds only 35,000 in her cash box when she counts and does not remember using it. She has not kept any record and now she is upset.

Was it a good decision by Suhani to save a part of her earnings every month?
Was it a wise decision to keep all her savings as cash in a cash box?
Could she have managed to save money in a better and more effective manner?
Do you want to learn how to save money and use it effectively?

Let’s learn personal saving with the help of a group activity.

Personal Finance - Why to save

This activity has two parts:

**PART 1**
WAYS TO SAVE MONEY

- You are earning 30,000/- per month. You have recently changed your job and have to move to a metropolitan city. You are now living as a paying guest paying 10,000/- per month. Your other estimated expenditures like travel, food, recreation would be around Rs. 17,000 per month.
- Make a list of different ways to save money.

**PART 2**
HOW WILL YOU USE THE MONEY

- After a year how much have you been able to save?
- How will you use the money that you have saved?

Divide the class into groups of four.
Instruct the participants to think and prepare a list of the various ways they can save money.
Give the participants 10 minutes to prepare the list.
Once done, instruct them to think of how they could use the money they have saved.
Give the participants 10 minutes to prepare the list.
Keep a check on time. Tell the group to wind up quickly if they go beyond the given time limit.

Activity De-brief

- What were the different ways you could save money?
- How much money were you able to save?
- How will you use the money you have saved in one year?
Say

- Discuss the importance of personal finance and why it is important to save money.

Summarize

You can summarize the session by discussing:

- The importance of saving money.
- Ways to save money.
- How the money saved can be used for different purposes.
19.3.2: Types of Bank Accounts, Opening a Bank Account

Unit Objectives
At the end of this unit, students/Facilitator will be able to:
- Discuss the main types of bank accounts
- Describe the process of opening a bank account

Resources to be Used
- Account opening sample forms
- Participant Handbook

Ask
- How many of you save money?
- Where do you keep the money you save?
- How many of you have a bank account?
- What type of account do you have?

Example
- Let’s look at the given example:

Reena is in the third year of college but in the evening she gives tuitions for children living in her colony. She earns 15,000/- per month. As her students stay in different parts of the city, she has to walk a lot. To save time, she decides to buy a second hand scooter for herself. But she has to save money for it. Her classmate advises her to open a recurring deposit account in the bank.

She goes to the bank close to her home. The personal manager gives her some forms to fill. She is confused as she has never done this before. Her elder sister has an account in the same bank. She asks for help from her sister. She goes to the bank the next day with her sister. The personal banker gives her a list of documents that she will need to submit with the form for opening an account. The banker advises her to open a 6 months recurring deposit.

Ask
- Do you try to save money monthly but have to spend it on unforeseen expenditure?
- Have you ever thought of depositing your savings in a bank?

Say
- Before opening a bank account, you need to know the types of accounts we have in India.
- Discuss “Types of Bank Accounts” with the participants as given in the Participant Handbook.

Ask
- Can someone say what are the different types of bank accounts?
Let's learn about the different types of bank accounts through an activity.

Team Activity
- Divide the class in four groups.
- Label the groups as savings account, current account, recurring account and fixed deposit.
- On a chart paper, ask them to write the key points of their account.

Activity De-brief
- Ask each group to present the key points of their account.

Now that you know about the four different types of accounts, let's learn how to open a bank account.

Discuss “Opening a Bank Account” with the participants as given in the Participant Handbook.

Discuss “Tips” that the participants should keep in mind while opening a bank account as given in the Participant Handbook.

What are the main documents required for opening a bank account?
What are some important points to ask the bank personnel while opening an account?

Mention officially valid KYC documents (refer to the Participant Handbook)
Now, let's understand the procedure of opening a bank account through an activity.

Opening a Bank Account
- This activity is done in groups.
- Divide the class in groups of four or six.

PART 1
FILLING A BANK ACCOUNT OPENING FORM
- You have to fill a bank opening form.
- You can refer to the section “Opening a Bank Account” of your Handbook for reference.
- List all the steps that you will be required to fill in the form.
- List the documents that you need for filling the form.
- Now fill in the form.

Activity De-brief
How did you design the form?
- What all details did you fill in the form?
- What were your KYC documents?
- How would this activity help you in future?
Instruct the participants to read the section “Opening a Bank Account” of the Participant Handbook.
Give each group one sample account opening form.
Give the participants 5 minutes to read the form.
Give them 15 minutes to fill it.
Assist them by explaining each category and how to fill it.
Keep a check on time.
Tell the group to wind up quickly if they go beyond the given time limit.

Note:
- You can summarize the unit through a role play.
  - A person wanting to open an account in the bank.
  - What is the procedure that he will go through?
  - Discuss the key points of different types of bank accounts.
  - How to select the type of account
  - How to fill the account opening form.
- A sample account opening form is given in the following page for reference. Use it for the activity in the class.

Sample Bank Account Opening form.
### Detail of Assets
- **Owning House**: Y/N
- **Owning Farm**: Y/N
- **No. of Animals**: Any other

### Existing Bank
- **A/c. of family members / household**: Y / N
- **If yes, No. of A/cs.**: ___________

### Kisan Credit Card
- **Whether Eligible**: Y / N

I request you to issue me a **Rupay Card**.

I also understand that I am eligible for an Overdraft after satisfactory operation of my account after 6 months of opening my account for meeting my emergency/ family needs subject to the condition that only one member from the household will be eligible for overdraft facility. I shall abide by the terms and conditions stipulated by the Bank in this regard.

### Declaration:
I hereby apply for opening of a Bank Account. I declare that the information provided by me in this application form is true and correct. The terms and conditions applicable have been read over and explained to me and have understood the same. I shall abide by all the terms and conditions as may be in force from time to time. I declare that I have not availed any Overdraft or Credit facility from any other bank.

**Place:**
**Date:**
**Signature / LTI of Applicant**

### Nomination:
**I want to nominate as under**

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<tr>
<th>Name of Nominee</th>
<th>Relationship</th>
<th>Age</th>
<th>Date of Birth in case of minor</th>
<th>Person authorised in case to receive the amount of deposit on behalf of the nominee in the event of my /minor(s) death.</th>
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**Place:**
**Date:**
**Signature / LTI of Applicant**

### Witness(es)*
1. ____________________
2. ____________________

*Witness is requires only for thumb impression and not for signature.
19.3.3: Costs: Fixed vs. Variables: What are Fixed and Variable Costs?

Unit Objectives
At the end of this unit, students/Facilitator will be able to:
• Differentiate between fixed and variable costs

Resources to be Used
• Participant Handbook
• Blank sheets of paper
• Pens

Ask
• What is cost?
• Will a telephone bill fall under the category of a fixed or variable cost?

Say
• Discuss: Fixed and Variable cost with examples. Let us do a small activity.

Team Activity
Identify the type of cost
1. Rent
2. Telephone bill
3. Electricity bill
4. Machinery
5. Insurance
6. Office supplies/Raw materials
7. Employee salaries
8. Commission percentage given to sales person for every unit sold
9. Credit card fees
10. Vendor bills

Do
• Divide the class into two groups. Read out the list of costs given in the activity.
• Read out each item from the cost list and ask the groups in turns to identify whether it is a fixed or variable cost.
Say

- We saw that your utility bills like rent, electricity, telephone etc. are all fixed costs because you have to pay it every month.
- Variable costs is an expense which varies with production output or volume. For example commission, raw material etc.
- Discuss “Cost: Fixed vs. variables” with the participants as given in the Participant Handbook.
- Illustrate the relation between the costs with a graph.

Let’s learn the difference between fixed and variable cost with the help of an activity.

Team Activity

Fixed vs. Variable Costs

- This is a group activity.
  - You want to start your own entrepreneur business.
  - State the type of business you want to start.
  - List down all the cost or requirements for your business.
  - How will you differentiate between the fixed and variable cost.

Activity De-brief

- What is the total cost of your business?
- What are the fixed costs?
- What are the variable costs?
- How did you differentiate between the fixed and variable costs?

Do

- Instruct the participants that this is group work.
- Divide the class into small groups of 4 or 6.
- Give each group a sheet of paper.
- Tell the participants that they have to start their own entrepreneur business.
- Ask them the type of business they want to start.
- Instruct them to differentiate between the fixed and the variable costs of the business they want to start.
- Give the participants 15 minutes to discuss and write.
- Keep a check on time. Tell the group to wind up quickly if they go beyond the given time limit.
Summarize

- Note: You can summarize the unit either by having a role play between a consultant and a budding entrepreneur explaining the differences between fixed and variable costs or by discussing the key points of the unit.

Notes for Facilitation

- Answers for the activity - Identify the type of cost

1. Rent (Fixed)
2. Telephone bill (Fixed)
3. Electricity bill (Fixed)
4. Machinery (Fixed)
5. Insurance (Fixed)
6. Office supplies/Raw materials (Variable)
7. Employee salaries (Fixed)
8. Commission percentage given to sales person for every unit sold (Variable)
9. Credit card fees (Variable)
10. Vendor bills (Variable)
19.3.4: Investments, Insurance and Taxes

Unit Objectives
At the end of this unit, students/Facilitator will be able to:

- Describe the main types of investment options
- Describe the different types of insurance products
- Describe the different types of taxes

Resources to be Used
- Participant Handbook

Ask
- Ask the participants- “What do you see first thing in when you get your mobile bill? Apart from the amount and due date do you have a look at the taxes you are being billed for?
- Why do you think people get their cars insured or have a medical insurance?
- You have saved money and want to invest it, how would you decide what is the best investment for your money?

Example
- Let’s have a look at a few scenarios.

Ranbir has sold his house and deposited the money in his bank. His Chartered Accountant tells him that he will have to re-invest the money otherwise he will have to pay capital tax. What is capital tax and how is it different from income tax?

Jasmeet and Anup are blessed with a baby girl. They decide to have an insurance policy that will mature when their daughter is ready to higher education.

Shivani is working in a corporate office and getting good pay. She will have to pay income tax so she decides to invest her money in tax saving schemes. She goes to the bank manager to discuss the best products in which she can invest.

Say
- Discuss the Investment, Insurance and Taxes as given in the Participant Handbook.

Ask
- How do investments, insurances and taxes differ from each other?

Say
- Let’s learn the differences between the three by having an activity.

Say
- We will have a quiz today.
Team Activity

- The activity is a quiz.

Do

- Divide the class into groups of three and give a name to each group
- Explain the rules of the quiz. For each correct answer the group gets 1 mark. If the group is unable to answer the question is rolled over to the next group.
- Explain the purpose and duration of the activity.
- On the blackboard write the names of the groups.
- Ask the questions of the quiz.
- Keep a score for the groups.
- Set guidelines pertaining to discipline and expected tasks.

Summarize

- Summarize the unit by discussing the key points and answering question

Notes for Facilitation

Questions for the quiz

1. What are bonds?
   Bonds are instruments used by public and private companies to raise large sums of money.

2. Who issues the bonds?
   Private and public companies issue the bonds.

3. Why are bonds issued?
   To raise large amount of money as it cannot be burrowed from the bank.

4. Who is the buyer of stocks and equities?
   The general public is the buyer.

5. What types of scheme is the Sukanya Samriddhi Scheme?
   Small Saving Scheme

6. What is the difference between mutual and hedge funds?
   Mutual funds are professionally managed financial instruments that invest the money in different securities on behalf of investors. Hedge funds invest in both financial derivatives and/or publicly traded securities.

7. Why is a loan taken from the bank to purchase real estate?
   To lease or sell to make profit on appreciated property price.

8. Name the two types of insurances?
   Life Insurance and Non-life or general insurance

9. Which insurance product offers financial protection for 15-20 years?
   Term Insurance

10. What is the benefit of taking an endowment policy?
    It offers the dual benefit of investment and insurance.

11. Mr. Das gets monthly return on one of his insurance policies. Name the policy?
    Money Back Life Insurance
12. What are the two benefits of a Whole Life Insurance?
   *It offers the dual benefit of investment and insurance*

13. Which policy covers loss or damage of goods during transit?
   *Marine Insurance*

14. After what duration is the income tax levied?
   *One financial year*

15. What is long term capital gain tax?
   *It is the tax payable for investments held for more than 36 months.*

16. Name the tax that is added while buying shares?
   *Securities Transaction Tax*

17. What is the source of corporate tax?
   *The revenue earned by a company.*

18. Name the tax whose amount is decided by the state?
   *VAT or Value Added Tax*

19. You have bought a T.V. What tax will you pay?
   *Sales Tax*

20. What is the difference between custom duty and OCTROI?
   *Custom duty is the charges payable when importing or purchasing goods from another country. OCTROI is levied on goods that cross borders within India.*
19.3.5: Online Banking, NEFT, RTGS, etc.

Unit Objectives
At the end of this unit, students/Facilitator will be able to:

- Discuss the uses of online banking
- Discuss the main types of electronic funds transfer

Resources to be Used
- Participant Handbook
- Computer System with internet connection
- Debit card

Ask
- When was the last time you visited a bank?
- How do you pay your bill for electricity and telephone?
- Have you ever tried to transfer money from one bank account to another bank account using the online banking facility?

Say
- Most of us lead a busy life. Time has become more important than money. In this busy schedule no one has time to stand in bank queues. That’s where Online Banking comes in. Online banking or internet banking means accessing your bank account and carrying out financial transactions through the internet.
- Discuss “What is online banking?” from the Participant Handbook.
- There are various advantages of online banking:
  - It saves time, as you need to visit the branch.
  - You can conduct your banking transactions safely and securely without leaving the comfort of your home.
  - Online Banking also gives you round the clock access.
  - Online Banking makes it possible for you to pay your bills electronically.

Do
- Show them how they can use the internet banking.
- Use the computer system and show the demo videos on how to use internet banking provided on most banking sites.
- Tell the class the various features of online banking:
  - Through their website set-up your online account.
  - Choose a secure username and password.
  - Set-up your contact information.
  - Once your information is verified, you are good to go.
  - Once you enter the portal explore all the features and learn your way through the portal.
- Discuss about maintaining the security of the online account.
Say
- One of the biggest advantages that online banking offers, as discussed earlier, is transferring money from one account to another. This transaction is called electronic funds transfer. Electronic transfers are processed immediately with the transferred amount being deducted from one account and credited to the other in real time, thus saving time and effort involved in physically transferring a sum of money.
- Discuss “Electronic Funds Transfer” from the Participant Handbook.

Do
- Discuss how to transfer money from one account to another using online banking (NEFT/ RTGS, etc.).
- Illustrate with an example.

Summarize
- Close the discussion by summarizing the about online banking.
- Ask the participants if they have any questions related to what they have talked about so far.
UNIT 19.4: Preparing for Employment & Self Employment

Key Learning Outcomes

At the end of this unit, students/Facilitator will be able to:
1. Discuss the steps to follow to prepare for an interview
2. Discuss the steps to create an effective Resume
3. Discuss the most frequently asked interview questions
4. Discuss how to answer the most frequently asked interview questions
5. Identify basic workplace terminology
At the end of this unit, students/Facilitator will be able to:

- Discuss the steps to follow to prepare for an interview

### Resources to be Used

- Participant Handbook

### Unit Objectives

### Ask

- Have you ever attended an interview?
- How did you prepare before going for an interview?

### Say

- An interview is a conversation between two or more people (the interviewer(s) and interviewee) where questions are asked by the interviewer to obtain information from the interviewee.
- It provides the employer with an opportunity to gather sufficient information about a candidate and help them select the ideal candidate.
- It also provides the interviewee with an opportunity to present their true potential to the employer, build confidence and help make a decision about the job by asking questions regarding designation, salary, perks, benefits, promotions, transfers, etc.
- Let’s do an activity to understand how to prepare for interviews better.

### Activity 1

- Introducing Yourself

### Do

- Select a participant and ask him/her to answer the following questions: “What can you tell me about yourself.”
- Give the participant at least one minute to speak.
- Once he/she is done, ask the rest of the participant what they gathered about the participant who was providing information.
- Now repeat the exercise with five other participants.

### Ask

- What information you should include when you are describing or introducing yourself in an interview?
- What information you should not include when you are describing or introducing yourself in an interview?
**Say**

- Tell the participants that when an interviewer asks you to say something about yourself, he/she is not asking you to present your life history.
- Introduction should be short and crisp, and should present you in a positive light. It should include the following points:
  - Any work experience that you might have
  - A brief summary of your educational qualifications
  - Your strengths and achievements
  - Any special projects that you might have been part of
- The following topics should be avoided during an introduction:
  - Detailed description of your family (unless you are specifically asked to do so)
  - Too much information about your weaknesses
  - Information that is not true

**Do**

- Congratulate each participant for sharing their points.
- Ask the audience to applaud for them.
- Ask de-brief questions to cull out the information from each group.
- Keep a check on time.

**Activity 2**

- Planning the right attire

**Do**

- Describe 2 individuals to the participants. One is wearing a casual t-shirt, jeans, and slippers. He has not combed his hair and neither has he trimmed or shaved his beard. The other individual is dressed formally with a shirt and pant, and is well-groomed. He has also worn formal shoes and a belt. Ask the participants which person would they prefer to hire in their organization and why?

**Summarize**

- Close the discussion by discussing ‘how to prepare for an interview’ as discussed in the Participant Handbook.
- You can add the following points to it:
  - Tell the participants to create a positive and good impression in an interview. It is important for them to prepare for an interview beforehand.
  - The interviewer analyses not only your technical knowledge in relation to the job, but also whether or not you are a fit for the organization.
  - Every employer looks at the whole package and not just one or two things in isolation. Therefore, the way you dress and the way you present yourself is also important along with your skills and talents.
  - The participants will get only one chance to create a good first impression.
19.4.2: Preparing an Effective Resume: How to Create an Effective Resume?

Unit Objectives
At the end of this unit, students/Facilitator will be able to:
- Discuss the steps to create an effective Resume

Resources to be Used
- Participant Handbook
- Blank papers
- Pens

Ask
- When preparing for an interview, what are the most important things that you need to do?
- What documents do you carry with you, when you go for an interview?
- What is a resume?
- Why do you need a resume?

Say
- Resume is not just a sheet of paper with your qualifications printed on it.
- It is a selling tool that will help the employer to see how and what you can contribute for company.
- Talk about the steps involved in creating an effective/attractive resumes discussed in the Participant Handbook.
- Now let’s prepare a resume to understand the process in a better way.

Do
- This is an individual activity.
- Give the details of the activity.
- Instruct them to read the activity carefully.
- The participant is expected to make an attractive resume based on the information provided.
- Give the class 25-30 minutes to study the case and create a resume.
- At the end of 30 minutes, the participants should exchange the resume with the person sitting next to him or her.
- Every participant will evaluate the resume prepared with their fellow participants.

Say
- Do you think the candidate should apply for the job posting described in the advertisement?
- We have already discussed the steps involved in creating an effective/attractive resumes.
- Now let’s prepare a resume for the candidate details given in the activity.
Activity

Case Study Analysis

- In the first section of the activity, you are being given the information about a candidate who is applying for a particular job.
- In the second section, you are being given the detailed description of the job posting. Create a resume for the candidate to apply for the job posting.
- Use the information that has been provided about the candidate to create this resume.

Candidate Details

Nipesh Singla was born on 20th April, 1988 in Chandigarh, India. He currently resides at 1XX7, Sector XX D, Chandigarh 160018. His mobile number is 988XXXXX01, and e-mail address is nxxxxxxxxxla@gmail.com. Nipesh attended middle and senior school at Government Boys Senior Secondary School, Sector 15, Chandigarh. He has been a very talented boy since school. He was fond of painting and watching old Hindi movies. As part of a school charity program, he volunteered at the children's hospital during his senior years.

In July 2007, he joined Westwood School of Hotel Management, Zirakpur to pursue a diploma course in Hotel Management and Catering. After completing this course, he joined XYZ Group of Hotels as a Housekeeping intern in June 2010 for six months. In this role, he was responsible for cleanliness and maintenance of one floor in the hotel. Taking advantage of his strong interpersonal skills, he also got opportunities to make housekeeping arrangements for corporate meetings. While pursuing education, he gained working knowledge of Microsoft Word, Excel, Access and PowerPoint.

Nipesh is detail-oriented, flexible and adaptable. He has successfully worked with a diverse work force. He gelled well with his peers, both in college and during his internship. After completing the internship, his objective has been to find a job opportunity where he can use his skills and experience. Backed by experience, he is confident about his skills as housekeeping assistant.

Job Posting

* Do you see yourself as a HOUSEKEEPING SUPERVISOR?

What's your passion? Whether you’re into cricket, reading or hiking, at IHG we are interested in YOU. At IHG, we employ people who apply the same amount of care and passion to their jobs as they do in their hobbies - people who put our guests at the heart of everything they do. And we’re looking for more people like this to join our friendly and professional team.

THE LOCATION:

At the moment, we are looking for HOUSEKEEPING SUPERVISOR to join our youthful and dynamic team at Holiday Inn Amritsar, Ranjit Avenue in Amritsar, Punjab (India). Holiday Inn Amritsar is ideally located in Amritsar’s commercial district on Ranjit Avenue with the world famous Golden Temple located only a short distance away. Sparkling chandeliers mark an incomparable arrival experience as you escape to the welcoming environment that is, Holiday Inn Amritsar. The fresh international brand to celebrate and explore Amritsar.

Salary: Negotiable

Industry: Travel / Hotels / Restaurants / Airlines / Railways

Functional Area: Hotels, Restaurants

Role Category: Housekeeping

Role: Housekeeping Executive/Assistant.

Desired Candidate Profile

Friendly, pleasant personality, Service - oriented.

You should ideally be Graduate/ Diploma holder in HM and at least 2 years of experience as a supervisor in good brand with good communication skills, English is a must.
In return we'll give you a competitive financial and benefits package. Hotel discounts worldwide are available as well as access to wide variety of discount schemes and the chance to work with a great team of people. Most importantly, we'll give you the room to be yourself.

*Please get in touch and tell us how you could bring your individual skills to IHG.

Education-

UG: Any Graduate/ Diploma holder
PG: Post Graduation Not Required

---

Say

- Now, let's share the resume with the fellow participant sitting next to you and evaluate each other's effort.

Do

- Congratulate each participant for making their first attempt towards creating an effective resume.
- As a follow up activity, you can suggest them to prepare their own resume and show it to you the next day.

Summarize

- Close the discussion by showing some effective resume samples to the candidates.
- Ask the participants what they have learnt from this activity.
- Ask if they have any questions related to what they have talked about so far.

Notes for Facilitation

- Keep printed copies of the activity ready for the session.
- Put down the suggested format of the resume on the board while explaining the steps in preparing a resume.
- Do check the participants' resume and suggest necessary changes.
- Suggested example for the case presented:

Nipesh Singla
#1XX7, Sector XX-D
Chandigarh-160018
Mobile No: 91-988XXXXX01
E-mail: nxxxxxxxxxla@gmail.com

Objective: Seeking an opportunity to use my interpersonal skills and experience to contribute to your company’s growth, profitability and objectives.

Professional strengths:
- Proficient in housekeeping
- Experienced in and capable of working with a diverse work force
- Team player and friendly in nature
- Successful working in a multi-cultural environment
• Detail oriented, flexible, and adaptable
• Knowledge of Microsoft Word, Excel, Access and PowerPoint

Educational background:
• Diploma in Hotel Management and Catering, Westwood School of Hotel Management, Zirakpur
• High School, Government Boys Senior Secondary School, Sector 15, Chandigarh

Professional internships:
• Housekeeping Intern, XYZ Group of Hotels, New Delhi (June 2010 – August 2010)
  • Responsible for cleanliness and maintenance of one floor in the hotel.
  • Got opportunities to make housekeeping arrangements for corporate meetings.

Volunteer Work:
• Student volunteer at children’s hospital in Chandigarh.

Nipesh Singla
19.4.3: Interview FAQs

Unit Objectives
At the end of this unit, students/Facilitator will be able to:
- Discuss the most frequently asked interview questions
- Discuss how to answer the most frequently asked interview questions

Resources to be Used
- Participant Handbook

Say
- Tell the participants you will provide them with interview situation and questions and they have to try to answer them.
- Tell them you will also explain the different ways to approach these questions.

Do
- Divide the class in pairs and ask the participants to perform a role play.
- One partner will play the role of the interviewer while the other will play the role of the interviewee.
- Tell them the interviewer can start the interview by asking the interviewee to introduce himself/herself.
- Call all the pairs one by one in front of the class to enact the role play.
- Follow the same pattern for all other situations.
- Time allotted for each situation is 8-10 minutes.
- Congratulate each participant for giving their input.
- Ask the class to applaud each time a team has completed their role play.
- Keep a check on time.

Role Play
Conduct a role play for the situation given.

Situation 1
- The interviewer will start by asking the interviewee a few generic questions such as:
  - What is your name?
  - Tell me something about yourself?
  - Can you tell me something about your family?
- Then, the interviewer will bluntly ask the following questions:
  - How do you explain this huge time gap in your resume?
  - What is the reason for this?
  - Weren’t you looking for a job or is it that no one selected you?
Say

De-brief:
• When you put information on your resume, you should be prepared to answer any questions about it.
• Be present and focused on the questions being asked to you.
• One way of tackling the blunt questions is to tell the interviewer you did not come across an opportunity where you were sufficiently satisfied with both the remuneration offered as well as the profile. Therefore, you waited for the right opportunity to come along while looking for an ideal job.

Role Play

Conduct a role play for the situation given.

Role Play – Situation 2

• The interviewer will start by asking the interviewee a few generic questions such as:
  • What is your name?
  • Tell me something about yourself?
  • Can you tell me something about your family?
• Then, at the end of the interview, ask the interviewee:
  • There are over 200 people who have applied for this job, some with excellent work experience. Why should I hire you?

Say

De-brief:
• There is nothing wrong with stating your strengths and achievements. However, do not come across as arrogant or too boastful.
• You need show the interviewee that you have unique skills or talents to contribute to the company. The interviewer needs to know how you stand apart from the rest of the crowd.
• Tell the interviewer you are looking forward to working with the company and that you are a hard-working individual.

Role Play

Conduct a role play for the situation given.

Role Play – Situation 3

• The interviewer will start by asking the interviewee a few generic questions such as:
  • What is your name?
  • Tell me something about yourself?
  • Can you tell me something about your family?
• Then, lean forward, clasp your hands on the table and in a soft voice ask the interviewee:
  • Did you ever experience any neglect or disregard from your previous office? In other words, did you ever suffer because your office or team displayed favouritism?

Say

De-brief:
• Keep this in mind: Do not criticize anyone during an interview.
• You are free to express your opinion, however, your language, answers, body language, and the tone of your voice should remain constructive and neutral.
• Since criticism will show you in negative light, you should keep your answers honest yet diplomatic.
• You can tackle such questions by saying, “I got along well with most of my faculty and peers.”
Role Play

Conduct a role play for the situation given.

Role Play – Situation 4
- The interviewer will start by asking the interviewee a few generic questions such as:
  - What is your name?
  - Tell me something about yourself?
  - Can you tell me something about your family?
- Then very bluntly ask the interviewee:
  - How long do you plan to stay with this company if you are selected?
- After the candidate responds, ask sarcastically:
  - Do you seriously mean that?

Say

De-brief:
- Don’t provide unreal and idealistic answers.
- Your answers should be honest yet diplomatic. In a situation like this, the interviewer does not expect you to provide a specific timeline.
- You can say something like, “I would like to stay with the company as long as I can contribute constructively and develop as an employee, within the organization, professionally and financially.”

Role Play

Conduct a role play for the situation given.

Role Play – Situation 5
- The interviewer will start by asking the interviewee a few generic questions such as:
  - What is your name?
  - Tell me something about yourself?
  - Can you tell me something about your family?
- Ask him/her how important he/she thinks it is to be punctual in the corporate world.
- After he/she answers, look up sternly at the interviewee and in a crisp voice, say:
  - You were late for this interview by 10 minutes. That surely does not seem to be in line with what you just said?

Say

De-brief:
- Politely apologize for being late.
- You can add something such as, “I assure you this is not a habit”. All your future actions should be in line with this statement.
- Avoid giving any excuses.
- You might feel obligated to provide a justification for your tardiness, but the interviewer is not interested in that.
- Do not over apologize. Once this response is out of the way, turn your focus back to the interview.
Role Play

Conduct a role play for the situation given.

Role Play – Situation 6

- The interviewer will start by asking the interviewee a few generic questions such as:
  - What is your name?
  - Tell me something about yourself?
  - Can you tell me something about your family?
- After asking a few academic or job-related questions, ask the interviewee:
  - If you get this job, what salary package do you expect us to give you?

Say

De-brief:

- If there is no way for you to avoid this question, respond to the interviewer by providing a reasonable and well-thought out salary range.

Role Play

Conduct a role play for the situation given.

Role Play – Situation 7

- The interviewer will start by asking the interviewee a few generic questions such as:
  - What is your name?
  - Tell me something about yourself?
  - Can you tell me something about your family?
- Then, bringing the interview to a close, ask the interviewee:
  - Do you have any questions for me?

Say

De-brief:

- Ask relevant questions.
- Don't bombard the interviewer with questions.
- If you have questions about the result of the interview, you can limit your questions to 1 or 2. Keep them short and relevant like:
  - When will I be informed about the results of the interview?
  - What are the working hours?
  - Will the job require me to travel?

Explain

- Tell the participants to be prepared for answering different types of questions in an interview.
- Stay calm and focused, and take a moment to think about how you should respond. Always maintain a confident tone.
- Even if you don't intend to, your body language conveys your level of discomfort with a particular question. Try to keep your actions, tone, and gestures neutral.
- Maintain your composure while answering personal question.
Do

- Tell all the participants to form pairs again.
- Tell them to use the following list of frequently asked interview questions to conduct mock interviews.
- They will use all or some of these questions to conduct mock interviews with their partners.
- One partner will play the role of the interviewer while the other will play the role of the interviewee.
- After they are through asking and answering the questions, the roles will be reversed.
- The same list of questions will be used again.
- After each mock interview ask the interviewer to provide feedback and clear any doubts that may arise.
- Time allotted for each situation is 30-35 minutes.

Activity

Mock Interview Questions

- Tell me something about your family.
- What qualities would you look for in a Manager or a Supervisor?
- Why did you apply for this job?
- What do you know about this company?
- How do you deal with criticism?
- How do you plan to strike a good work-life balance?
- Where do you see yourself five years from now?
- Have you applied for jobs in other companies?
- What kind of salary do you expect from this job?
- Do you have any questions for me?

Summarize

- Close the discussion by discussing the questions in the both activities.
- Ask the participants what they have learned from this activity.
- Ask if they have any questions related to what they have talked about so far.
19.4.4: Work Readiness – Terms and Terminology

**Unit Objectives**
At the end of this unit, students/Facilitator will be able to:
- Identify basic workplace terminology

**Resources to be Used**
- Participant Handbook
- Chart papers
- Blank sheets of paper
- Pens

**Ask**
- What do you understand by workplace terminology?
- Are offer letter and contract of employment the same?

**Say**
- Let's start this unit with an activity.

**Team Activity**

**Workplace terminology**
- This is a group activity conducted in three parts.

**Part 1**
Sheila received a call from the recruiter of MND Company. Before she is recruited by the company, think of the recruitment process she will have to go through. Start from the telephone call to signing her letter of acceptance. Write down all the words that come to your mind.

**Activity De-brief**
- Have the participants read out the words they have written
- Encourage all the participants to participate in the activity

**Do**
- Divide the class into small groups of 4 or 6.
- Instruct the participants that they will be doing a brainstorming activity.
- Give them one chart paper each. Tell them to divide the chart in two parts.
- Instruct them that they have to use one half of the chart paper now. The other half will be used later.
- The participants have to write all the words that come to their mind related to the recruitment process.
- Give them 10 minutes to do the activity.
- Tell them that there are no right or wrong answers.
- Keep a track of the time.
Say
- You all know quite a few words related to the terms used in the office.
- Let us talk about some new terms that have been missed out.
- Discuss “Work Readiness Terms and Terminology” with the participants as given in the Participant Handbook.

Ask
- Why is it important to know the workplace terms?
- How do they help?
- Can the words be categorised further?

Say
- Let’s now continue the activity.

Team Activity
Terms and Terminology
- This is again a group activity. The members of the group remain the same as in Activity 1.

Part 2
With the help of the new terms you have learned, make a flow chart of the hiring process of MND Company.

Activity De-brief
- Ask the groups to share the flow charts and the new terms they added while preparing the flow chart.

Do
- Instruct the participants that they have to use the 2nd half of the same chart they had used before.
- Using the new terminology and the terms they had previously written on the chart, they have to make a flow chart of the hiring process of the MND Company.
- Give them 10 minutes for this activity.
- Keep a check on time. Tell the group to wind up quickly if they go beyond the given time limit.

Say
- Let’s go ahead with the activity.

Team Activity
Terms and Terminology
- The activity continues with the same group members.

Part 3
Sheila now works for the MND Company. She is not aware of the company culture and policies. She goes to the HR Department to get her doubts clarified. Can you think of the terms for which she wants clarity? Make a list of those words.

Activity De-brief
- Ask the groups to share their list of words. Some of the words are benefits, comp. time, deduction, employee training, holidays, lay-off, leave, maternity leave, mentor, notice, paternity leave, and time sheet.
Do

- Instruct the participants to identify the key terms an employee of a company should know. They can use the same chart paper for this activity.
- Give them 5 minutes for this activity.
- Keep a check on time. Tell the group to wind up quickly if they go beyond the given time limit.

Summarize

- Note: You can either summarize the key points of the unit or have a role play where an employee has just joined a company and the HR Manager explains the terms of employment.
UNIT 19.5: Understanding Entrepreneurship

Key Learning Outcomes

At the end of this unit, students/Facilitator will be able to:

1. Discuss the concept of entrepreneurship
2. Discuss the importance of entrepreneurship
3. Describe the characteristics of an entrepreneur
4. Describe the different types of enterprises
5. List the qualities of an effective leader
6. Discuss the benefits of effective leadership
7. List the traits of an effective team
8. Discuss the importance of listening effectively
9. Discuss how to listen effectively
10. Discuss the importance of speaking effectively
11. Discuss how to speak effectively
12. Discuss how to solve problems
13. List important problem solving traits
14. Discuss ways to assess problem solving skills
15. Discuss the importance of negotiation
16. Discuss how to negotiate
17. Discuss how to identify new business opportunities
18. Discuss how to identify business opportunities within your business
19. Explain the meaning of entrepreneur
20. Describe the different types of entrepreneurs
21. List the characteristics of entrepreneurs
22. Recall entrepreneur success stories
23. Discuss the entrepreneurial process
24. Describe the entrepreneurship ecosystem
25. Discuss the purpose of the Make in India campaign
26. Discuss key schemes to promote entrepreneurs
27. Discuss the relationship between entrepreneurship and risk appetite
28. Discuss the relationship between entrepreneurship and resilience
29. Describe the characteristics of a resilient entrepreneur
30. Discuss how to deal with failure
19.5.1: Concept Introduction (Characteristic of an Entrepreneur, types of firms/ types of enterprises)

Unit Objectives
At the end of this unit, students/Facilitator will be able to:

• Discuss the concept of entrepreneurship
• Discuss the importance of entrepreneurship
• Discuss the characteristics of an entrepreneur
• Describe the different types of enterprises

Resources to be Used

• Participant Handbook

Say

• Let’s start this session with some interesting questions about Indian entrepreneurs.

Team Activity

Quiz Questions
1. Who is the founder of Reliance Industries?
   Dhirubhai Ambani
2. Who is the Chairman of Wipro Limited?
   Azim Premji
3. Who launched e-commerce website Flipkart?
   Sachin Bansal and Binny Bansal
4. Who is the founder of Paytm?
   Vijay Shekhar Sharma
5. Who is CEO of OLA Cabs?
   Bhavish Aggarwal
6. Who is the founder of Jugnoo?
   Samar Singla (autorickshaw aggregator)
7. Who is the founder of OYO Rooms?
   Bhavish Aggarwal

Do

• Tell them that you will ask them few questions about a few entrepreneurs.
• Divide the class in to two groups.
• In turns ask the quiz questions to the groups.
• If the answer is incorrect pass the question to the other group.
• Share the answer if the groups are not able to answer.
• Congratulate the participants who answered correctly.
Ask

- What do you understand by entrepreneurs?
- What is the importance of entrepreneurship in today's scenario?
- What do you think are the characteristics of successful entrepreneurs?
- What are different types of enterprises that an entrepreneur in India can own and run?

Say

- Talk about entrepreneurs, importance of entrepreneurship, characteristics of successful entrepreneurs, and different types of enterprises in India as discussed in the Participant Handbook.
- Tell the participants, stories of successful Indian entrepreneurs- their struggles, the moments of heartbreak, the perseverance and triumph.
- Ask them if they know of any such entrepreneur.

Summarize

- Close the discussion by summarizing about the opportunities for entrepreneurs in India.

Notes for Facilitation

- Check out different Government schemes for small entrepreneurs. Share the information with the participants.
- You can tell them about the government websites like Start Up India, mudra.org.in etc.
- Discuss about various schemes and policies by the Government of India for entrepreneurs.
19.5.2: Leadership and Teamwork

Unit Objectives
At the end of this unit, students/Facilitator will be able to:
- List the qualities of an effective leader
- Discuss the benefits of effective leadership
- List the traits of an effective team

Resources to be Used
- Participant Handbook
- Blank sheets of paper
- Pens

Do
- Show the picture given below to the class.
- Ask them to quickly write on a piece of paper what comes to their mind after seeing the picture.
- Now ask them, “What do you understand from this picture?”
- Encourage participants to share their thoughts.

Say
- This picture depicts the qualities of a leader and the difference between a leader and a boss.
- A boss focuses on structure and inspires fear whereas a leader follows vision and generates enthusiasm.
- A boss blames employees for the breakdown whereas a leader fixes breakdowns.
- A boss depends on authority whereas a leader depends on goodwill.
- A boss says “I” and a leader says “We.”
- A boss drives employees whereas a leader coaches them.
- A boss takes credit whereas a leader gives credit.

Say
- Talk about leadership and leadership qualities for an entrepreneur as discussed in the Participant Handbook.

Ask
- Why is it important for a leader to be effective? How does it help the organization?
Long Chain

This is a group activity.

Divide the class into 2 teams.

Ask each team to create a chain using materials they have in class such as shoe laces, belts, paper, handkerchief, ribbons, etc.

The team that creates the longest chain wins the game.

Observe if the participants are interacting with their team or working in isolation.

Share your observations with the class.

De-brief:

What did the winning team do differently?

Who was responsible for the winning team’s success?

How does this activity explain the role of teamwork in entrepreneurial success?

Tell the class that both the teams performed well.

Discuss that the objective of this activity was to open communication channels and how this has been achieved.

The participants should aim to keep the communication channels open when interacting with their peers and team members.

It will set the pace and enthusiasm required for all the ensuing teamwork activities.

Talk about teamwork and importance of teamwork in entrepreneurial success as discussed in the Participant Handbook.

Close the discussion by summarizing about the importance of teamwork for employees.

Teamwork helps in reducing stress for the employees.

Teamwork helps employers in generating more number of solutions to a problem and developing improved communication amongst employees.

Ask the participants what they have learned from these exercises.

Ask if they have any questions related to what they have talked about so far.
At the end of this unit, students/Facilitator will be able to:

- Discuss the importance of listening effectively
- Discuss how to listen effectively
- Discuss the importance of speaking effectively
- Discuss how to speak effectively

Unit Objectives

Resources to be Used

- Participant Handbook

Activity 1

Activity – Chinese Whisper

<table>
<thead>
<tr>
<th>Step 1: Form a circle.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Step 2: Start a whisper chain. Any one participant will whisper a message into his/her neighbour’s ear. No one else must hear the message. The message can be serious or downright silly.</td>
</tr>
<tr>
<td>Step 3: The next person who first heard the message should whisper the message very quickly to the person sitting next to them.</td>
</tr>
<tr>
<td>Step 4: The game goes on until the last person says whatever they heard out loud and the first person reveals the real message.</td>
</tr>
</tbody>
</table>

Compare them and have a great laugh!

Ask

De-brief questions:

- Was the original message the same as the message that is communicated at the end of the game?
- Why do you think there was a difference in the messages?

Say

- No, the original message was not same at the end of game.
- The barriers to communication like language, disturbance and noise, poor listening skills, boredom, poor speaking skills, etc. are the potential reasons this happens.
- There are various aspects to communication. Speaking skills and listening skills are two major components to any communication. There is always some room for improvement in the way we communicate.
- It is important to accept the reality of miscommunication and work to minimise its negative impacts.
Communication is a two-way process where people exchange information or express their thoughts and feelings. It involves effective speaking and effective listening. If I go to the store to get bread, I exchange money for the bread. I give something and get something in return. Communication takes place in the same manner. You have to provide and receive information for communication to take place.

Let’s play a game to understand effective listening process better.

This is a class activity. The participants need to answer the questions they hear. Instruct them to listen carefully. You will read it at a stretch and if need be repeat it once more. Tell the participants to raise their hand if they know the answer to the question asked. Keep a check on time.

Is there any law against a man marrying his widow’s sister?
If you went to bed at eight o’clock at night and set the clock’s alarm to ring at nine o’clock, how many hours of sleep would you get?
Do they have a 26th of January in England?
If you had only one match and entered a dark room that had a kerosene lamp, oil heater, and a wood stove, what would you light first?
The Delhi Daredevils and the Chennai Super Kings play five IPL matches. Each wins three matches. No match was a tie or dispute. How is this possible?
There was an airplane crash. Every single person died, but two people survived. How is this possible?
If an airplane crashes on the border of two countries, would unidentified survivors be buried in the country they were travelling to or the country they were travelling from?
A man builds an ordinary house with four sides except that each side has a southern exposure. A bear comes to the door and rings the doorbell. What is the colour of the bear?
Answers:

<table>
<thead>
<tr>
<th>Question</th>
<th>Answer</th>
</tr>
</thead>
<tbody>
<tr>
<td>There's no law against a man marrying his widow's sister, but it would be the neatest trick in the book since to have a widow, the man would have to be dead.</td>
<td>There's no law against a man marrying his widow's sister, but it would be the neatest trick in the book since to have a widow, the man would have to be dead.</td>
</tr>
<tr>
<td>You’d get one hour’s sleep since alarm clocks do not know the difference between morning and night.</td>
<td>You’d get one hour’s sleep since alarm clocks do not know the difference between morning and night.</td>
</tr>
<tr>
<td>Oh, yes. They have a 26th of January in England. They also have a 27th, a 28th, and so on.</td>
<td>Oh, yes. They have a 26th of January in England. They also have a 27th, a 28th, and so on.</td>
</tr>
<tr>
<td>First of all, you would light the match.</td>
<td>First of all, you would light the match.</td>
</tr>
<tr>
<td>Who said the Delhi Daredevils and the Chennai Super Kings were playing against each other in those games?</td>
<td>Who said the Delhi Daredevils and the Chennai Super Kings were playing against each other in those games?</td>
</tr>
<tr>
<td>Every SINGLE person died, but those two were married.</td>
<td>Every SINGLE person died, but those two were married.</td>
</tr>
<tr>
<td>You can’t bury survivors under any law especially if they still have enough strength to object.</td>
<td>You can’t bury survivors under any law especially if they still have enough strength to object.</td>
</tr>
<tr>
<td>The bear that rang the doorbell would have to be a white bear. The only place you could build a house with four southern exposures is at the North Pole where every direction is in South.</td>
<td>The bear that rang the doorbell would have to be a white bear. The only place you could build a house with four southern exposures is at the North Pole where every direction is in South.</td>
</tr>
</tbody>
</table>

Ask

De-brief question:
- What were the barriers that came into your way of listening?
- How can you overcome barriers to listening?

Say

- There is a difference between hearing and listening.
- If you don’t listen properly, the message may be misunderstood.
- Be open-minded while listening to someone.
- It is important to listen effectively and carefully without making assumptions.

Activity 3

Elevator Pitch:
You are in the lift of a hotel and you bumped into your former client who is a famous businessman. He has financed a lot of small business ventures and can finance your new start-up too. After exchanging pleasantries, he asks you what your new company does. You open your mouth, and then pause. Where do you even begin? Then, as you try to organize your thoughts, his meeting is called, and he is on his way. If you would been better prepared, you’re sure that he would have stayed long enough to schedule a meeting with you too. If you were given another chance, what would you have said to this person?

Do

- Start off the task by providing a beginning sentence to get the story started, and then go around the classroom getting each one to add a new sentence to keep the story going.
- This task should be done spontaneously allowing only a little time to think (30 seconds).
- For example: **There was once a student who was looking for a job after graduation.**
Tell the participants to follow these steps to create a great pitch, but bear in mind that you’ll need to vary your approach depending on what your pitch is about.

1. **Identify Your Goal**: Start by thinking about the objective of your pitch. For instance, do you want to tell the potential clients about your organization? Do you have a great new product idea that you want to pitch to an executive or do you want a simple and engaging speech to explain what you do for a living?

2. **Explain What You Do**: Start your pitch by describing what your organization does. Focus on the problems that you solve and how you help people. Ask yourself this question as you start writing: what do you want your audience to remember most about you? Keep in mind that your pitch should excite you first. After all, if you don’t get excited about what you’re saying neither will your audience. People may not remember everything that you say, but they will likely remember your enthusiasm.

3. **Communicate Your USP**: Your elevator pitch also needs to communicate your unique selling proposition or USP. Identify what makes you, your organization or your idea unique. You’ll want to communicate your USP after you’ve talked about what you do.

4. **Engage with a Question**: After you communicate your USP, you need to engage your audience. To do this, prepare open-ended questions (questions that can’t be answered with a "yes" or "no" answer) to involve them in the conversation. Make sure that you’re able to answer any questions that he or she may have.

5. **Put it all Together**: When you’ve completed each section of your pitch, put it all together. Then, read it aloud and use a stopwatch to time how long it takes. It should be no longer than 20-30 seconds. Remember, the shorter it is, the better!

**Example:**

Here’s how your pitch could come together:

"My company deals with cloth retail online business and we use various e-commerce platforms to sell our products. This means that you can do shopping with ease and spend time on other important tasks. Unlike other similar companies, we have a strong feedback mechanism to find out exactly what people need. This means that, on average, 95 percent of our clients are happy with our products. So, how can you help us in creating our own web portal?

6. **Practice**: Like anything else, practice makes perfect. Remember, how you say it is just as important as what you say. If you don’t practice, it’s likely that you’ll talk too fast, sound unnatural or forget important elements of your pitch. Set a goal to practice your pitch regularly. The more you practice, the more natural your pitch will become. Practice in front of a mirror or in front of colleagues until the pitch feels natural.

**Summarize**

- Close the discussion by summarizing how to speak effectively as discussed in the Participant Handbook.
19.5.4: Problem Solving & Negotiation Skills

**Unit Objectives**

At the end of this unit, students/Facilitator will be able to:
- Discuss how to solve problems
- List the important problem solving traits
- Discuss ways to assess problem solving skills
- Discuss the importance of negotiation
- Discuss how to negotiate

**Resources to be Used**

- Participant Handbook

**Ask**

- What is a 'problem'?
- What do you think are the problems you may face in the process of becoming a successful entrepreneur?

**Say**

- Discuss the definition of problem as given in the Participant Handbook.
- In a hurdle race the hurdles are the obstacles on the way to reach your goal.
- Similarly, obstacles are the hurdles you may face while reaching your goal i.e. to set-up your own business. Your goal will be to reach the finishing line after crossing these hurdles.

**Ask**

- What do you do when you face a problem?
- How do you resolve it? You can pick examples from the question asked previously 'the problems they are likely to face in the process of becoming a successful entrepreneur'.

**Say**

- Discuss how to solve problems as given in the Participant Handbook.

**Team Activity**

- This is a group activity.
- The groups will solve the problem and come up with the best solution in each case.
- 1. Unable to arrange for some extra finance for setting up a beauty parlour. The loan sanctioned and disbursed is not enough. You have tried all your contacts, friends and relatives. But unable to manage the extra amount. Bank will not sanction more amount as you have used up the complete sanction limit.
- 2. You have rented a space for your business and all arrangements are done. You will be operating from the office space rented in two days. Now the owner comes up to you and says he wants to sell the place and wants you to vacate in 15 days.
- 3. You have just set up your business and need extra human resource. You have tried invieng a few also tied up with an agency for getting the right candidate. But you are unable to get the right candidate. If the candidate is good, you cannot offer the salary demanded. If the candidate agrees to the salary, he/she has other demands like working hours to be reduced, leaves etc. which may not work for your set up.
**De-brief questions:**
1. What was the problem?
2. Is there any other alternative solution?
3. Is this the best solution presented?

**Ask**
- Try to think of some people around you who are able to solve problems very easily. Even you or your friends might be approaching them when there is a problem. What qualities do they have? What personality traits do such people possess?

**Say**
- Discuss the important traits for problem-solving as given in the Participant Handbook.

**Ask**
- In order to build a successful organization, you need to hire people who possess good problem solving skills. How would you assess the level of problem solving skills of potential candidates before hiring them?

**Say**
- Discuss how to assess for problem-solving skills as given in the Participant Handbook.

**Summarize**
- Ask the participants the things that they have learnt so far.
- Ask if they have any questions related to what they have talked about so far.
- Summarize the discussion on problem solving.

**Activity**
- The activity is to organise an election event. Select three volunteers from the group. They have to give a speech on their election manifesto to the class. They have to negotiate with the fellow participants and convince them to vote for them. The best negotiator will win the election.

**Do**
- Ask three participants to volunteer for the activity.
- Explain the purpose and duration of the activity.
- Set guidelines pertaining to discipline and expected tasks.
Ask

• Out of the three contestants, whom would you support? Why? What did they say or do which convinced you to make your decision?
• Have you ever tried to negotiate in your personal or professional life?
• Ask the class to share some of their experiences where they have been able to strike a deal by negotiating.

Say

• Discuss “What is Negotiation?” as given in the Participant Handbook.

Ask

• Why is it important to negotiate? As an entrepreneur, where do you think that negotiation skills will be needed?

Say

• Discuss the importance of negotiation while starting a business as given in the Participant Handbook.

Say

• Discuss the important steps to negotiate as given in the Participant Handbook.

Role Play

• Conduct a role play activity.
• Ask the participants to assemble together.
• Explain the purpose and duration of the activity.
• Set guidelines pertaining to discipline and expected tasks.

Do

• Divide them into groups of four (4) (depending on the batch size).
• Give them the hand-outs for role play scenarios.
• Two groups to be given scenarios on problem solving.
• Other two groups to be given scenarios on negotiation.
• The groups will build on the scenarios and prepare for the role play.
• Give the groups atleast 5 mins to discuss and be ready with the role play.
• Invite each group one by one to come and present their role play.

Problem solving Scenario 1

Avinash has a Mobile Repair Store in Allahabad. His outlet is one of the most popular one in the vicinity and he has great rapport with his customers. He is always well-dressed, jovial and full of energy.

It’s around 11 AM, when a customer barges in to the shop and starts shouting at Avinash for giving her back the instrument which is still not working. The screen of her mobile is also cracked from one side. Avinash remembered thoroughly checking the handset before handing it over to the customer. The customer threatens to sue the company and to go to Consumer Court for cheating her.
Problem solving Scenario 2
You are running a successful small scale business, Shreeji Aggarbattis. Your staff members do door to door selling and organise marketing campaigns in local markets. Your brand has established it's name in last few years. Recently, lot of customers have been coming to you and lodging complaints that your staff members indulge in malpractices. Few of them informed you that a staff member engaged them in a friendly conversation. In the meanwhile, the other gave them lesser packets of aggarbattis than they paid for. Another set of customers lodged complaint about the misconduct and rude behaviour of a particular staff member. You often hear from your customers that the orders don't get delivered on time or wrong products get delivered. You have already been struggling with shortage of staff and such complaints are a serious concern as it is hampering your brand image. What strategies will you adopt to solve this problem?

Negotiation Scenario 1
You have interviewed a prospective new employee who could be a key member of your new entrepreneurial venture. The new person is demanding a salary that is 20% higher than you thought based on your business plan. Finances are tight, yet you believe this person could make a significant impact on future profits. If you paid the required salary for the new person, then you would have to restructure your entire business plan. You've been searching for an individual with this skill level for three months. to the candidate is waiting for your response. Now you have to call him in to make the final negotiations.

Negotiation Scenario 2
You are a young entrepreneur who has just registered his start up project and applied for a bank loan accordingly. You receive a letter saying that your loan application has been rejected as your start up idea did not appeal to the bank and they think that it is not a revenue generating model. You have taken an appointment to meet the manager and show your negotiation skills to get your loan approved.

Notes for Facilitation
Facilitating Role Plays
Preparing for the activity
1. Carefully review the details of the scenario and the character descriptions.
2. Become familiar with the key issues being addressed in the scenario.
3. Study the provided material so that you are ready to address issues related to the situations depicted in the role-plays.
4. Anticipate and know how to address issues participants might raise during the activity.

Conducting the activity
1. Introduce the activity. Emphasize that role-playing provides participants with an opportunity to apply their new knowledge, skills, and tools in situations that simulate actual interactions with customers.
2. Ask participants to form pairs. Direct the members of each group to choose who will play the roles. Remind the groups that each participant should be given the opportunity to play/practice the different roles.
3. Conduct a demonstration so that participants become familiar with the expectations related to the roles and support materials.
4. Give the pairs/groups 10 to 15 minutes to conduct the role-play (depending on the duration of the session).
5. After all the groups have finished with the role-play, conduct a debriefing session on each role-play.
6. Ask the groups to take five minutes to talk about what happened during the role-play. The groups should discuss the questions given in the debriefing for each role-play. Encourage participants to provide constructive criticism during their discussions.

Summarize
1. Wrap the unit up after summarizing the key points and answering questions.
19.5.5: Business Opportunity Identification: Entrepreneurs and Opportunities

Unit Objectives
At the end of this unit, students/Facilitator will be able to:
- Discuss how to identify new business opportunities
- Discuss how to identify business opportunities within their business

Resources to be Used
- Participant Handbook
- Blank sheets of paper
- Pens

Ask
- How does an entrepreneur identify an opportunity?
- What do you think are the common queries or concerns faced by entrepreneurs?
- How can you identify new business opportunity?

Say
- Let’s talk about opportunity, common queries or concerns faced by entrepreneurs, idea as an opportunity, factors to consider when looking for opportunities, ways to identify new business, and opportunity analysis as discussed in Participant Handbook.
- Let’s do an activity to understand ways to identify business opportunities within your business.

Do
- Tell the class that this is an individual activity.
- Tell the participants to create a matrix on their notebooks.
- There will be four boxes in your matrix.
- Strength, Weakness, Opportunity and Threats will be the four headings of the matrix. This is called the SWOT matrix.
- Read out the questions to them and tell the participants they need to answer the questions asked in each matrix.
- Tell them they can also use their own understanding of themselves to fill the SWOT matrix.

Activity
Do your SWOT analysis

<table>
<thead>
<tr>
<th>Strength</th>
<th>Weakness</th>
</tr>
</thead>
<tbody>
<tr>
<td>What are your strengths?</td>
<td>What are your weaknesses?</td>
</tr>
<tr>
<td>What unique capabilities do you possess?</td>
<td>What do your competitors do better than you?</td>
</tr>
<tr>
<td>What do you do better than others?</td>
<td></td>
</tr>
<tr>
<td>What do others perceive as your strengths?</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Opportunity</th>
<th>Threat</th>
</tr>
</thead>
<tbody>
<tr>
<td>What trends may positively impact you?</td>
<td>Do you have solid financial support?</td>
</tr>
<tr>
<td>What opportunities are available to you?</td>
<td>What trends may negatively impact you?</td>
</tr>
</tbody>
</table>
Do

• Congratulate everyone for the class activity.
• Ask the audience to applaud for themselves.
• Allot the participants sufficient time to complete this activity, but do keep a check on time.
• Ask de-brief questions to cull out information from the participants.

Ask

De-brief questions:

• What are your weaknesses according to your SWOT analysis?
• Do you think you can change your weakness into strength? How?
• Do you think you can work on your threats? How?

Summarize

• Close the discussion by summarizing ways to identify business opportunities within your business.
• Ask the participants what they have learned from this exercise.
• Ask if they have any questions related to what they have talked about so far.
At the end of this unit, students/Facilitator will be able to:
- Explain the meaning of entrepreneur
- Describe the different types of entrepreneurs
- List the characteristics of entrepreneurs
- Recall entrepreneur success stories
- Discuss the entrepreneurial process
- Describe the entrepreneurship ecosystem
- Discuss the purpose of the ‘Make in India’ campaign
- Discuss the key schemes to promote entrepreneurs

**Resources to be Used**
- Participant Handbook
- Chart papers
- Marker pens
- Pencils
- Colour pencils
- Scale
- Eraser
- Other requisite stationery material

**Ask**
- Do you think that entrepreneurs need support?
- What do you think is an eco-system?
- What do you think ‘entrepreneurship support eco-system’ means?

**Say**
- Let’s learn what entrepreneurship support eco-system means.
- Discuss ‘Entrepreneurship Support Eco-System’ as given in the Participant Handbook.

**Ask**
- Can you define entrepreneurship support eco-system?
- What are the key domains of the support eco-system?

**Say**
- Let’s learn more about these domains by conducting an activity.
- You have to make a poster showing the components of the six main domains of entrepreneurship support eco-system.

**Team Activity**
- Making a poster showing the entrepreneurship support eco-system.
Do
- Divide the class into groups of four or six.
- Hand out chart paper and coloured pens.
- Explain the purpose and duration of the activity.
- Go around checking the progress of each group.
- Set guidelines pertaining to discipline and expected tasks.

Activity De-brief
Ask each group to display their poster and explain the key domains of entrepreneurship support eco-system.

Ask
- What kind of government support eco-system is available for entrepreneurs in India?

Say
- Discuss ‘Make in India’ campaign as given in the Participant Handbook.

Team Activity
- Presentation on key schemes to promote entrepreneurs

Do
- Divide the class into pairs.
- Number each pair from 1-15.
- Assign a scheme, same as their group number, to each group.
- Ask them to read the scheme carefully and present it to the class.
- Explain the purpose and duration of the activity.
- Go around checking the progress of each group.
- Set guidelines pertaining to discipline and expected tasks.

Activity De-brief
- Ask each group to explain the scheme offered by government to promote entrepreneurs.

Summarize
- Summarize the unit by discussing the key points and answering questions the participants may have.
19.5.7: Risk Appetite & Resilience

Unit Objectives

At the end of this unit, students/Facilitator will be able to:

- Discuss the relationship between entrepreneurship and risk appetite
- Discuss the relationship between entrepreneurship and resilience
- Describe the characteristics of a resilient entrepreneur

Resources to be Used

- Participant Handbook
- Chart papers
- Blank sheets of paper
- Pens
- Marker pens

Ask

- Can you define risk or explain what constitutes a risk?
- What do you mean when they say, “This may be a risky proposition”?
- What risks are they talking about?

Example

- Let’s have a look at these two examples:

  Rohit and his family were travelling by car from Delhi to Nainital. It was their second trip there. Rohit was familiar with the road. His friends told him that the highway after Rampur was in a bad condition. They advised him to take a shortcut and turn left from Moradabad and take the Kaladhungi road. This road is in a better condition. Since he was going with his family, and did want take the risk of getting lost, he left early. He took the Kaladhungi road and reached Nainital well in time.

  Suresh and his family too were travelling by car from Delhi to Nainital. It was their second trip there. His friends too advised him to take a shortcut and turn left from Moradabad and take the Kaladhungi road as this road was in a better condition. Suresh too decided to take the Kaladhungi road but he left Delhi in the afternoon. It was dark by the time he reached Kaladhungi, and he was sure that he was taking the correct turn. As it was late, he could not find anyone to give him directions. He ended up being in an unknown place that was scarcely inhabited.

Say

- Let’s see what type of risks Rohit and Suresh took.
- Discuss ‘Risk Appetite and Resilience’ with the participants as given in the Participant Handbook.

Say

- Let’s learn more about risk appetite and resilience with the help of an activity.
Team Activity

Risk Appetite
- This is a group activity.
- In the previous unit, you read success stories of Mr Dhirubhai Ambani and Dr Karsanbhai Patel.
- Mr Ambani left his job and started his company Reliance with just Rs. 50,000/-.
- Dr Patel kept his job, went door-to-door to sell Nirma, and only when the brand started gaining popularity did he start his own company.
- What types of risk did both of them take?
- What risk factors, do you think, did they keep in mind before launching their company?
- Write the Risk Appetite Statement of both the companies.

Activity De-brief
- Who took a greater risk?
- What are the differences between the Risk Appetite Statement of both the companies?

Do
- Instruct the participants that this is group work.
- Divide the class into small groups of 4.
- Give each group a chart paper.
- Tell the participants that they have to evaluate the risks taken by Mr Dhirubhai Ambani and Dr Karsanbhai Patel.
- Give the participants 15 minutes to discuss and write.
- Keep a check on time. Tell the group to wind up quickly if they go beyond the given time limit.

Ask
- Do you think all entrepreneurial ventures are successful?
- What happens if the first venture is not successful?
- Should the entrepreneur stop when faced with challenges or face them?

Example
- Let's have a look at the following example:

Vijay Shekhar Sharma is the founder of Paytm, which is a giant Indian e-commerce. He was born in a middle-class family in Uttar Pradesh. He started his first job at an MNC. He quit after six months and built a company One97 with his friends. As One97 grew bigger, it needed more money because it was running more servers, bigger teams, and had to pay royalty. At that time, the tech bubble popped and technology companies were running in losses. Finally, money ran out. So One97 took loans and then more loans at higher rates of interest, as high as 24 per cent, and became caught in a vicious cycle.

In 2014, Paytm was launched with online wallet services after which, the company enabled online payment transactions. The company got licenses from RBI in 2016 to launch India’s first ever payment bank. Moreover, the main motive of Paytm was to transform India into a cashless economy.

After demonetization came into effect, Vijay Shekhar Sharma started promoting online and digital transactions to deal with the cash crunch. In fact, the service of the company’s mobile wallet is accepted across India. The logo of Paytm is now popular almost everywhere from tea stalls to major companies.
Say

- Let's see what qualities made Vijay Shekhar Sharma a resilient entrepreneur.
- Discuss Entrepreneurship and Resilience with the participants as given in the Participant Handbook.

Say

- Let's learn more about entrepreneurship and resilience with the help of an activity.

Team Activity

Entrepreneurship and Resilience

- This is a group activity.

  - Think of some entrepreneurship ventures that faced challenging times, but later resulted in success stories.
  - Who is the founder of that company?
  - What challenging times did it face?
  - How did it overcome those challenges?
  - List the resilient characteristics of the entrepreneur.

Activity De-brief

- Each group to give their presentation.
- Why did you choose this company?
- What is the success story of the company?

Do

- Instruct the participants that this is group work.
- Divide the class into small groups of 4.
- Give each group a chart paper.
- Tell the participants that they have to think of an entrepreneur who faced challenging times, but eventually succeeded.
- Give the participants 15 minutes to discuss and write.
- Keep a check on time. Tell the group to wind up quickly if they go beyond the given time limit.

Summarize

- You can summarize the key points of the unit.
- Ask the participants what they learned from the activities.
- Clarify any questions or doubts they might have.
19.5.8: Success and Failures

Unit Objectives
At the end of this unit, students/Facilitator will be able to:
- Discuss how to deal with failure

Resources to be Used
- Participant Handbook

Ask
- Have you heard the quote 'nothing is impossible'?
- What do you think it means?
- Do you think that all successful entrepreneurs became famous overnight or did they have to struggle or face failure before succeeding?

Example
- Let’s have a look at this example.

Shah Rukh Khan, also known as, SRK or King Khan is a force to reckon with. Did he achieve stardom overnight? Shah Rukh Khan, who has seen many struggles in his life has slept on streets, struggled to support himself and his sister at a very young age, and lost his parents very early in life, which led to his sister seeking mental health support. Amidst all the chaos and challenges, he kept pushing himself, and today he stands tall as the 'Badshah of Bollywood'. Certainly those years were not easy for him.

When he was young, he stood at Marine Drive and said, “I will rule this city one day”. Failure was not just his companion during or before his stardom, it is still a substantial part of his life. Success does not come easy. What made him a star was his acceptance of failure and the urge to improve.

Say
- How do you define success and failure?
- What is fear?
- Discuss “success and failure” with the participants as given in the Participant Handbook.

Ask
- Have you felt or experienced fear?
- What led you to feel that emotion?
- How did you handle it?

Say
- Let’s learn about success and failure with the help of an activity.
Team Activity

- Divide the class into groups of four.
- Instruct them to think of one scenario where they have to interview a successful entrepreneur.
- Explain the purpose and duration of the activity.
- Set guidelines pertaining to discipline and expected tasks.
- They have to choose one person from the group as the interviewee and one as the interviewer.
- Go around and make sure they have understood what is to be done and are discussing the roles properly.
- Check that everyone understands their role. Give clarifications if needed. Give the participants about 5 minutes to discuss and decide their roles.
- Ask the groups to stop the discussion as soon as the time is over.
- Invite each group one by one to come and present their interview as a role play.

Notes for Facilitation

Facilitating Role Plays
Preparing for the activity
1. Carefully review the details of the scenario and the character descriptions.
2. Become familiar with the key issues being addressed in the scenario.
3. Study the provided material so that you are ready to address issues related to the situations depicted in the role plays.
4. Anticipate potential questions that might be raised by the participants and be ready to address them.

Conducting the activity
1. Introduce the activity. Emphasize that role playing provides participants with an opportunity to apply their new knowledge, skills, and tools in situations that simulate actual interactions with customers.
2. Ask participants to form pairs. Direct the members of each group to choose who will play the roles. Remind the groups that each participant should be given the opportunity to play/practice the different roles.
3. Conduct a demonstration so that participants become familiar with the expectations related to the roles and support materials.
4. To maintain spontaneity of the interactions during the role play, ask the participants not to discuss the details of their roles prior to the role play.
5. Give the pairs 15-20 minutes to conduct the role play.
6. Circulate among the groups to answer any questions that may arise and provide guidance as needed.
7. After all the pairs have finished with the role play, conduct a de-briefing session on each role play.
8. Ask the groups to take five minutes to talk about what happened during the role play. The groups should discuss the questions given in the de-briefing for each role play. Encourage participants to provide constructive criticism during their discussions.
9. Conclude the activity by asking participants to think about whether and how they might use scripted role plays in their real life.

Summarize

- Wrap the unit up after summarizing the key points and answering questions.
UNIT 19.6: Preparing to be an Entrepreneur

Key Learning Outcomes

At the end of this unit, students/Facilitator will be able to:

1. Discuss how market research is carried out
2. Describe the 4 Ps of marketing
3. Discuss the importance of idea generation
4. Recall basic business terminology
5. Discuss the need for CRM
6. Discuss the benefits of CRM
7. Discuss the need for networking
8. Discuss the benefits of networking
9. Discuss the importance of setting goals
10. Differentiate between short-term, medium-term and long-term goals
11. Discuss how to write a business plan
12. Explain the financial planning process
13. Discuss ways to manage your risk
14. Describe the procedure and formalities for applying for bank finance
15. Discuss how to manage their own enterprise
16. List the important questions that every entrepreneur should ask before starting an enterprise
19.6.1: Market Study/ The 4Ps of Marketing/ Importance of an IDEA: Understanding Market Research

Unit Objectives

At the end of this unit, students/Facilitator will be able to:
- Discuss how market research is carried out
- Describe the 4 Ps of marketing
- Discuss the importance of idea generation

Resources to be Used

- Participant Handbook
- Chart papers
- Markers pens
- Blank sheets of paper

Ask

- Suppose, you want to open a restaurant, what are the factors you will consider?
- How will you promote your restaurant?

Example

- Let's have a look at this example.
  Arjun was an MBA working in a company. But he wanted to start a low cost budget hostel for foreign tourists coming to India. He did a lot or market research before starting the project. Based on the information he gathered, he made his business plan. His hostel is now flourishing and he is thinking of expanding to other tourist destinations.

Say

- Discuss "Market Study" with the participants. Refer to the Participant Handbook.
- Let's learn about market study and research with the help of an activity.

Team Activity

Market Study
- This is a group activity.
- You want to start your own tuition centre.
- What type of research will you do?

Activity De-brief
- Ask each group to come forward and give a brief presentation.
- Encourage other groups to be interactive and ask questions.
- What factors did you keep in mind while doing your research?
- Based on our research would you go ahead and open a tuition centre?
By opening a tuition centre you are offering a service.

What factors will you keep in mind before opening it?

Discuss “The 4Ps of Marketing” with the participants as given in the Participant Handbook.

Let's learn about the 4Ps of Marketing with the help of an activity.

4 Ps of Marketing

- This is a group activity.
- You have to sell a pen to four different segments:
  1. Rural villagers
  2. Rural middle class
  3. Urban middle class
  4. Upper end rich people (Niche market)

Keeping the 4Ps of Marketing in mind, what marketing strategy will you design to sell the pen?

Activity De-brief

- Ask each group to present their strategy.
- Encourage other groups to be interactive and ask questions.

Instruct the participants that this is group work.

Divide the class into four groups.

Give each group a chart paper.

Assign each group a target audience for selling the pens:
  1. Rural villagers
  2. Rural middle class
  3. Urban middle class

Instruct the participants that this is group work.

Divide the class into small groups of 4 or 6.

Give each group a chart paper.

Tell the participants that they have to start their own tuition centre.

Give the participants 10 minutes to discuss and write the research work they need to do.

Keep a check on time. Tell the group to wind up quickly if they go beyond the given time limit.

Divide the class into small groups of 4 or 6.

Give each group a chart paper.

Assign each group a target audience for selling the pens:
  1. Rural villagers
  2. Rural middle class
  3. Urban middle class
Say

- Each entrepreneur has an idea of wants he wants to sell. It may be a service or a product.
- Discuss “Importance of an IDEA” as given in the Participant Handbook.

Summarize

- Summarize the key points of the unit.
- Ask the participants what they learnt from the activities.
- Encourage them to ask if they have any doubts.

4. Upper end rich people

- Tell the participants that they have to design a marketing strategy keeping the 4Ps of Marketing in mind.
- Give the participants 20 minutes to discuss and come up with their strategy.
- Keep a check on time. Tell the group to wind up quickly if they go beyond the given time limit

Activity De-brief

- Ask each group to come forward and give a brief presentation.
- Ask each group what they kept in mind while designing their marketing strategy.
- Encourage other groups to be interactive and ask questions.
At the end of this unit, students/Facilitator will be able to:

- Recall basic business terminology

**Unit Objectives**

**Resources to be Used**

- Participant Handbook

**Say**

- Let's recall some basic business terminology.
- Discuss the Business Entity Concepts as given in the Participant Handbook.
- Let's learn some basic business terminology by having an activity.
- We will have a quiz today.

**Activity**

- The activity is a quiz.

**Do**

- Divide the class in two groups and give a name to each group.
- Explain the rules of the quiz. For each correct answer the group gets 1 mark.
- If the group is unable to answer the question is passed to the next group.
- Explain the purpose and duration of the activity.
- Ask the questions of the quiz.
- Keep a score of the groups.
- Set guidelines pertaining to discipline and expected tasks.

**Summarize**

- Summarize the unit by discussing the key points.

**Notes for Facilitation**

**QUESTIONS FOR THE QUIZ**

1. What does B2B mean?
   
   *Business to business*

2. What is a financial report?
   
   *A comprehensive account of a business’ transactions and expenses*

3. Who is a sales prospect?
   
   *A potential customer*

4. How is working capital calculated?
   
   *Current assets minus current liabilities*
5. What is an estimation of the overall worth of a business called?
   **Valuation**

6. You are buying a house. What type of transaction is it?
   **Complex transaction**

7. How will you calculate the net income?
   **Revenue minus expenses**

8. How is Return on Investment expressed?
   **As percentage**

9. How will you calculate the cost of goods sold?
   **Cost of materials minus cost of outputs**

10. What is revenue?
    **Total amount of income before expenses are subtracted.**

11. What is a Break-Even Point?
    **This is the point at which the company will not make a profit or a loss. The total cost and total revenues are equal.**

12. What is the formula used to calculate simple interest?
    **A = P(1 + rt); R = r * 100**

13. What are the three types of business transactions?
    **Simple, Complex and Ongoing Transactions**

14. The degrading value of an asset over time is known as
    **Depreciation**

15. What are the two main types of capital?
    **Debt and Equity**
19.6.3: CRM & Networking

Unit Objectives

At the end of this unit, students/Facilitator will be able to:

- Discuss the need for CRM
- Discuss the benefits of CRM
- Discuss the need for networking
- Discuss the benefits of networking

Resources to be Used

- Participant Handbook

Ask

- Can your business run without customers/buyers?
- Who is the most important entity in any business?

Say

- The key to every success business lies on understanding the customer’s expectations and providing excellent customer service.
- Discuss about CRM and its benefits. Refer to the Participant Handbook.
- Providing excellent customer service entails:
  - Treating your customers with respect.
  - Be available as per their need/schedule.
  - Handling complaints effectively.
  - Building long-lasting relationships.
  - Collecting regular feedback.
- Handle customer complaints proactively. Ask “what happened”, “why it happened”, “how can it be avoided next time”, etc.
- Collecting feedback from the customers regularly will enable you to improve your good/service.
- “Let’s understand it better with the help of some case scenarios. You will be given some cases within your groups. You have to analyse the case scenario that has been given to you and then find an appropriate solution to the problem.”

Do

- Divide the class into four groups of maximum six participants depending on the batch size.
- Give one case study to each group.
- Instruct them to read the case carefully.
- The group is expected to analyse and discuss the case amongst them and find a solution to the given problem.
- Put down the discussion points (de-brief questions) on the board. Give the class 5-10 minutes to discuss the case and note down their solutions.
- At the end of 10 minutes, the team should present their case solution to the class.
Case Study Analysis

Raju runs a business of wooden furniture. He has a huge list of customers on Facebook and WhatsApp who give him orders regularly. Ankita is one of his old and regular customers. She placed an order for a new chester and TV cabinet via WhatsApp and requested Raju to send them as soon as possible. When the parcel reached Ankita through courier she found that chester was broken and the TV unit was chipped from the bottom. Ankita was heartbroken. It was a complete waste of money. She sent a message to Raju on WhatsApp, expressing her anger and disappointment. Raju might lose an old customer forever if he doesn't satisfy the customer. What should Raju do to retain his customer?

Scenario 2

Rajni runs a boutique shop. She sells suits and sarees. She is one of the most successful designer in her city. Rajni swears that all the clothes in her boutique have unique designs. Smita has to attend her cousin’s wedding; she goes to Rajni's boutique to buy a saree. Smita wanted a unique designer saree. Rajni customized a saree for her and sent it over the courier. When Smita had a look at the saree she realised her two friends had the same design sarees. She sent a message to Rajni on WhatsApp, expressing her anger and disappointment. Did Rajni make a false promise? Were her designs copied? What could happen to Rajni's image after this incident? What would you do if you were in Rajni's place?

Scenario 3

Shama is a beautician who offers parlour services to ladies by making home visits. Recently, Shama got her name registered on an e-commerce website. Two days earlier, she got a message from Mrs Sushma. The appointment was fixed for next day, 11:00 am and the remuneration for the services was decided beforehand. When Shama reached there at 10:50 am, Mrs Sushma was not at home. When Shama called her, she asked her to wait for a while. Mrs Sushma reached home at 11:45 am. Meanwhile, Shama had to reschedule her next appointment. After availing Shama’s services, Mrs Sushma refused to pay the requisite amount and started finding faults in the services provided by her. Who was at fault in this scenario? What should you do in case the customer behaves unreasonably? What would you do if you were in Shama’s place?

Scenario 4

Shailender is the manager of a car showroom. He proactively takes part in all the transactions that happen in his showroom. Vinita wants to buy a new car. She has chosen a car from Shailender’s showroom. The salesperson has given her a very good discount and has also promised free service for one year. Vinita goes to the showroom and asks to complete all the formalities to purchase the car. When she sees the final bill she realize that she has not received the promised discount neither was there any mention of the free services. She immediately demands to see the Shailender. When Shailender’s head asks how much discount Vinita was promised, he realised the discount will make the sale in loss. The car showroom owner might lose a customer and deal due to false commitments made by his manager. Besides, the customer might tell this to other people, creating a bad name and image for the showroom. If you owned that showroom, how would you have convinced your customer?

Say

- Now, let’s discuss the problem and solution with the class.
- The group will first briefly describe the case to the class.
- Then discuss the issue identified and the proposed solution.
- Present the solution as a role play.
- Post presentation, the other groups may ask questions from the group that has presented.
**Do**
- Congratulate each group for the presentation/role play.
- Ask the audience to applaud for them.
- Keep a check on time. Tell the group to wind up the discussion quickly if they go beyond the given time limit.

**Say**
- If your customers are happy with you they will give referrals which will help to grow your business.
- One more way of growing business is 'Networking'.
- Discuss Networking and its benefits. Refer to the Participant Handbook.

**Activity**
**Group Discussion**
- Conduct a group discussion in the class on how they can do networking for their business.

**Summarize**
- Ask the participants what they have learnt from this exercise/activity.
- Ask if they have any questions related to what they have talked about so far.
- Close the discussion by summarizing the importance of CRM and Networking for entrepreneurs.
- Close the discussion by summarizing the importance of CRM and Networking for entrepreneurs.
19.6.4: Business Plan: Why Set Goals?

Unit Objectives

At the end of this unit, students/Facilitator will be able to:

- Discuss the importance of setting goals
- Differentiate between short-term, medium-term and long-term goals
- Discuss how to write a business plan
- Explain the financial planning process
- Discuss ways to manage your risk

Resources to be Used

- Participant Handbook
- Chart papers
- Blank papers
- Marker pens
- Ruler

Ask

- Remember we had written SMART Goals in a previous session? Let’s try and recall why it is important to set goals?
- While framing SMART goals, we talked about ‘T’ in SMART, which was ‘Time Bound’? What do we mean by time-bound goals?
- What time limit did you set for your goal- 3 weeks, 3 years, 10 years?

Say

- Talk about short term, long term and medium term goals, as discussed in the Participant Handbook.

Ask

- As you are planning to become an entrepreneur, you must have thought of an idea for a start-up. What is your business idea?

Do

- Ask few participants to share their business ideas.

Ask

- Have you created a business plan for your business idea?
- Do you think it is important to have a business plan in place? Why/why not?

Say

- Talk about 'Why Create a Business Plan’ as discussed in the Participant Handbook.
- Let’s understand it better with the help of an activity.
Team Activity

Writing a business Plan

- This is a group activity.
- Give the groups the required resources such as chart paper and markers.
- This activity is divided into two parts:
  1. Create a business idea
  2. Develop a business plan
- The group will discuss and come up with a new business idea and present their idea to the class.
- In the second part of the activity the group will develop a business plan for the business idea.
- The business plan prepared will be presented by the groups to the class.

<table>
<thead>
<tr>
<th>MY BUSINESS PLAN</th>
</tr>
</thead>
<tbody>
<tr>
<td>Executive Summary: What is your Mission Statement?</td>
</tr>
<tr>
<td>Business Description: What is the nature of your business?</td>
</tr>
<tr>
<td>Market Analysis: What is your target market?</td>
</tr>
<tr>
<td>Organization and Management: What is your company’s organizational structure?</td>
</tr>
<tr>
<td>Service or Product Line: What is the lifecycle of your product/service?</td>
</tr>
<tr>
<td>Marketing and Sales: How will you advertise and sell your products?</td>
</tr>
<tr>
<td>Funding Request: How much fund is required and from where?</td>
</tr>
</tbody>
</table>

Say

- Teams will need to brainstorm for this part of the activity.
- Use the blank papers for the second part of this activity.
- Make your business plan on a chart paper based on the following parameters:
  1. Executive Summary
  2. Business Description
  3. Market Analysis
  4. Organization and Management
  5. Service or Product Line
  6. Marketing and Sales
- Explain each parameter in detail as done in the Participant Handbook.
- Discuss each parameter with the business idea examples of the groups.
- Groups will discuss and develop the business plan for their business idea.
Say
- Now, let's share our plan with the class.
- Each group will briefly describe the plan to the class.
- Post presentation, the other groups may ask questions to the group who have presented their plan.

Do
- Congratulate each group for sharing their points.
- Ask the audience to applaud for them.
- Keep a check on time. Tell group to wind up the discussion quickly if they go beyond the given time limit.

Say
- Along with a business plan, you need to create a financial plan and evaluate the risk involved with your start up.

Summarize
- Ask the participants what they have learnt from this exercise/activity.
- Ask if they have any questions related to what they have talked about so far.

Notes for Facilitation
- Keep the business plan format ready in a flipchart to display it during the activity.
19.6.5: Procedures and Formalities for Bank Finance

Unit Objectives

At the end of this unit, students/Facilitator will be able to:

- Describe the procedure and formalities for applying for bank finance

Resources to be Used

- Participant Handbook
- Bank loan/finance form sample

Ask

- While preparing a business plan in the last session, we discussed financial planning to arrange financial resources for your start-up. Therefore, how will you collect funds to start your business?

Say

- While most entrepreneurs think 'product' is the most difficult thing to decide for a business, start-up capital poses an even a bigger obstacle. Though there are various ways of funding the business, to convince investors to invest money is the most challenging.

- Some of the funding options available in India are:
  - **Bootstrapping**: Also called self-financing is the easiest way of financing
  - **Crowd funding**: Funds are collected by consumers pre-ordering or donating for starting the business.
  - **Angel investors**: Individual or group of investors investing in the company
  - **Venture capitalists**: Venture capitals are professionally managed funds who invest in companies that have huge potential. They usually invest in a business against equity.
  - **Bank loans**: The most popular method in India.
  - **Microfinance Providers or NBFCs**
  - **Government programmes**
- Let us know discuss the most popular method i.e. bank finance in detail here.

Do

- Discuss the list of documents that are required to apply for a loan like letter of introduction, business brochure, references of other banks, and financial statements.
- Explain the details to be filled in a loan application form.
- Divide the class into groups. Give each group a loan application form.
- Ask the groups to discuss and fill the form.

Summarize

- Close the discussion by summarizing the important documents needed for bank loan.
- Ask the participants if they have any questions related to what they have talked about so far.
**CHECKLIST OF DOCUMENTS TO BE SUBMITTED ALONG WITH LOAN APPLICATION**

(Common for all banks)

<table>
<thead>
<tr>
<th></th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>Audited financial statements of the business concern for the last three years</td>
</tr>
<tr>
<td>2.</td>
<td>Provisional financial statements for the half year ended on ________________</td>
</tr>
<tr>
<td>3.</td>
<td>Audited financial statements of associate concern/s for the last three years</td>
</tr>
<tr>
<td>4.</td>
<td>Copy of QIS II for the previous quarter ended on ____________</td>
</tr>
<tr>
<td>5.</td>
<td>Operational details in Annexure I</td>
</tr>
<tr>
<td>6.</td>
<td>CMA data for the last three years, estimates for current year and projection for the next year</td>
</tr>
<tr>
<td>7.</td>
<td>Term loan/DPG requirements in Annexure II</td>
</tr>
<tr>
<td>8.</td>
<td>List of machinery in respect of machinery offered as security in Annexure III</td>
</tr>
<tr>
<td>9.</td>
<td>Additional details for export advances furnished in Annexure IV</td>
</tr>
<tr>
<td>10.</td>
<td>Property statements of all directors/partners/proprietor/guarantors</td>
</tr>
<tr>
<td>11.</td>
<td>Copies of ITAO of the company for the last three years</td>
</tr>
<tr>
<td>12.</td>
<td>Copies of ITAOs/WTAOs of the directors/partners/proprietor and guarantors</td>
</tr>
<tr>
<td>13.</td>
<td>Copies of certificate from banks and financial institutions certifying the latest liability with them</td>
</tr>
<tr>
<td>14.</td>
<td>Copy of board resolution authorizing the company to apply to your bank for the credit facilities mentioned in application</td>
</tr>
<tr>
<td>15.</td>
<td>Copy of memorandum and article of association (in case of limited company)/partnership deed (in case of partnership firm)</td>
</tr>
<tr>
<td>16.</td>
<td>Cash budget for the current year and next year in case of contractors and seasonal industries</td>
</tr>
</tbody>
</table>
19.6.6: Enterprise Management – An Overview: How to Manage Your Enterprise?

**Unit Objectives**
At the end of this unit, students/Facilitator will be able to:
- Discuss how to manage their own enterprise

**Resources to be Used**
- Participant Handbook

**Ask**
- Having set-up a business, do you think it is possible to do everything on your own?
- Does one require trained persons for help?
- What does management mean?

**Say**
- Let’s have a look at this example:
  Kapil had a small business that was beginning to pick up pace. He wanted to expand his business, and therefore employed few more people. One day, as he was walking past Ramesh, one of his new employees, he overheard Ramesh talking rudely to a customer on the phone. This set him thinking. Kapil realised that he should have regular team meetings to motivate his employees and speak with them about any problems they might be facing during work. He should also conduct training sessions on new practices, soft skills, and technology, and develop work ethics manual for managing his enterprise.

**Say**
- Was Kapil correct in his approach or he should have scolded Ramesh instantly in front of his other employees?
- Discuss “Enterprise Management – An Overview” with the participants as given in the Participant Handbook.

**Say**
- Let’s learn how to effectively manage an enterprise or business through an activity.

**Team Activity**

**Enterprise Management**
- This is a group activity.
- Design a matrix listing the topics and key words that are needed to run an enterprise effectively and smoothly.

**Activity De-brief**
- Have each group present their matrix.
- Encourage participants of the other groups to ask question about each other’s presentation.
Do

- Instruct the participants that this is group work.
- Divide the class into small groups of 4.
- Give each group a chart paper and coloured pen.
- Tell the participants that they have make a matrix they need to fill.
- They have to write the main topics and key words that will them effectively manage their enterprise.
- Give the participants 15 minutes to discuss and write.
- Keep a check on time. Tell the group to wind up quickly if they go beyond the given time limit.

Summarize

- Ask the participants what they have learned from this exercise/activity.
- Ask if they have any questions related to what they have talked about so far.
- Close the discussion by summarizing the importance of effective management to run an enterprise as given in the Participant Handbook.
At the end of this unit, students/Facilitator will be able to:

- List the important questions that every entrepreneur should ask before starting an enterprise

**Resources to be Used**

- Participant Handbook
- Blank sheets of paper
- Pens

**Ask**

- Why do you want to become an entrepreneur?

**Say**

- It is very important to know why you want to become an entrepreneur. Your personal goals for becoming an entrepreneur play a key role in the success of your business. Your goals should be clear well before you start your business.
- Apart from the goals, the other aspects of business that you need to bear in mind are the potential problems that you may face to set-up, your areas of interest, and all the other dimensions of the business.
- Let’s understand it better with the help of some questions that every entrepreneur should ask before starting their own business.
- Open the Participant Handbook section named ‘20 Questions to Ask Yourself Before Considering Entrepreneurship’. You have to answer the questions individually.
- Then, we will have a class discussion on all the questions.

**Do**

- Read out the questions one by one in front of all the participants.
- Participants have to answer all the one by one questions.
- Give the class 10-15 minutes to note down their answers.
- At the end of 15 minutes, open the discussion for all the questions.
- Moderate the discussion by focusing on the relevant points.
- Keep a check on time and don’t let the discussion get sabotaged or lose track of time. Ensure all the questions are covered and discussed.

**Summarize**

- Ask the participants what they have learned from this exercise/activity.
- Ask if they have any questions related to what they have talked about so far.
20. Annexures

Annexure I – Training Delivery Plan
Annexure II – Assessment Criteria
# Annexure I

## Training Delivery Plan

<table>
<thead>
<tr>
<th>Training Delivery Plan</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Program Name:</strong> Certificate Course in Assorter (Advanced)</td>
</tr>
<tr>
<td><strong>Qualification Pack Name &amp; Ref. ID</strong></td>
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<tr>
<td><strong>Version No.</strong></td>
</tr>
<tr>
<td><strong>Pre-requisites to Training (if any)</strong></td>
</tr>
</tbody>
</table>

### Training Outcomes

By the end of this program, the participants will be able to:

1. **Assort diamonds for jewellery manufacturing:**
   - Segregating diamonds of similar characteristics into groups as per basic 4C’s.
   - Select them to be used in jewellery manufacturing

2. **Grade and Assort polished diamonds:**
   - Tallying the weight of the stones from the weight written on the packet.
   - Grade and classifying into multiple group based on the 4C’s
   - Grade diamonds based on colour (from D to Z), clarity (From flawless to included) and cut (from excellent to poor)
   - Reporting problems related to lighting failure, tool failure, any delays, mismatch etc.

3. **Assort rough diamonds:**
   - Segregating rough diamonds of similar characteristics into groups like makeable, sawable, cleavable.
   - Send them further for processing

4. **Assort gemstones:**
   - Segregating gemstones in groups in terms of type, size, colour and weight.

5. **Coordinate with others:**
   - Coordinate with others to work as a team and multitask and communicate with colleagues.
   - Achieve team goals and individual goals.

6. **Maintain occupational health and safety:**
   - Familiarising artisan towards potential hazards in order to make work environment safe for everyone against fire and other hazards with first aid procedures.
<table>
<thead>
<tr>
<th>Sl. No</th>
<th>Module Name</th>
<th>Session Name</th>
<th>Session Objectives</th>
<th>NOS Reference</th>
<th>Methodology</th>
<th>Training Tools/Aids</th>
<th>Duration</th>
</tr>
</thead>
</table>
| 1     | Introduction| Orientation  | • Introduce each other and the training centre  
|       |             |              | • Build rapport with fellow students and the facilitator  
|       |             |              | • Establish a positive classroom environment  
|       |             |              | • Develop platform for positive facilitator/student relationship  
|       |             |              | • Inform about any achievements of the facilitator or training centre in the gem and jewellery sector (if any) | | Facilitator-led-discussion Videos | Projector/Notes/Slides, Video | 0.5 hours |
| 2     | Introduction to the gem and Jewellery Sector | Types of organizations and job roles | • List the different types of organizations in the gem and jewellery sector  
|       |             |              | • Outline the different types of job roles in the gem and jewellery industry | | NA | Facilitator-led-discussion  
|       |             |              |  
|       |             |              | Videos  
|       |             |              | Mentoring | | | Projector/Notes/Slides, Video | 2 hrs |
| 3     | Assort diamonds for jewellery manufacturing (optional NOS) | Assort diamonds for jewellery manufacturing | • Receiving diamond packets  
|       |             |              | • Understanding the process of procurement of diamond packets in the organization  
|       |             |              | • Concept of facets, parts of diamond and its arrangement  
|       |             |              | • Concept of 4C’s  
|       |             |              | • Understanding of clarity grading  
|       |             |              | • Understanding of G&J/N3603 PC2  
|       |             |              | PC1, KB2  
|       |             |              | PC8, PC11  
|       |             |              | PC6, KB3  
|       |             |              | PC6, KB3 | | Facilitator-led-discussion and lectures  
|       |             |              | Demonstration  
|       |             |              | Equipment handling  
|       |             |              | Practice sessions | | | Tweezers  
|       |             |              | Scoop  
|       |             |              | Shade card  
|       |             |              | 10x eye glass  
|       |             |              | Tripod or Table loupe  
|       |             |              | Cleaning Cloth  
|       |             |              | Day light Lamp  
|       |             |              | Assortment Pads with white sheets  
|       |             |              | Pen  
|       |             |              | Pencil  
<p>|       |             |              | Eraser | | | | 142 hours |</p>
<table>
<thead>
<tr>
<th>4</th>
<th>Assort polished diamonds (optional NOS)</th>
<th>Polished diamond grading and assorting</th>
<th></th>
<th>142 hours</th>
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<tbody>
<tr>
<td></td>
<td></td>
<td>Introduction to diamonds, its formation, mining and sources.</td>
<td></td>
<td>Facilitator-led discussion and lectures</td>
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<td></td>
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<td>Concept of facets, parts of diamond and its arrangement</td>
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<td>Demonstration</td>
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<td></td>
<td></td>
<td>Concept of 4C’s in detail and their grading charts</td>
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<td>Equipment handling</td>
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<td></td>
<td></td>
<td>Understanding of clarity grading, inclusions and blemishes in diamonds and grading them</td>
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<td>Practice sessions</td>
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<td></td>
<td>Understanding of price/valuation of diamonds</td>
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<td>Tweezers</td>
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<td></td>
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<td>PC3, PC4, PC6, KB3, KB6</td>
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<td>Scoop</td>
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<td></td>
<td></td>
<td>PC6, KB3, KB4</td>
<td></td>
<td>Shade card</td>
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<td></td>
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<td>PC6, KB3, KB4</td>
<td></td>
<td>10x eye glass</td>
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<td></td>
<td></td>
<td>PC6, KB3</td>
<td></td>
<td>Tripod or Table loupe</td>
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<td></td>
<td></td>
<td>PC12, PC13, PC14, PC15</td>
<td></td>
<td>Cleaning Cloth</td>
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<td></td>
<td></td>
<td>KB1</td>
<td></td>
<td>Day light Lamp</td>
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<td></td>
<td></td>
<td>KB7</td>
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<td>Assortment Pads with white sheets</td>
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<td></td>
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<td>PC2, PC5, G&amp;J/N3604</td>
<td></td>
<td>Pen</td>
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<td></td>
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<td>PC2, PC5, PC6, KB3</td>
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<td>Calculator</td>
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<td></td>
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<td>PC12, PC13, PC14, PC15</td>
<td></td>
<td>Diamond Sieve</td>
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<td>PC2, PC5, PC6, KB3</td>
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<td>Gauge</td>
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<td>Diamond Weighing Scale</td>
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<td>Paper Packets for Diamonds</td>
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<td>PC12, PC13, PC14, PC15, KB2, KB3</td>
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<td>Assort rough diamonds (optional NOS)</td>
<td>Rough diamond assorting</td>
<td>PC8, PC12, PC13, PC 14, PC15, KB3 KB5 PC8, PC9 PC12, PC13, PC 14, PC15, KB3 PC6, PC7, PC8, PC 10, PC12, PC13, PC 14, PC15, KB3, KB8 PC1, PC2, PC3, PC4, PC11, PC16, PC17, PC18 KB1</td>
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<td>Diamonds Weighing Scale.</td>
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<td>Facilitator-led discussion and lectures</td>
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<td>10x eye glass</td>
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Carat with measuring, gauging and sieving
- Understanding of colour and its grouping and grading them with fluorescence
- Understanding the concept of cut grading and various proportions of diamond and measure them
- Concept of fancy shapes diamonds
- Concept of fancy coloured diamonds
- Receiving diamond packets
- Sorting of small diamonds and grouping them into groups with similar characteristics with near zero loss/damage
- Identification of diamond and its stimulants/Synthetic s
- Understanding of pricing/valuation of diamonds with price guides

5 Assort rough diamonds (optional NOS) Rough diamond assorting PC8, PC12, PC13, PC 14, PC15, KB3 KB5 PC8, PC9 PC12, PC13, PC 14, PC15, KB3 PC6, PC7, PC8, PC 10, PC12, PC13, PC 14, PC15, KB3, KB8 PC1, PC2, PC3, PC4, PC11, PC16, PC17, PC18 KB1 PC1, PC2, PC3, PC4, PC7, PC11, PC16, PC17, PC18 PC6, PC7, PC8, PC 10, PC12, PC13, PC 14, PC15, KB3, KB8 PC1, PC2, PC3, PC4, PC11, PC16, PC17, PC18 KB1
<p>| Concept of hardness and toughness in a crystal | KB6, KB8, KB11, KB6, KB9, PC4, PC5, KB6, KB10, KB6, KB7, PC12, PC14, KB1, PC12, PC14, KB6, PC6, PC7, KB3, PC8, PC9, PC10, PC11, KB3, KB12, PC12, PC14, KB5, KB2, KB8, KB12, PC5, PC13, PC14, PC16, KB7, KB10 |
| Concept of facets, parts of diamond and its arrangement |  |
| Concept of 4C’s to understand grading systems |  |
| Understanding of clarity |  |
| Understanding of carat with gauging and sieving. |  |
| Understanding of colour and its grouping |  |
| Understanding the concept of crystal system and internal crystallographic planes |  |
| Understanding the concept of cut grading and various proportions of diamond |  |
| Understanding various rough diamond classification (gem quality, industrial quality and bort) |  |
| Categorizing roughs into sawable, cleavable, makeable etc. |  |
| Understanding the diamond cutting process |  |
| Fancy shapes |  |
| Sorting of diamonds and grouping them into groups with similar characteristics with |  |</p>
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<td>6</td>
<td>Assort gemstone (optional NOS)</td>
<td>Coloured gemstone assorting</td>
<td>• Receiving packets of gemstones as per company policy</td>
<td>G&amp;J/N3605, PC6, PC8, KB6, PC1, PC3, KB3, KB4, PC1, KB3, PC1, PC2, KB3, PC1, KB3, PC1, KB1, KB2, KB3, KB5, PC1, PC4, PC5, PC6, PC7, PC8, PC9, PC9</td>
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<td>Coordinating with others (compulsory)</td>
<td>Coordinating with other departments</td>
<td>• Need of coordinating with other departments and its importance</td>
<td>G&amp;J/N9901, PC1, PC2, PC3, PC7, PC8, PC9, G&amp;J/N9901, PC1, PC2, PC3, PC7, PC8, PC9</td>
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<td>Maintain occupational health and safety (Compulsory NOS)</td>
<td>Maintaining occupational health and safety</td>
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<td>Demonsstration</td>
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<td></td>
<td>Respecting and following the organizational policies and procedures</td>
<td>What constitutes hazards and risks</td>
<td>KB2</td>
<td>Demonstration</td>
</tr>
<tr>
<td></td>
<td>Maintain good reputation with seniors, colleagues and subordinates</td>
<td>Commonly present health and safety hazards in the workplace and the related precautions to avoid them</td>
<td>PC1, PC2, PC3, PC5, PC6, PC7, KB1, KB4, KB8, KB9</td>
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<td>Achieving targets and performing well</td>
<td>Risks associated with the use of electrical equipment in the workplace</td>
<td>PC8, KB3</td>
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<td></td>
<td>Interacting with supervisor</td>
<td>Measures to prevent or minimize accidents in the workplace</td>
<td>PC1, PC2, PC3</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Interacting with colleagues within and outside the department</td>
<td>How different chemicals react and the danger attached</td>
<td>PC5, PC6, PC8, PC9, PC10, KB5, KB6, KB7</td>
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<tr>
<td></td>
<td>Interacting with outside parties</td>
<td>Use of machines and tools without</td>
<td>PC1, PC7</td>
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</tr>
<tr>
<td></td>
<td>Understanding of organizational text and technical knowledge</td>
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<tr>
<th>8</th>
<th>Maintain occupational health and safety (Compulsory NOS)</th>
<th>Maintaining occupational health and safety</th>
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<tr>
<td></td>
<td>What constitutes hazards and risks</td>
<td>Commonly present health and safety hazards in the workplace and the related precautions to avoid them</td>
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<tr>
<td></td>
<td>Risks associated with the use of electrical equipment in the workplace</td>
<td>Measures to prevent or minimize accidents in the workplace</td>
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<td>How different chemicals react and the danger attached</td>
<td>Use of machines and tools without</td>
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<td>G&amp;J/N9902 PC2, KB1 PC1, PC3, PC4, PC5, KB2</td>
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<td>KB7</td>
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- Laptop
- White board marker
- Projector
- First aid kit
- 4 hrs
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<th>Topic</th>
<th>Code</th>
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<tbody>
<tr>
<td>· First aid execution relevant to condition e.g. bleeding minor burns eye injuries</td>
<td>PC10, KB15</td>
</tr>
<tr>
<td>· Fire safety education:</td>
<td>PC8</td>
</tr>
<tr>
<td>· Preventive measures to avoid fire accidents</td>
<td>KB9</td>
</tr>
<tr>
<td>· Causes of fire</td>
<td>KB10</td>
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<tr>
<td>· Different materials used for extinguishing fire</td>
<td>PC6, KB12</td>
</tr>
<tr>
<td>· How to use fire safety equipments</td>
<td>KB11</td>
</tr>
<tr>
<td>· Rescue operations to be followed during fire hazard</td>
<td>PC9,</td>
</tr>
<tr>
<td>· Appropriate actions to be taken in case of an accident and a fire or other hazard</td>
<td>PC7, PC12, KB13</td>
</tr>
<tr>
<td>· Need to use/wear preventive clothing/equipment while handling hazardous materials or machines</td>
<td>PC11, KB16</td>
</tr>
<tr>
<td>· Various safety signs displayed and what each one of them indicates</td>
<td>PC1, KB8,</td>
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<td>PC12, KB14</td>
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### Annexure II

**Assessment Criteria**

**CRITERIA FOR ASSESSMENT OF TRAINEES**

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<thead>
<tr>
<th>Sr. No.</th>
<th>Guidelines for Assessment</th>
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<tbody>
<tr>
<td>1</td>
<td>Criteria for assessment for each Qualification Pack has been created by the Sector Skill Council. Each Performance Criteria (PC) has been assigned marks proportional to its importance in NOS. SSC has laid down proportion of marks for Theory and Skills Practical for each PC.</td>
</tr>
<tr>
<td>2</td>
<td>The assessment for the theory part must be based on knowledge bank of questions created by the SSC.</td>
</tr>
<tr>
<td>3</td>
<td>Assessment agencies will create unique practical tests for skill evaluation in consultation with GJSCI for candidates at every examination/training centre. (as per assessment criteria below). Behaviour and attitude also must be assessed while the student is performing the practical.</td>
</tr>
<tr>
<td>4</td>
<td>To pass this Qualification Pack, every candidate should score a minimum of 50% in theory and 70% in practical to successfully clear the assessment.</td>
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<table>
<thead>
<tr>
<th>Assessment Criteria for Polished Grader and Assorter (Advanced)</th>
<th>Job Role</th>
<th>Qualification Pack</th>
<th>Sector Skill Council</th>
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<tr>
<td></td>
<td>Polished Grader and Assorter (Advanced)</td>
<td>G&amp;J/Q3603, Version 1.0</td>
<td>Gem &amp; Jewellery Skill Council of India</td>
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<table>
<thead>
<tr>
<th>Sr. No.</th>
<th>Assessment criteria (PC)</th>
<th>Total Marks (80+20)</th>
<th>Out of</th>
<th>Theory</th>
<th>Skills Practical</th>
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<tbody>
<tr>
<td>1</td>
<td>PC1. Accurately measure the 4Cs of a diamond</td>
<td>25</td>
<td>5</td>
<td>20</td>
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<td></td>
<td>PC2. Match his/her judgment with the grading given by GIA or other agencies</td>
<td>25</td>
<td>5</td>
<td>20</td>
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<td></td>
<td>PC3. Deliver in time to next process</td>
<td>5</td>
<td>0</td>
<td>5</td>
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<td>PC4. Complete work with no loss of diamonds</td>
<td>10</td>
<td>0</td>
<td>15</td>
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<td>PC5. Achieve the productivity in terms of carats or number of pieces as set by the company</td>
<td>5</td>
<td>0</td>
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<td>PC6. Comply with relevant legislation, standards, policies and procedures</td>
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<td>NOS Total</td>
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<td>2. G&amp;J/N9930 Maintain IPR</td>
<td>PC1. spot plagiarism and report</td>
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<td>2</td>
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<td>PC2. understand rationale of patents and IPR</td>
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<td>PC3. avoid being involved in IPR violations</td>
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<td>3. G&amp;J/N9931 Coordinate with team and superiors</td>
<td>PC1. understand the work output requirements</td>
<td>2</td>
<td>1</td>
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<td>PC2. comply with company policy and rule</td>
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<td>PC3. deliver quality work on time as required by reporting any anticipated reasons for delays</td>
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<td>PC4. put team over individual goals</td>
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<td>PC5. conflicts resolution and multi-tasking</td>
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<td>4. G&amp;J/N9933 Maintain safety</td>
<td>PC1. spot and report potential hazards on time</td>
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<td>PC2. follow company policy and rules regarding hazardous materials</td>
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<td>1</td>
<td>2</td>
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<td>PC3. deliver quality work on time as required by reporting any anticipated reasons for delays</td>
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- Explain each Guideline for Assessment in detail
- Explain the score that each trainee needs to obtain
- Recapitulate each NOS one-by-one and take participants through the allocation of marks for Theory and Skills Practical.
- Explain the Allocation of Marks. Explain that they will be assessed on Theory and Skills Practical.