

# Unit



## Beauty and Wellness Industry, and Beauty Therapy

### INTRODUCTION

The outward appearance of a person is the first thing that catches the eye of others. Therefore, being presentable at all times is of considerable importance. Here, comes the role of a Beauty Therapist, who carries out various beauty treatments on a person to improve the overall appearance, which includes dressing-up appropriately, putting the right make-up, skincare and hairstyle. Besides, the therapist gives wellness treatments, including manicure and pedicure, which involve massage, followed by aftercare advice to clients. Sometimes, they are also suggested a balanced diet and nutrition, and a daily exercise regimen to maintain a healthy lifestyle.

In this Unit, you will learn about the basic aspects of the Beauty and Wellness Industry, career opportunities in the sector, various beauty therapy services, preparing and maintaining the work area, and health and safety standards to be followed at a workplace.

### BEAUTY AND WELLNESS INDUSTRY IN INDIA

The Beauty and Wellness sector is growing at a fast pace and is an important industry in India. It contributes a lot to the country's economic growth and is gradually becoming a leading employer — creating millions



171119CH01

of employment opportunities. The reason for this exponential growth is rising consumerism, globalisation and changing lifestyles of Indian consumers. The rapid growth of the Beauty and Wellness Industry, along with the entry of many small and large companies, has led to a huge demand for trained personnel or beauty therapists. Though the Beauty and Wellness Industry is new in India, there has been an increasing awareness about health and well-being. The industry is booming and it is mainly due to the growing desire among both men and women to look stylish and feel good about themselves. Customers visit a salon to avail beauty treatments and therapies. Therefore, a beauty salon has to provide a satisfied experience to its customers. A snapshot of beauty business in India is shown in Fig. 1.2.



Fig. 1.1: A customer undergoing a beauty therapy

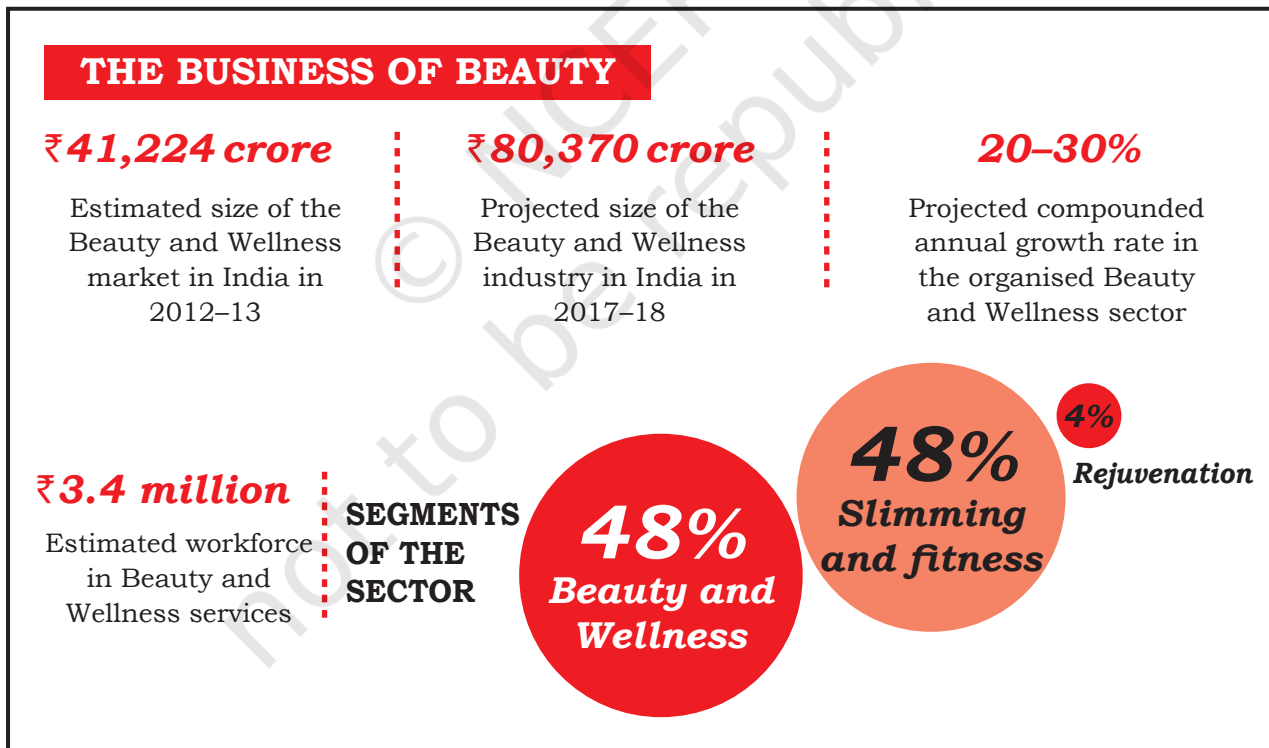
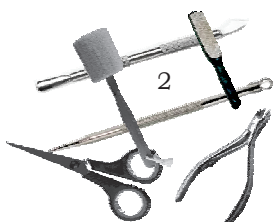


Fig. 1.2: A snapshot of the beauty business in India

(Source: <https://www.businesstoday.in/magazine/features/vlcc-clsa-everstone-kpmg-ac-nielsen-report/story/209609.html>)



One segment of the Beauty and Wellness Industry that is doing particularly well is specialised hair care. Another segment expanding rapidly is bridal make-up. Earlier, it was, usually, only the bride who visited a salon prior to the wedding. But these days, even the bridegroom, friends and relatives of both the bride and the groom go for beauty treatments and related services in salons, which often offer special packages for this type of clientele.

The reasons for the growth of the Beauty and Wellness sector are as follows.

- 1) People are buying more beauty products.
- 2) People are moving to cities and spending more money to avail beauty products and services.
- 3) Young people are being exposed to advertisements through media, which increase their aspiration to look beautiful and presentable at all times.
- 4) There is an obsession with younger looking skin as more and more consumers ask for cosmetic treatments and anti-ageing products.
- 5) More product innovation is being done for enhancing marketability.

## SESSION 1: CAREER OPPORTUNITIES IN THE BEAUTY AND WELLNESS SECTOR

### Major sub-segments in the Beauty and Wellness sector

The Beauty and Wellness sector has several sub-segments. The major sub-segments are depicted in Fig. 1.3.



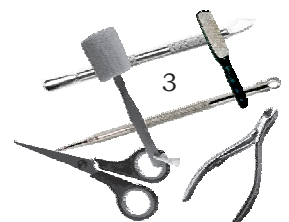
Fig. 1.3: Major sub-segments in the Beauty and Wellness sector

### Beauty centres or salons

A beauty salon provides skin, hair, nail care and other related therapies to improve the overall look of a person. These services are provided as per customers' requirements.

### Hair salons

These are specialised salons, which provide services like haircut, hairstyling, shampooing, hair colouring and



## NOTES

scalp treatment. Some hairstylists even provide nail and skincare services.

### Product and counter sale

This involves counter sale of beauty products, including cosmetics and toiletries, which address age-related health and appearance issues of clients by a salon.

### Fitness and slimming

These include service providers in the fields of physical exercises, yoga, aerobics, other mind and body practices, weight loss and slimming.

### Rejuvenation centres

This includes the core spa industry services, such as spa operations, spa education, spa products and events. The sector primarily offers pro-active services aimed at relaxing the body and mind.

### Alternative therapy centres

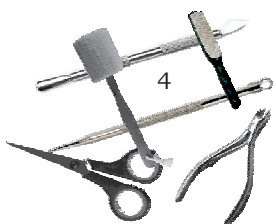
Clinical diagnosis and treatments under alternative therapy are provided in this segment. Alternative therapy relates to natural healing methods, which are different from the regular western medical treatments or allopathic or pharmaceutical procedures. Apart from naturopathy, this includes crystal healing, cupping and vibration therapy.

### Unisex salons

Unisex beauty salons offer Beauty and Wellness services to both men and women. Many organised segments are offering such services, and unisex beauty and wellness centres are gradually gaining acceptance in the Indian society.

### International beauty brands

The growing number of customers in the Beauty and Wellness sector has attracted a number of international brands to the Indian market. Some of the popular international cosmetic brands with a presence in India are — Maybelline New York, L'Oréal Paris, MAC, etc.



Besides, with an upsurge of online retail, Indian consumers have an access to a wide range of beauty and grooming products — both indigenous and international. Some of the Indian cosmetic brands are — Lakmé, Himalaya, VLCC, Biotique, Shahnaz Husain, Forest Essentials, etc.

### Career path for Beauty Therapist

Most Beauty Therapists start their career in beauty centres and hair salons. However, anytime during their career, they can shift to other sub-segments. Apart from urban areas and metro cities, the rising awareness of Beauty and Wellness is causing the expansion of the industry in other areas as well (Fig. 1.4, 1.5 and 1.6).

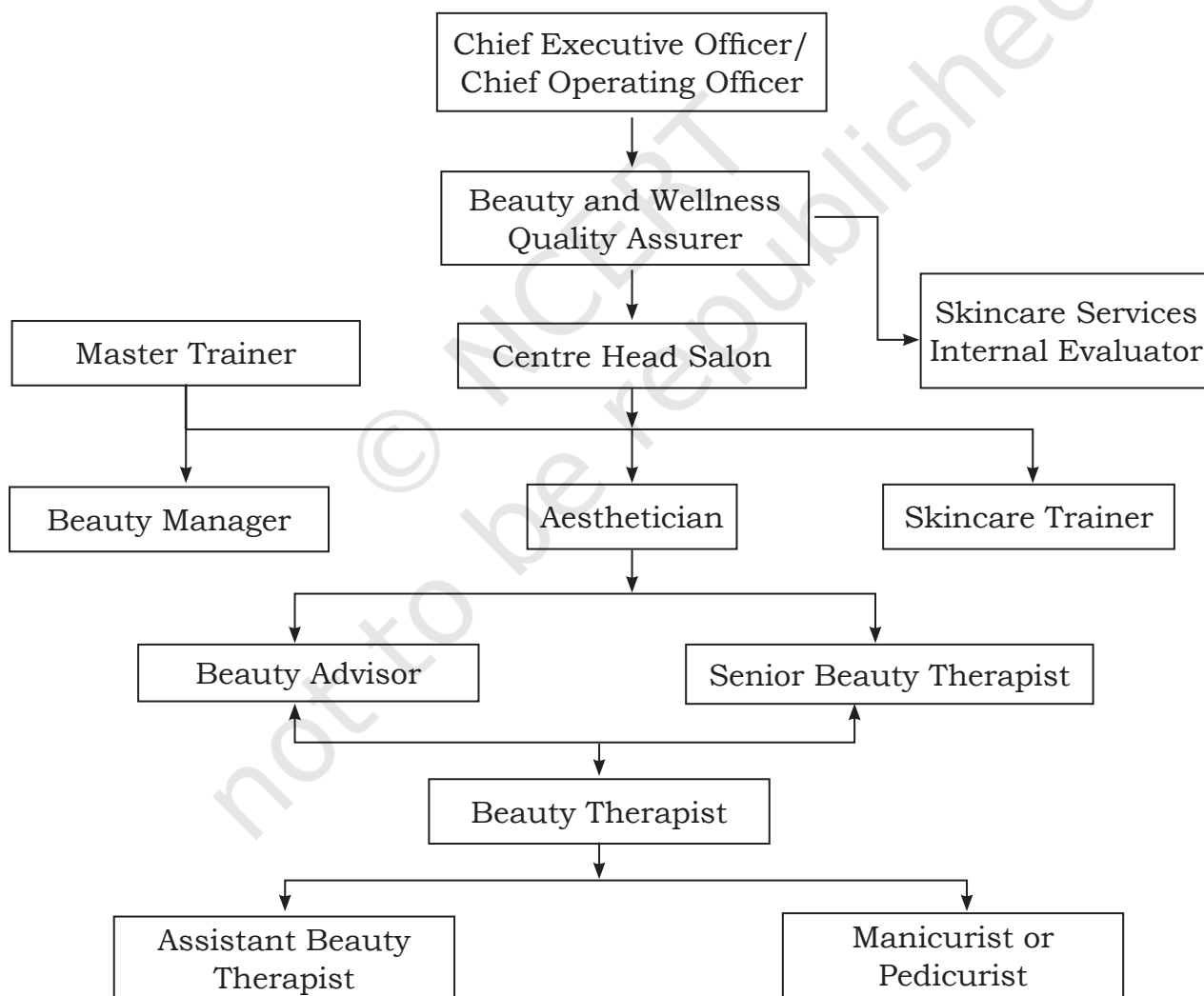
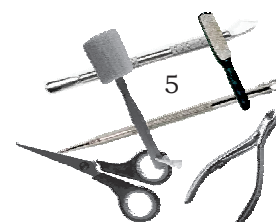


Fig. 1.4: Career path in skincare services



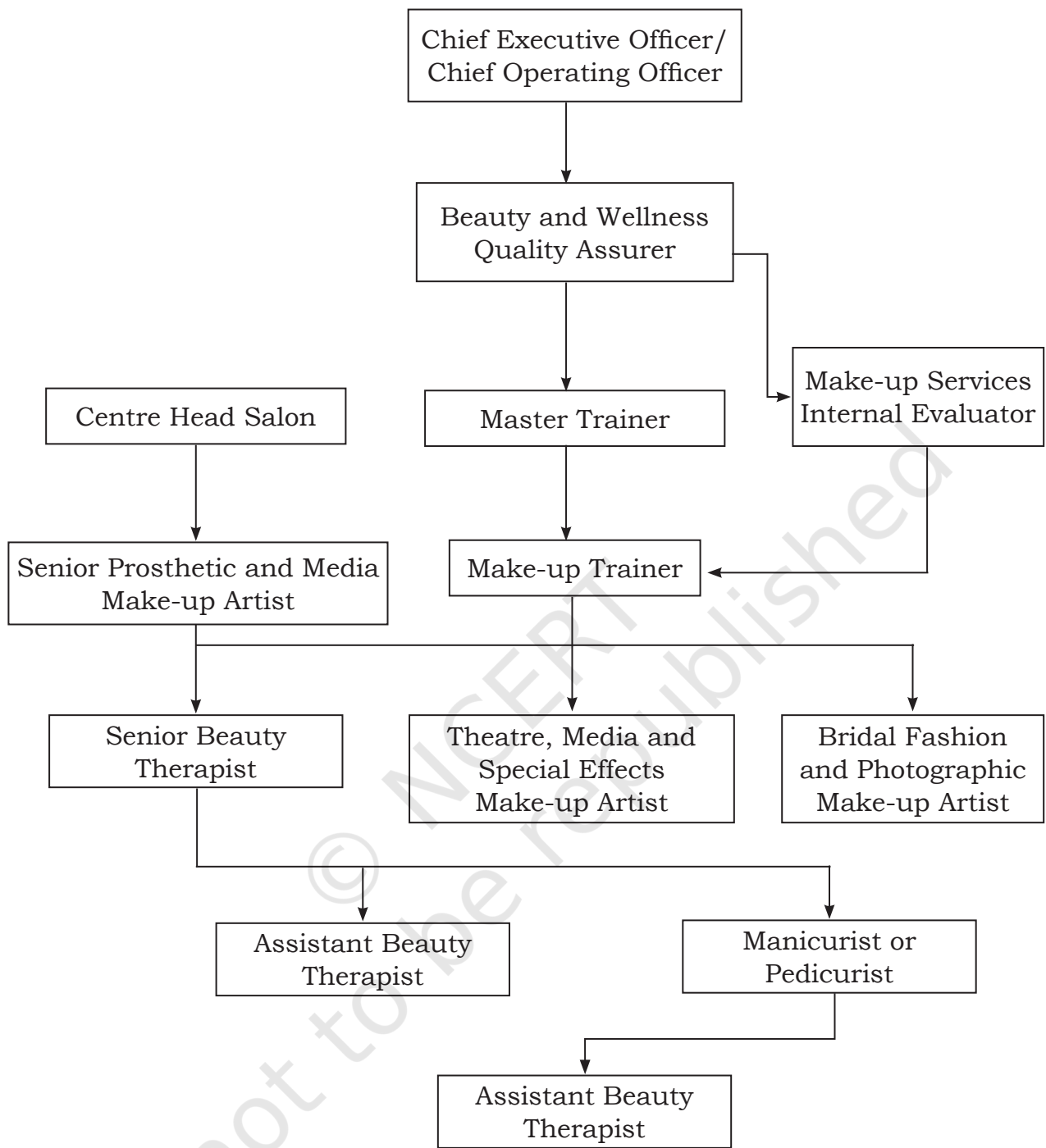
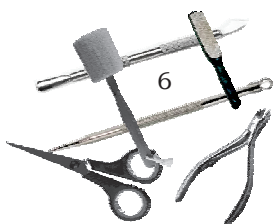


Fig. 1.5: Career path in make-up services



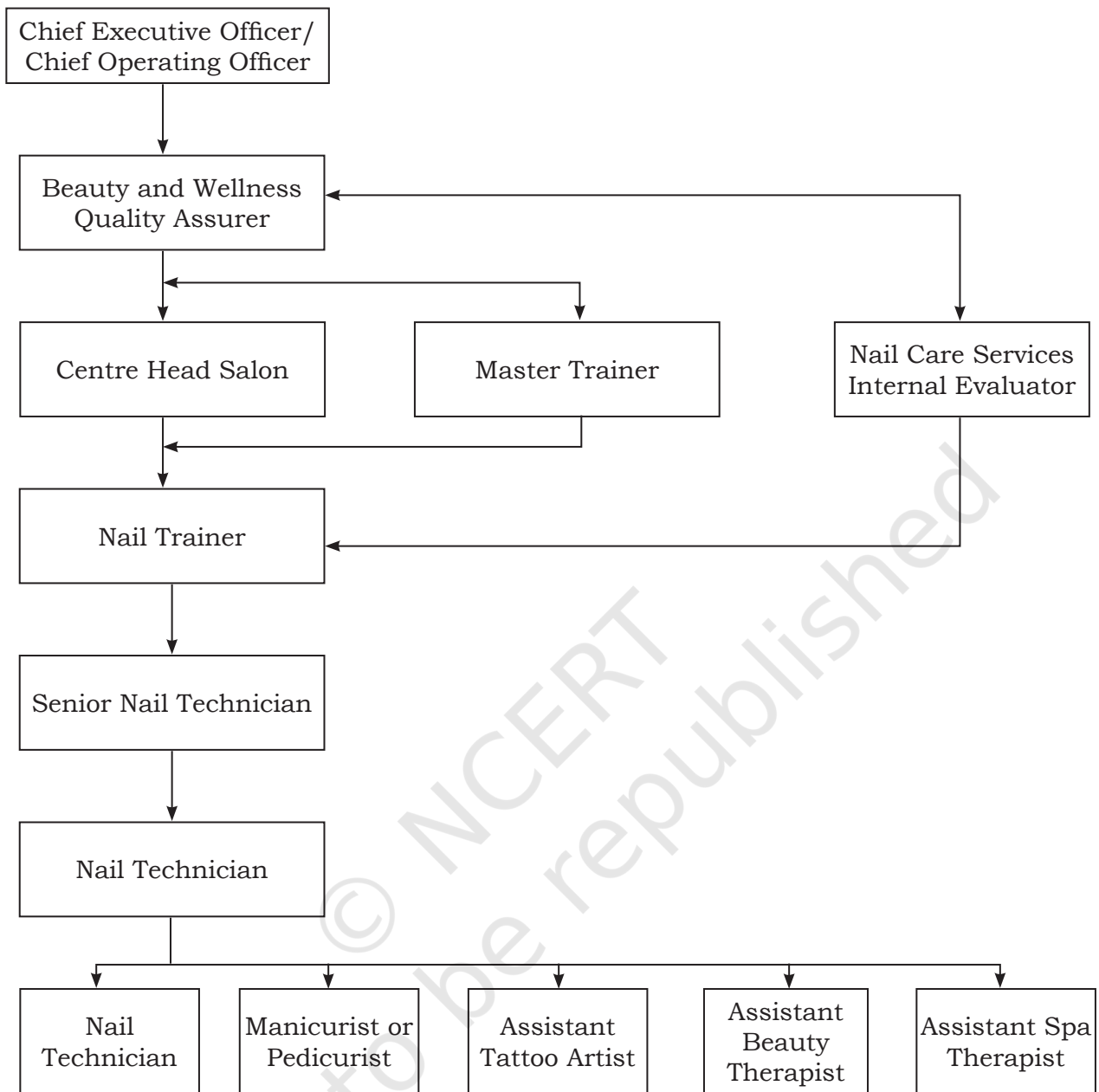


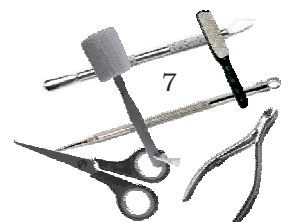
Fig. 1.6: Career path in nail care services

## Practical Exercises

### Activity 1

Prepare a flow chart on the career path for a Beauty Therapist in skincare services.

Material required: chart paper, sketch pens, pencil, eraser, sharpener and ruler



## NOTES

### Procedure

- Collect information on various job positions of a Beauty Therapist in skincare services.
- Prepare a flow chart on the career path for a Beauty Therapist in skincare services.
- Present it before the class.

### Activity 2

Identify training and employment opportunities locally available for a Beauty Therapist.

Material required: notebook and pen

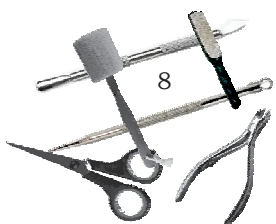
### Procedure

- Visit various beauty salons in a nearby market.
- Talk to beauticians and find out the various activities they perform in a day.
- Find out if they provide training for becoming a Beauty Therapist.

## Check Your Progress

### A. Multiple Choice Questions

1. \_\_\_\_\_ involve(s) counter sale of beauty products, including cosmetics and toiletries, which address age-related health and appearance issues of clients.
  - (a) Fitness and slimming
  - (b) Alternate therapy centres
  - (c) Rejuvenation centres
  - (d) Product and counter sales
2. \_\_\_\_\_ include(s) the core spa industry services, such as spa operation, spa education, spa products and events.
  - (a) Fitness and slimming
  - (b) Alternative therapy centres
  - (c) Rejuvenation centres
  - (d) None of the above
3. Unisex salons offer Beauty and Wellness services to \_\_\_\_\_.
  - (a) men
  - (b) women
  - (c) both (a) and (b)
  - (d) None of the above



**B. Fill in the Blanks**

1. A Beauty \_\_\_\_\_ provides skin, hair, nail care and other related therapies to clients to improve their overall appearance.
2. Fitness and \_\_\_\_\_ centres provide services in the field of physical exercises, yoga, aerobics, other mind and body practices, and fitness and slimming.
3. The role of a Beauty Therapist includes applying the right \_\_\_\_\_, providing skincare services and doing the hairstyle.
4. Customers, generally, visit a salon to avail beauty treatments and \_\_\_\_\_.

**C. Subjective Questions**

1. Describe any two sub-segments of the Beauty and Wellness sector.
2. Describe the career path of a Beauty Therapist in nail care services.

**What have you learnt?****After completing this Session, are you able to:**

- describe different services offered in the Beauty and Wellness sector.
- identify the various sub-segments of the Beauty and Wellness sector.
- Draw a flow chart for the career path for a Beauty Therapist in nail care, skincare and make-up services.

**SESSION 2: BEAUTY THERAPY SERVICES**

Beauty therapy is a term, which includes a wide spectrum of activities or services from head to toe. Each service has a procedure of its own, which has to be followed step-by-step carefully, else it can create muscle and skin problems like rashes, allergies and infections, which can lead to unsatisfied clients. Each service requires a thorough knowledge of the products, tools and equipment to be used. Also, care must be taken that a client is not allergic to any beauty product.

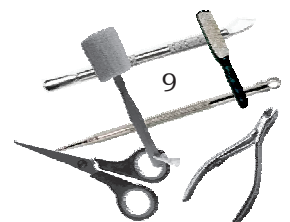




Fig. 1.7 (a) and (b): Various beauty services being provided to clients

Let us take a look at beauty therapies and services, generally, provided to clients by a salon.



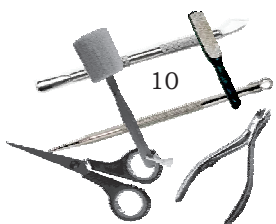
### Manicure

It is a treatment for improving the appearance of hands, and is popular among both men and women. Most salons have a separate area catering to this service. This treatment helps in keeping the hands and nails clean and well-groomed by pushing back cuticles, removing dead skin cells and softening the skin — exfoliation, massaging and application of nail paint. Thus, manicure helps in:

- softening the hands.
- improving blood circulation in the hands.
- relaxing the hand and finger muscles.
- improving the appearance of hands and nails.

### Pedicure

This treatment helps improve the appearance of feet and toenails. Like manicure, it also includes exfoliation,



using a pumice stone, and massage, followed by painting the toenails. Pedicure helps in:

- softening the feet.
- improving blood circulation in the feet.
- giving shape to toenails.
- improving the appearance of feet and toenails.
- relaxing aching feet.
- reducing hard and dead skin cells.

The major difference between manicure and pedicure lies in the area to be treated, positioning of the client, treatment of hard skin and massage procedure.

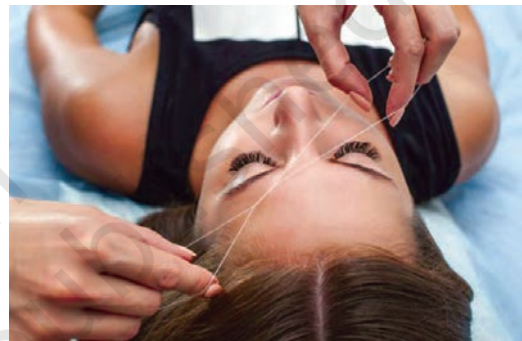
### Threading

It is a hair removal technique, wherein a cotton thread is used to remove the entire hair follicle (Fig. 1.9). The hair is pulled out in a twisting motion, wherein the thread traps the hair and pulls it out.

- Threading is less painful than pulling out individual hair.
- It is much quicker and safer than waxing.
- It is suitable for almost all skin types, including sensitive skin.
- No chemical is used.
- It gives a clean and well-kempt look to the face and eyebrows.



*Fig. 1.8: Manicured hands and pedicured feet*



*Fig. 1.9: Threading of the forehead*

### Waxing

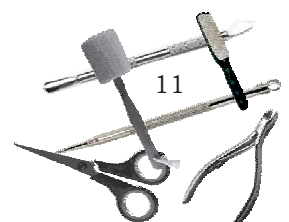
It is also a hair removal technique, in which the hair is pulled out from the root by the use of hot or cold wax. It takes around three to six weeks for the new hair to grow. This depends on a person's hair growth pattern. Waxing is of two types — strip and stripless waxing.

In strip waxing, a thin layer of wax is applied on the skin and a cloth or disposable paper strip is placed over it and pulled against the direction of hair growth, removing the unwanted hair along with the wax.

In stripless waxing, a thick layer of wax is applied and no cloth or paper strip is used. On



*Fig. 1.10: Waxing of the hand*



cooling, the wax hardens, which helps in the easy removal of unwanted hair. It is said to be less painful and removes even the finest hair.

### **Bleaching**

Bleach refers to a bleaching agent, which helps lighten the skin tone. Bleaching is done to lighten the colour of facial hair (Fig. 1.11). Bleaching is done for the following purposes:

- reducing dark spots and freckles
- lightening dark areas on the elbow or underarm
- brightening the skin
- lightening the facial hair and making them less visible



*Fig. 1.11: Bleaching of the face*

### **Face clean-up**

Clean-up is done for unclogging the skin pores and allowing the skin to breathe (Fig. 1.12). It helps remove dead cells and clean deep-seated dirt from the skin. In the process of clean-up, the skin is cleansed, exfoliated and moisturised. Unclogging clears the pores and decongests the skin, thereby, allowing it to breathe. It has the following benefits:

- imparts a healthy glow to the face
- cleans the skin thoroughly by removing harmful bacteria, sweat and impurities due to pollution
- wards-off acne and pimples
- improves blood circulation in the face

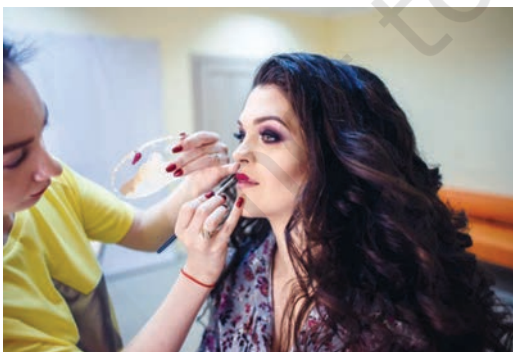


*Fig. 1.12: Face clean-up*

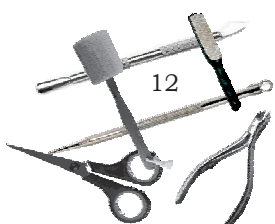
### **Make-up**

It is a process of applying cosmetics on the face to enhance one's appearance (Fig. 1.13). Lipstick, eyeliner, eye shadow, mascara, foundation, kohl, lip gloss, lip balm, concealer, face powder, etc., are commonly used in make-up.

The film and TV industry, including television media, and theatre, need make-up artists on a regular payroll. Hence, there



*Fig. 1.13: Applying make-up*



is often an opening in this sector. Make-up has the following benefits:

- helps create a favourable first impression
- boosts confidence
- hides skin flaws and blemishes
- protects the skin from pollution
- adds to the desired expression and looks

## **Hairdo**

A hairdo or hairstyle is a way in which the hair is styled (Fig. 1.14). It is considered as an important aspect of personal grooming and fashion, and is popular among both men and women. A hairstyle is achieved by arranging the hair in a certain way by the use of combs, blow-dryer and cosmetics like hair gel, etc. Styling the hair is also called 'hairdressing', especially when practised as an occupation. Hairstyling includes adding accessories, such as hairbands, clips, pins, barrette, tiaras, etc., to the hair to hold it in place and enhance its appearance. It has the following benefits:

- enhances the appearance of the hair and face, thus, increasing the confidence of a person
- helps in taming unruly hair

## **Mehendi (henna)**

It is an art of decorating the hands (including palms) and legs (including feet) with designs using a natural plant dye that colours the skin maroon-red. It is a natural dye that leaves a cooling effect on the skin (Fig. 1.15). *Mehendi* stays on one's skin for few days. It is done mostly on special occasions, such as weddings, festivals, religious ceremonies, etc.

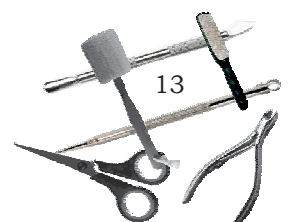
*Mehendi* is made from henna leaves. It has conditioning properties and is also used to dye the hair.



*Fig. 1.14: Making a hairstyle*



*Fig. 1.15: Applying mehendi*



## Practical Exercises

### Activity 1

Prepare a collage depicting the various services provided by a Beauty Therapist.

Material required: chart paper, glue stick, beauty magazines, pencil, eraser and sketch pens

#### Procedure

- Collect pictures of various services provided by a Beauty Therapist, such as waxing, manicure, pedicure, make-up, hairdo, etc., from magazines.
- Now, make a collage using the pictures.
- Write a brief note on each of the services as identified by you.
- Present it before the class.

### Activity 2

Role-play of a Beauty Therapist in preparing a client for waxing.

Material required: notebook and pen

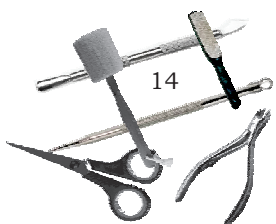
#### Procedure

- Identify the various tasks (seating a client, wearing protective clothing, removing the client's jewellery and keeping them in a safe place, etc.) that are performed by a Beauty Therapist in waxing.
- List the items required to carry out the service.
- Decide the characters to be played by the students, such as Beauty Therapist, Assistant Beauty Therapist, client and other staff members working in a salon.
- Write down the communication to be made between the Beauty Therapist and the client before initiating the service.
- Ask for the client's feedback after the service.

## Check Your Progress

### A. Multiple Choice Questions

1. \_\_\_\_\_ helps in improving the appearance of feet and toenails.
  - (a) Threading
  - (b) Hairstyle
  - (c) Pedicure
  - (d) Bleaching



2. Manicure is a treatment for improving the appearance of \_\_\_\_\_.
  - (a) hands
  - (b) feet
  - (c) toenails
  - (d) face
3. Face clean-up is done for \_\_\_\_\_ the skin pores and allowing the skin to breathe.
  - (a) clogging
  - (b) unclogging
  - (c) exfoliating
  - (d) congesting

**B. Fill in the Blanks**

1. In threading, the hair is pulled out in a \_\_\_\_\_ motion, wherein the thread traps the hair and pulls it out.
2. A \_\_\_\_\_ is achieved by arranging the hair in a certain way by the use of combs, blow-dryer and cosmetics like hair gel, etc.
3. Styling the hair is also called \_\_\_\_\_, especially when practised as an occupation.
4. Strip and \_\_\_\_\_ are the two types of waxing.

**C. Subjective Questions**

1. What is the difference between manicure and pedicure?
2. What is the purpose of waxing?

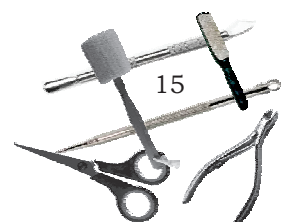
What have you learnt?

**After completing this Session, are you able to:**

- list the different services performed by a Beauty Therapist.
- describe the benefits of various beauty services.

**SESSION 3: PREPARING AND MAINTAINING THE WORK AREA**

A salon must be kept clean and disinfected. A suitable temperature and adequate lighting facility must be maintained. Besides, it must follow the required safety measures. In the absence of these basic facilities, the services offered by a salon can go wrong, which might affect its reputation and clientele. In case of a mishappening or an accident, clients can even sue the salon, thus, destroying its reputation and business.



Hygiene is of utmost importance in the Beauty and Wellness sector. Therefore, a salon's work area must always be kept clean with adequate safety measures in place. Tools and equipment needed for a treatment may be kept in the area before a customer is seated and the process actually begins. It must be ensured that waste disposal is done immediately after each treatment. The cleaning and disinfection of tools is mandatory.

You will study about various aspects related to customers' information, maintaining clean and disinfected environment, personal presentation and behaviour to be maintained in the beauty salon in the following sections.

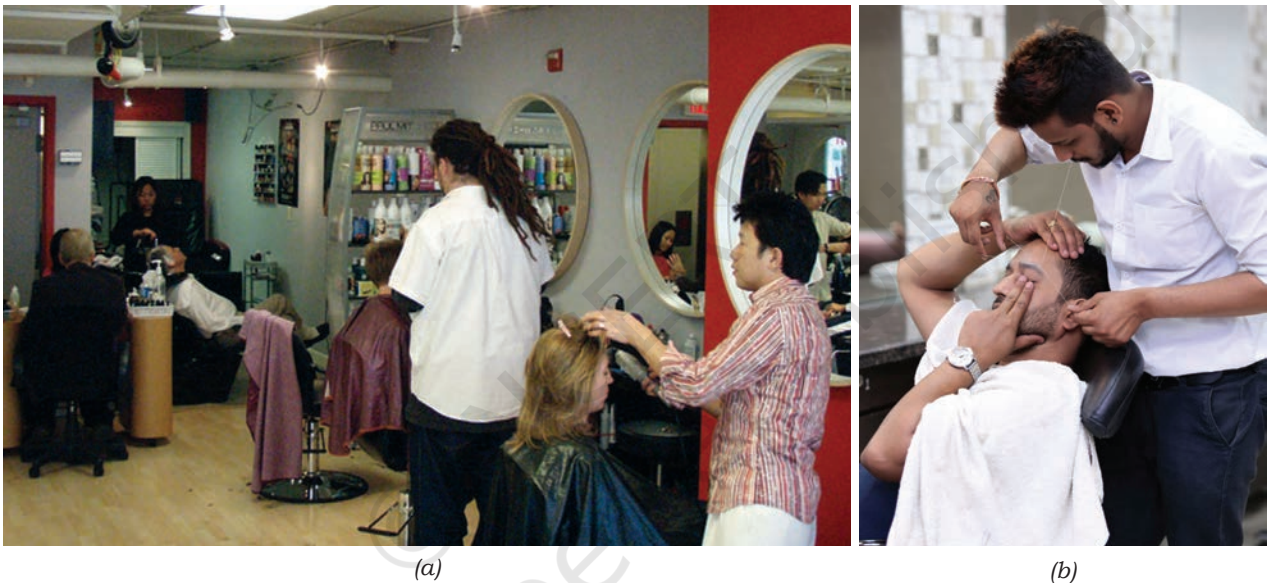


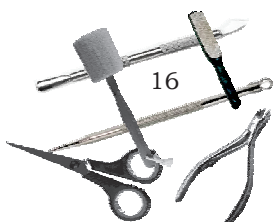
Fig. 1.16 (a) and (b): The work area of a beauty salon

### **Maintenance of record cards**

A record card is an important document, which contains the following information:

- previous treatments taken by a client
- treatment the client has been booked for
- history of the client about the products to be used, skin type, and if the person is allergic to any product

Before starting a treatment, the record card must always be referred to and details like name and address, must be confirmed with the client to ensure that the correct card has been picked up.



## Essentials of the work area

Usually, a work area is used for providing multiple services. So, it must have the following:

- clean and disinfected environment
- clean treatment couch or chair, towels and aprons
- adequate ventilation and lights
- temperature controllers
- space to allow movement
- space for keeping the belongings of clients
- a quiet atmosphere with soft and soothing music being played in the background as it helps in relaxation
- tools and products needed for a procedure
- tools arranged in a trolley for a treatment
- pen and a record card of clients
- adequate cotton and tissues

## Sterilisation and disinfection methods

Cleaning, sterilisation and disinfection of tools and equipment are ways to prevent contamination and infections (Fig. 1.17). In addition to these, clean towels, spray bottles, spatula, etc., must always be used to avoid contamination and infections.



Fig. 1.17: Sterilisation of equipment

- ‘Cleaning’ just removes dirt and dust. It is done before sterilisation and disinfection.
- Next step is ‘disinfection’, which kills bacteria, viruses and fungi. The cleaning agent must be changed at regular intervals during the process of disinfection.
- ‘Sterilisation’ is a method of killing microorganisms with the help of steam. It is done by using an autoclave (a closed container used for the process that involves high temperatures and pressure). Only tools made up of metals like scissors and tweezers, and few heat-resistant glassware can be autoclaved.
- Like sterilisation, ‘sanitising’ also destroys germs completely. It is done by using heat and chemicals. Household bleach (4% chlorine) and alcohol solution (70%) are examples of few chemical sanitisers.



## Equipment and material used in a beauty salon

The various equipment and material used in a beauty salon are shown in Fig. 1.18 (a-k).



(a) Tweezers



(b) Scissors



(c) Pumice stone



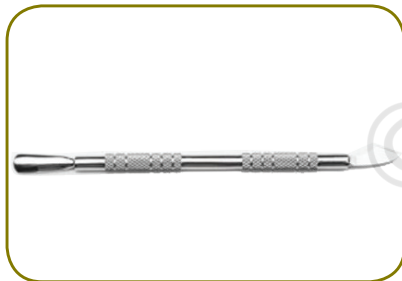
(d) Metal scrapper



(e) Cuticle nipper



(f) Cuticle trimmer



(g) Comedone extractor



(h) Facial sponge



(i) Loofa



(j) Cuticle cutter



(k) Face pack brush

Fig. 1.18 (a-k): Equipment and material commonly used in a beauty salon

## Personal presentation and behaviour

The way a person presents oneself impacts one's professional life to a great extent. The way the person looks, speaks, acts or greets the client — everything needs to be appropriate at all times.

### Tips for Beauty Therapist

A Beauty Therapist must:

- wear the salon uniform and make sure that it is clean, neat and ironed.
- maintain high level of personal hygiene as the person will be working closely with customers.
- maintain a neat hairstyle (long hair can be tied neatly in a ponytail or bun).
- avoid heavy make-up.
- ensure that the breath is fresh and does not smell of food or tobacco.
- keep the nails trimmed and clean.
- wear minimal jewellery.
- wear comfortable and covered footwear as it allows working comfortably and protects the feet from injuries by sharp tools.
- avoid eating or drinking in the work treatment area.
- speak politely and always greet the clients with a smile (Fig. 1.19).
- listen carefully and patiently to the clients and try to understand what they are trying to say.
- keep a client informed about how long will it take to start a treatment and also give the reason for the delay.
- wash hands every time before starting a procedure.

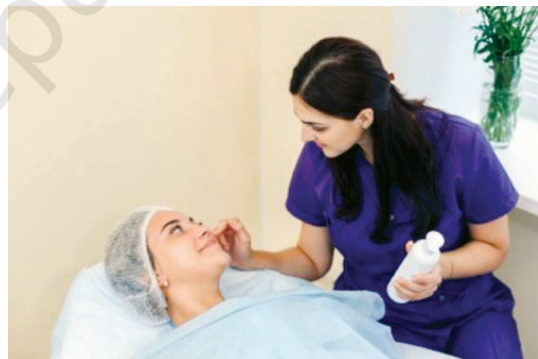
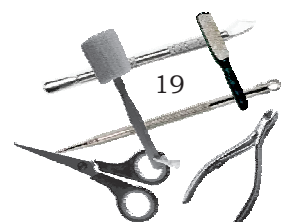


Fig. 1.19: Be polite with clients

## Safe disposal of waste

Safe disposal of waste is an important step as it helps in preventing contamination and infections. Waste left after a service is completed can pose health hazards for both the personnel working in the salon, as well as, the customers. Besides, it will leave a bad impression about the salon. The following practices must be adopted to dispose of the waste.



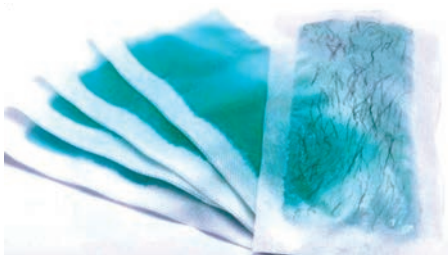


Fig. 1.20: Used wax strips need to be thrown in a covered bin



Fig. 1.21: Sweeping of the floor and disposal of waste hair must be done before another treatment starts



Fig. 1.22: Keep used towels and linen in a laundry basket

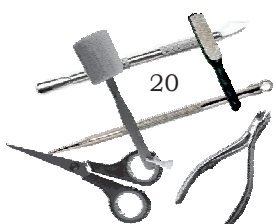


Fig. 1.23: Store tools in a tray

- Throw disposable items like cotton, tissues, wax strips, etc., in a covered bin immediately after use (Fig. 1.20).
- Sweeping of the floor and disposal of waste hair must be done before another treatment is started (Fig. 1.21).
- Maintain a neat surrounding in the salon by putting things in their respective places immediately after use. It also helps in saving time and preparing the work area for the next service.
- Ensure that all bottles have their lids on.
- Use the waiting time during a service to clean the area. For example, when the nail paint is drying during a manicure, dispose the dirty water and tissues appropriately.
- Clean the tools after a service and sterilise them.
- All cleaning activity must be done quietly without causing inconvenience to the clients.
- Follow the instructions as mentioned on the packet of an equipment for its usage and cleaning. This increases the durability of the equipment.
- Ensure the cleanliness of the workspace after every procedure. Disinfect the work area.
- Change sheets and towels in the work area after every treatment. Keep the used towels and linen in a laundry basket for washing (Fig. 1.22).

### Storage of tools and equipment

- Clean, disinfect and sterilise the tools and equipment after use and before putting them in their respective places (Fig. 1.23).
- Ensure safe storage of sharp tools to avoid injuries.
- Do not put sharp tools in uniform pockets.
- Be careful with electrical appliances. Do not leave the wires or other parts trailing on the floor.
- Turn off electrical appliances when not in use.

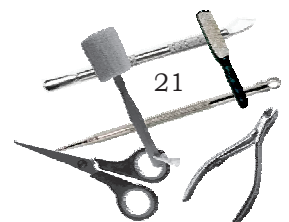


## Compliance of rules and norms

The rules and regulations for setting up a beauty salon vary in different States and Union Territories of India. These are to be registered under the Shops and Establishment Act. Under this Act, it is compulsory for every shop or establishment to register itself within 30 days of the commencement of work. This Act lays down rules regarding the working hours of employees, guidelines for opening and closing of shops and establishments, leaves for employees, rules for employment and termination of services, and maintenance of registers and records, including display of notices, licences and certificates.

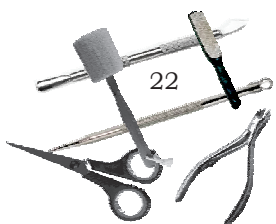
There are certain generic norms that a beauty salon must follow.

- A salon needs to be registered and must have a licence to operate.
- It must display its business permit and certificates (cosmetic and beauty training) of its employees.
- It needs to maintain drinking water facility and a clean washroom.
- It must have separate bins with lining to collect different types of waste.
- The salon must contain approved disinfectants and sanitisers, and these need to be stored safely in their actual containers.
- Single-use or disposable items must be discarded after every treatment.
- Reusable tools have to be sterilised or disinfected.
- The floor must be kept clean and the waste generated in the salon must be disposed of appropriately and immediately.
- All beauty products must be labelled.
- Personnel working in the salon must wear Personal Protective Equipment (PPE).
- A full list of employees is mandatory to be maintained and their police verification must be carried out before they are hired.
- The records of clients need to be kept up-to-date.
- The first aid kit must always be kept in an accessible place.



### Responsibilities of Beauty Therapist

- Suggest suitable service plans to meet the requirements of the clients.
- Ask relevant questions to the clients to identify contra-indications to the skin and make-up products, if any.
- Inform the clients of emergency procedures, if required.
- Ascertain the approximate time it will be require to complete a procedure and inform the customer of the same.
- Periodically inform waiting customers of the time left to start their service.
- Prepare the client for a treatment and provide the person with a suitable protective apparel.
- Organise the products, equipment and tools related to a service or treatment, and keep them handy.
- Sanitise the hands prior to the commencement of a service.
- Position oneself and the client to ensure privacy and comfort throughout the procedure.
- Select and apply products to suit the client's needs and achieve the desired effect.
- Discontinue a service immediately and provide advice and recommendations to the client in case of contra-actions.
- Clean the skin after a procedure to ensure that it is free of dirt, and is toned and moisturised.
- Provide specific post-procedure, home care advice and recommendations for product use and further services to the client.
- Ask questions to check if the client is satisfied with the result.
- Report health and safety risks or hazards to the concerned personnel.
- Report to the supervisor in case of work issues and unruly behaviour of clients.
- Complete the routine documentation in a desired format.



- Minimise the wastage of products by using them economically and following the storage and usage instructions as mentioned on their cover.
- Ensure the safe disposal of waste material.
- Thank the customers for post-service feedback. In case a customer is not satisfied with a service, take actions to resolve the matter to customer satisfaction or apologise for the same, and refer it to the supervisor.

## NOTES

### Practical Exercises

#### Activity 1

Prepare a list of equipment used in a beauty salon.

Material required: chart paper, glue stick, pictures of material used in a beauty salon, pencil, eraser and sketch pens

#### Procedure

- Take a chart paper and draw or paste pictures of any five tools and equipment used in a beauty salon.
- Write down the use of each tool and equipment that you have selected.
- Present it before the class.

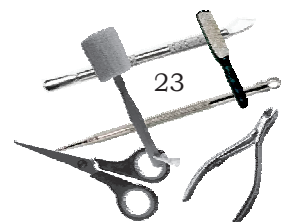
#### Activity 2

List the responsibilities of a Beauty Therapist.

Material required: notebook, pen, pencil and eraser

#### Procedure

- Visit a beauty salon and observe the various activities being performed by a Beauty Therapist.
- Describe any one activity with regard to the following:
  - Sanitisation
  - Sterilisation
  - Dealing with clients
  - Maintaining record cards
  - Preparing the work area
  - Receiving customer feedback
- Present it before the class.



**Check Your Progress****A. Multiple Choice Questions**

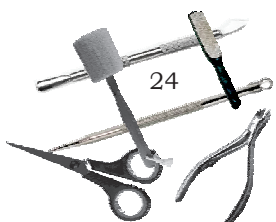
1. A method of killing microorganisms with the help of steam is \_\_\_\_\_.
  - (a) sterilisation
  - (b) wiping
  - (c) baking
  - (d) steaming
2. \_\_\_\_\_ is not a characteristic of a Beauty Therapist?
  - (a) having knowledge about products
  - (b) positive body language
  - (c) clean personal appearance
  - (d) being in a hurry
3. A salon needs to be registered and must have a \_\_\_\_\_ to operate.
  - (a) safe drinking water
  - (b) licence
  - (c) positive body language
  - (d) None of the above
4. The basic sanitation practices in a salon involve \_\_\_\_\_.
  - (a) keeping a dustbin
  - (b) sterilising the equipment
  - (c) using clean towels and gowns
  - (d) All of the above

**B. Fill in the Blanks**

1. Safe disposal of waste is an important step, as it helps in preventing infections and \_\_\_\_\_.
2. \_\_\_\_\_ is of utmost importance in the Beauty and Wellness sector.
3. The process of \_\_\_\_\_ destroys germs completely.
4. The \_\_\_\_\_ kit must always be kept in an accessible place.
5. Dispose waste material as per organisational standards in a \_\_\_\_\_ and hygienic manner.

**C. Subjective Questions**

1. Describe any five responsibilities of a Beauty Therapist.
2. What do you mean by maintaining record cards?
3. Name any six tools that need to be sterilised.



## What have you learnt?

### After completing this Session, are you able to:

- prepare and maintain the work area.
- prepare a client for treatment.
- identify the equipment and tools used to carry out various beauty services.
- sterilise and disinfect equipment and tools.
- segregate and dispose of the waste appropriately.

## SESSION 4: HEALTH AND SAFETY IN THE WORK AREA

The health and safety of people in a salon, i.e., staff and clients, are important. A Beauty Therapist has to work with various tools and equipment, which are to be used to carry out certain procedures. There may be situations when an equipment or a product may lead to accidents. Therefore, it is important to learn about the following in order to prevent hazards as they might pose a risk to the health and safety of clients and salon staff.

The following needs to be taken care of in a salon:

- identifying hazards and evaluating risks at a workplace
- health and safety laws
- workplace policies
- maintaining hygiene in the workplace

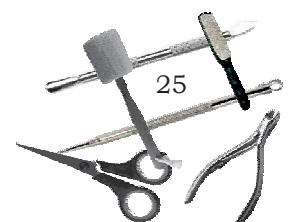
In order to be prepared to tackle any kind of eventuality, it is important to identify the risks and threats. Some measures that need to be adopted in a salon are as follows.

### Fire safety

In a salon, there are various items that can lead to a fire. To avoid such a mishap, one must be aware of the flammable items being used in the salon. Some of the items that may lead to a fire are:

- combustible oils
- flammable liquids and gases
- fuel-fired equipment
- refrigeration equipment

## NOTES



**FIRE SAFETY**

**ELECTRICAL SAFETY**

**CHEMICAL SAFETY**

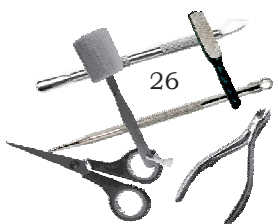
**POSTURE, LIFTING AND CARRYING**

**PARLOUR HYGIENE**

### Types of fire

All fires are not the same. The classification of fires as A, B, C, D and K is based on fuels that trigger a type of fire.

<b>Class A</b>	It is triggered by ordinary combustibles like wood, paper, cloth, trash and plastics. This type of fire can be easily extinguished by water.
<b>Class B</b>	It is caused by flammable liquids, such as oils, gasoline, petroleum paint, paint, paraffin and gases like propane and butane. It can be extinguished by methods that cut the oxygen supply.
<b>Class C</b>	These fires involve energised electrical equipment like motors, transformers, etc. These can be extinguished by cutting the power supply and using a non-conductive agent like Carbon dioxide to put off the fire.
<b>Class D</b>	It involves combustible metal fires. Potassium, sodium, aluminum, magnesium and titanium cause this type of fire. Water must not be used to extinguish it. Dry powder, which works by absorbing the heat and smothering it well, can be used.
<b>Class K</b>	These commonly relate to kitchen fires that are ignited by cooking oils, greases, animal and vegetable fat, etc. These can be put off by using Purple K, which is found in kitchen extinguishers. Wet chemical extinguishers can also be used.



## Types of fire extinguisher

Different kinds of fuels cause different types of fire, requiring different types of extinguisher. Thus, it is necessary to install and maintain them. There are three important elements that can cause fire — heat, oxygen and fuel. Fire extinguishers work by eliminating one or two of these elements. There are primarily the following types of fire extinguisher [Fig. 1.24 (a-f)]:

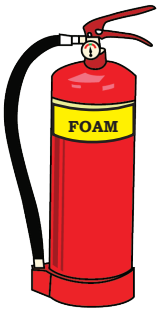


### Wet Chemical Extinguisher

To extinguish cooking fires and ordinary combustibles; used to extinguish fires caused by the following:

- Cooking oil
- Paper
- Clothes
- Animal or vegetable fat
- Wood

(a)



### Foam Extinguisher

To extinguish flammable liquid fires caused by the following:

- Oil-based paints
- Greases
- Hydrocarbon liquids

(b)



### Water Extinguisher

To extinguish fires caused by ordinary combustibles, such as:

- Paper
- Wood
- Clothes

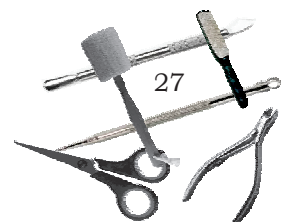
(c)



### Halon Extinguisher

To extinguish most types of fire, except those caused by combustible metals

(d)

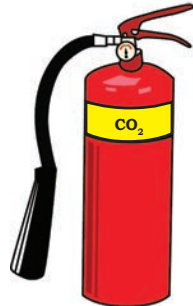




### Powder Extinguisher

To extinguish most types of fire (not preferred to be used in fighting electronic appliances fires)

(e)



### CO<sub>2</sub> Extinguisher

To extinguish most types of fire, except those caused by combustible metals

- Effective in case of electrical fires
- Less effective in open air due to dispersion

(f)

Fig.1.24 (a-f): Types of fire extinguisher

### **Water and foam**

Water works by eliminating the heat element. It is better to use water only for Class A fires because it can cause hazards in case of other fires. If used for Class B fires, it can spread the flammable liquid, and in case of Class C fires, it can lead to shocks. Foam can be used for Class A and B fires but not at all in case of Class C.

### **Carbon dioxide**

It works by eliminating two components, cutting off the oxygen supply and heat by cold discharge. It is used for extinguishing Class B and C fires, and is ineffective in case of Class A fires.

### **Dry chemical**

It is effective in case of Class A, B and C fires, which gives it another name of being a 'multipurpose dry chemical extinguisher'. It creates a barrier between oxygen and fuel, and hence, puts off the fire. If an ordinary dry chemical extinguisher is available, it must be used only for Class B and C fires.

### **Wet chemical**

They work in case of Class K fires (those caused by cooking oils, fats, etc.). They work by eliminating the heat and creating a barrier between oxygen and fuel. Some of these can be used in case of Class A fires as well.

### **Clean agent**

It uses halon and halocarbon agents to interrupt the combustion process. It is used for Class B and C fires, and some larger extinguishers of this type can be used for Class A, B and C fires as well.

### **Dry powder**

It creates a barrier between oxygen and fuel, thereby, extinguishing the fire. It is effective only for Class D fires and will not work on any other type of fire.

### **Water mist**

Such extinguishers cut the heat element and can be used as an alternative to a clean agent. They are mainly used for Class A fires but can be used in case of Class C fires as well.

### **Cartridge operated dry chemical**

Such an extinguisher is mainly used for Class A fires. It cuts the oxygen supply to the fuel and extinguishes the fire.

## **First action**

Every mishap can be dealt with efficiently and effectively, if a person acts promptly and knows what to do in case of a breakout. So, what must be done in case of a fire at a workplace?

- 1) Stay calm and do not panic.
- 2) Alert the people around.
- 3) Dial fire service helpline number 101 (in India) immediately.
- 4) Use your presence of mind and decide between escaping (in case of a major fire) and trying to extinguish the blaze if it is a minor one.
- 5) If one chooses to extinguish the fire, then choose the type of extinguisher carefully, depending on the type of fire.



Fig. 1.25: Signage for assembly point

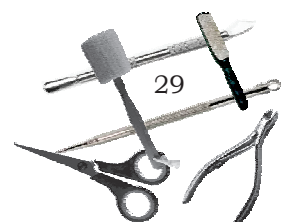




Fig. 1.26: Always use the stairs to evacuate a building

- 6) If one is not able to douse the blaze, it is better to escape the building.
- 7) Make way to the nearest assembly point or designated area in case of an emergency (Fig. 1.25).
- 8) If one is on a floor other than the ground floor, then the person must use stairs (Fig. 1.26) to evacuate a building and never use the lift.
- 9) If someone is trapped inside, inform the firemen and do not re-enter the building under any circumstance.



Fig. 1.27: Wash the burn with cold water

### First aid

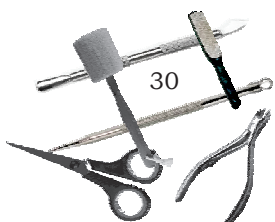
If one catches fire, one must 'stop, drop, cover and roll'. This is the first thing that needs to be done to douse the flames on clothes. In case of burns, follow these steps.

- 1) Wash the affected area with running cold water for at least 20 minutes (Fig. 1.27).
- 2) Put a wet cloth on the affected area, if running cold water is unavailable.
- 3) Do not use ice, butter, creams, etc., on the burn.
- 4) Immediately remove clothing and jewellery on the affected area to protect the skin from further heat and prevent the blood flow from stopping.
- 5) Do not burst the blisters as it can increase the pain and chances of infection.
- 6) Check for other injuries, such as bleeding, fractures, head injuries, etc.
- 7) Do not surround the injured person and provide enough breathing space.
- 8) Reach out for medical assistance immediately.

### Rescue techniques

In case of a fire emergency, the first course of action that needs to be followed is to escape from the exit route. Be careful of the surroundings when making your way out or trying to save someone. Follow these steps for a safe rescue or exit.

- 1) Look out for the nearest exit point — door or window.
- 2) While making your way out, shout out if anyone is left trapped inside.



- 3) If there is a casualty, protect the injured person from falling debris using a blanket.
- 4) Be careful while removing the debris to make way for safe exit as it can trigger a collapse.
- 5) Touch the doors with the back of your hand as palm is very sensitive and can easily get burnt. If a door feels warm, do not open it.
- 6) Smoke is poisonous, so stay close to the ground. If possible, cover the mouth with a damp cloth.
- 7) Move quickly and safely through the building, and proceed to the nearest stairway. Do not use the lift.

## Electrical safety

Electricity, a necessity, can be fatal at times. Shocks from faulty or damaged equipment can cause severe injuries and can even lead to permanent disability. One needs to be careful while working around machines or exposed cables. Safety depends on how one deals with a situation and one's alertness because a harm can be caused by just coming in contact with live parts, directly or indirectly through a conducting material.

### Risks

The main risk associated here is the death of a person or severe injuries. Some faults can even lead to fires or explosions, risking the lives of the people around. The occurrence of a short circuit in a place having flammable liquids can also lead to a fire.

### People at risk

- Maintenance staff, who look after machines and their operations
- Workers, working near an equipment, and those working without taking any training or precautions
- People, who misuse an equipment or try to use faulty equipment

### Causes of common hazards

- Exposed electrical parts like cables, broken plugs and sockets damaged appliances, etc. (Fig. 1.28)



Fig. 1.28: Be careful of exposed cables

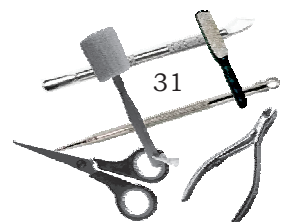




Fig. 1.29: Overloaded extension cords

- Improper installation of insulated grounding system or earthing
- Inadequate wiring or damaged wiring like cracks in cables leading to damaged insulation
- Overloaded circuits, which may lead to short circuits in some cases (Fig. 1.29)
- Faulty equipment and tools, outer cable insulation not secured into plugs, leading to exposed parts
- Wet areas, as water is a good conductor of electricity

## Electrocution

When one comes in contact with a voltage, high enough to cause a current flow, the person experiences a shock, causing serious injury or death. It is called 'electrocution'. The minimum current experienced by a human body is 1 milliamper (mA), and if the person experiences a current of 100 mA or more, it can be fatal. Moreover, electric shocks lead to various other complications that can be severe and damaging.

### **Effects of electrocution**

#### *Burns*

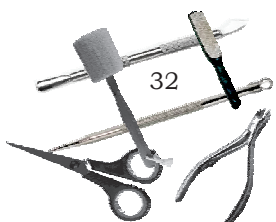
Electric shocks may lead to burns, which may be minor or major, depending on the voltage of the current experienced. Shocks above 500 volt can cause breakdown of the skin and injury to internal organs. Burns caused by such shocks can affect the heart too. In extreme cases, organ failure is followed by the death of a person.

#### *Neurological effects*

Electric shocks can also lead to complications in the peripheral and central nervous system, and these may show up early or later in life. The nervous control of heart and lungs may get affected.

#### *Fibrillation*

An alternating current of 50 or 60 Hertz can lead to ventricular fibrillation, which is rapid, irregular, unsynchronised contraction of cardiac muscles of ventricles. It can even stop the heartbeat.



### *Damage to bones*

Electric shocks, leading to severe muscle contractions, can cause fractures, dislocation of joints, etc.

### *Damage to respiratory system*

Electric shocks can also paralyse the respiratory system, affecting the heartbeat or altogether stopping it.

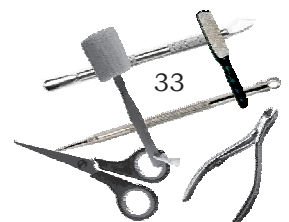
### **Preventing electric shocks**

Shocks occur when a human body comes in contact with a source of electricity. Electricity finds its path to the earth through the human body. So, it is important to be careful while working in a place that extensively uses electrical appliances. Some practices that must be taken care of are as follows.

- 1) Keep all electrical appliances unplugged when not in use and at the time of a power cut.
- 2) Ensure that an extension cord is not overloaded and replace it when it gets damaged. Pull out the plug only after turning off the switch.
- 3) Electric appliances always need to be kept away from water. Do not keep or use any appliance near wash basins and never spill water on them.
- 4) Do not touch an electronic device with wet hands.
- 5) Make sure that the insulated grounding system or earthing is functional.
- 6) Do not try to repair an appliance on your own. Let an electrician handle the repair work.
- 7) Keep the electric appliances away from the reach of children.

### **Rescue techniques and post-incident measures**

- 1) Do not touch a victim with bare hands when the person suffers an electrocution. However, try to separate the person from the source of current.
- 2) Rescue is safe when power has been cut off and the rescuer is standing on some insulating material. Know the source of electrocution, and then try to rescue the victim.
- 3) Make a call to the emergency helpline numbers immediately.



- 4) Careful judgement and planning is important while rescuing a person. Do not proceed if not sure.
- 5) Check for injuries. There can be visible or hidden injuries like bleeding, burns or fractures.
- 6) Cover the victim with a blanket to regulate the person's body temperature. But do not cover in case of large wounds or burns.
- 7) Stay calm and monitor the condition of the victim.

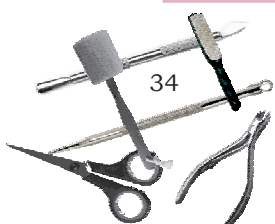
## Chemical safety

In the Beauty and Wellness Industry, various products, containing chemicals, are used. Frequent contact with these products can lead to some adverse health effects. But these products cannot be avoided. So, it becomes imperative that while using them, utmost care and precautions are taken.

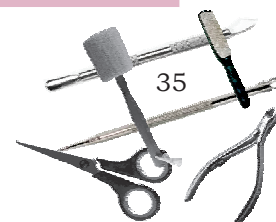
### Harmful chemicals

There are some chemicals that are harmful to health but it may be difficult to avoid these due to the lack of safer alternatives. The following table gives information on some of the harmful chemicals and products containing them, and precautions that must be taken.

Chemical name	Found in products	Symptoms of exposure	Potential long-term effects
Dibutyl Phthalate	Nail polish	Nausea, dizziness, eye and skin irritation	Reproductive toxicity, birth defects
Formaldehyde or Methylene Glycol	Nail hardener, nail polish, keratin hair straighteners	Breathing problems, coughing, wheezing, skin rashes, eye, nose and throat irritation	Cancer, dermatitis
Toluene	Nail polish, nail glue, hair dye, wig, hair glue or hairpiece bonding glue	Dizziness, headache, skin rashes, eye, nose and throat irritation	Liver and kidney damage, birth defects, pregnancy loss
Methyl Methacrylate (MMA)	Artificial nails	Breathing problems, chest pain, eye, nose and throat irritation, headache and nausea	Loss of smell, reproductive toxicity, asthma



Cyclopentasiloxane or Cyclomethicone	Flat iron sprays, thermal protection sprays	Under the high heat of a flat iron, cyclopentasiloxane creates formaldehyde	Skin irritation
Formaldehyde	Nail polish, body wash, shampoos, conditioners, cleansers, eye shadows, etc.	Leads to breathing problems, coughing, wheezing, skin rashes, eye, nose and throat irritation	Cancer, dermatitis
Styrene	Hair extension glue, lace wig glue	Vision problem, trouble in concentrating, tiredness	Cancer
Trichlorethylene	Hair extension glue, lace wig glue	Dizziness, headache, nausea, eye and skin irritation	Liver and kidney damage, dermatitis, double vision
1,4 Dioxane	Hair extension glue, lace wig glue	Eye and nose irritation	Cancer, liver and kidney damage
2-butoxyethanol or Ethylene Glycol Monobutyl Ether	Disinfectants, cleaners	Headache, eye and nose irritation	Reproductive toxicity
Quaternary Ammonium compounds or Dimethyl Benzyl Ammonium Chloride	Disinfectants and cleaners	Skin, eye and nose irritation	Asthma
P-phenylenediamine	Hair dye, henna tattoo	Skin irritation	Dermatitis
Glyceryl Thioglycolate	Permanent wave solution, 'acid perm'	Skin irritation	Dermatitis
Ammonium Persulfate	Hair bleach	Eye, skin and nose irritation, coughing, shortness of breath	Asthma, dermatitis
Ethyl Methacrylate	Artificial nails	Eye and skin irritation, rashes on eyelids, face or neck, difficulty in concentrating, coughing and shortness of breath	Asthma
Acetone	Nail polish remover, hairspray	Eye, skin and throat irritation, dizziness	Eye, skin and throat irritation, dizziness



Acetonitrile	Nail glue remover	Eye, skin and throat irritation, reddening of the face, chest pain and nausea	Weakness, exhaustion
Butyl Acetate, Ethyl Acetate or Isopropyl Acetate	Nail polish, nail polish remover, wig glue or hairpiece bonding glue	Eye, skin and throat irritation, headache, dizziness	Eye, skin and throat irritation, dermatitis
Methacrylic Acid	Nail primer, eyelash glue	Skin burns, eye, nose and throat irritation	Kidney damage, dermatitis, reproductive toxicity



Fig. 1.30: Wear gloves before starting to work with chemicals

## Chemical handling

The seepage or spilling of chemicals can occur at any stage of providing beauty treatments to clients. We can cut out on the harm caused by them, if handled carefully. The following points must be taken into account while working with chemicals.

### *Personal Protective Equipment*

All personnel working in a salon must wear Personal Protective Equipment (PPE) to avoid a mishap or injury. PPE includes apron, mask, gloves and head cover.

### *Work areas*

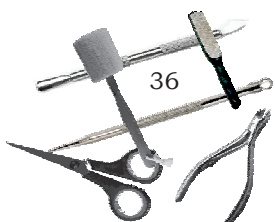
Never use tabletops as storage areas. However, chemicals for immediate use can be put on tabletops of the work area.

### *Close bottles*

The lids of bottles or jars, in which chemical products are stored, must be closed tightly after use and kept away from the edges so that they do not fall and spill on to the floor.

### *Labels*

All bottles must be labelled with the name of the chemicals or products stored inside, hazard pictogram and description about the product. Make sure that the labels are not worn out or damaged.



### *Transportation*

Do not carry chemicals and products loosely or in hands. Use a tray or cart to carry the products and avoid mishaps.

### *Check at regular intervals*

Examine the inventory at regular intervals so that the expired chemicals can be discarded and replaced with new ones.

### *Keep the floor clean from chemicals*

In case, a chemical spills on the floor, then immediately clean it (Fig. 1.31).

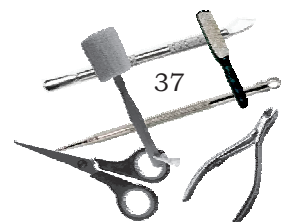


*Fig. 1.31: In case a chemical spills, immediately clean the floor*

## **Chemical storage**

Storing chemicals safely is important as even the slightest carelessness has the potential to cause a hazard and major accidents. Liquid chemicals are more dangerous as compared to powders because they can spill over to larger areas and increase the risk. So, there needs to be a storage area and containment facility to curb accidents. The personnel working in the salon must be trained in storing and using the chemicals. They must also be aware of what needs to be done in case of an emergency. Precautions that can help prevent accidents are as follows.

- 1) It is better to have a separate storage area for chemicals to avoid hazards.
- 2) They need to be arranged in a shelf according to their compatibility as incompatible chemicals can initiate or intensify a fire.
- 3) They must not be placed on shelves higher than 1.5 m from the ground level.
- 4) Heavy and large bottles need to be kept in lower shelves and flammable chemicals must be placed in safety cabinets.
- 5) Every chemical needs to have a designated place of storage and must be put back in its respective place after use.
- 6) Ensure that the chemicals are not exposed to heat or sunlight.
- 7) Each chemical must be labelled.



### First aid

Chemical exposure can prove to be fatal in severe cases and must be handled only by trained personnel. Every response to an emergency counts, and therefore, the role of a person providing the first aid to a victim is important. The person providing the first aid must:

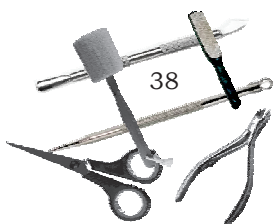
- 1) inform the authorities and emergency contacts immediately.
- 2) not try to neutralise an injury with other chemical(s) as it can make it worse.
- 3) not touch a burn, apply an ointment on the affected area or burst the blisters. The person must wait for a doctor instead.
- 4) keep a check on the victim till medical help arrives.
- 5) note down the name of the chemical that caused the injury.

### Posture, lifting and carrying

A stylist needs to stand for hours to provide services to clients. The posture affects the person's overall health. An incorrect posture may lead to disorders related to bones and muscles. Elevated arms can lead to musculo-skeletal disorders, affecting the neck and shoulders, while bending and standing for long hours can affect the backbone and other body parts. Next comes how one lifts and carries the stock. Sudden and heavy lifting may lead to muscle pull and ligament rupture. So, one needs to be careful with one's postures while working at all times.

### Methods to avoid posture-related problems

- Do not strain a particular body part for a long period.
- Move and stretch the body parts between services or after every half-an-hour.
- Change your body posture by carrying out a variety of services or activities.
- While sitting at the time of rendering a service, it is important to have the chair at the right height.
- Exercise to keep the body fit and flexible.



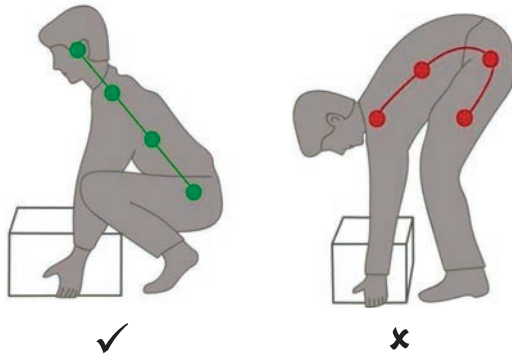


Fig. 1.32: The correct and incorrect postures while lifting a weight

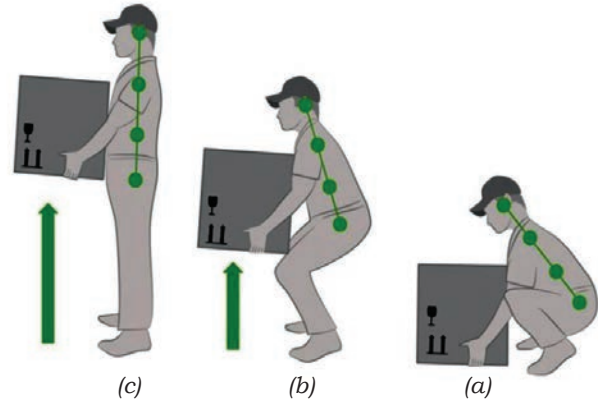


Fig. 1.33 (a-c): Follow these steps while lifting a weight

## Measures to adopt while lifting and carrying loads

- Get help while carrying heavy and large loads.
- While lifting, bend at the knees to sit, use both the hands to hold a load, use the legs to lift it, hold it between the knee and chest (Fig. 1.33), and stand straight without bending at the waist.
- While turning, move the legs and feet, avoid twisting at the waist.
- While lifting the load, always use the leg and buttock muscles as they are strong. Lower back muscles are weak, so avoid straining them.
- Use equipment like hand trucks or forklifts to carry the load to minimise injury risk.

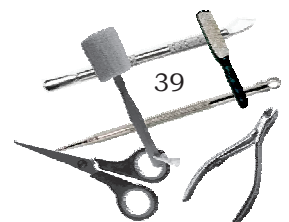
## Risks at workplace

We have already studied about the hazards that one may come across at a workplace. The risks associated with these hazards are:

- tripping over stray wires,
- bumping into equipment and things placed in the way and falling or getting injured,
- electric shocks or fire due to loose or frayed cables,
- slipping on water or some other liquid spilled on the floor,
- allergy from unsterilised tools, and
- burns from heating rods and hot water.



Fig. 1.34: Hazards at a workplace



## Parlour hygiene

A Beauty Therapist's role in maintaining hygiene in a salon is of utmost importance as it can make or mar its image. The person must be careful about cleaning and maintaining hygiene in the salon. Few important areas that need to be taken care of are as follows.

### Wash hands

Wash your hands with a hand wash or anti-bacterial soap before performing a treatment (Fig. 1.35). Since hands come in contact with many people and things, such as shaking hands with customers, providing services to clients, using various products to carry out treatments, touching used towels and tools, etc., it is important that one washes the hands before and after carrying out a treatment. One can also use a sanitiser to clean the hands.



*Fig. 1.35: Wash the hands with a hand wash or an anti-bacterial soap before and after a treatment*

### Work surface

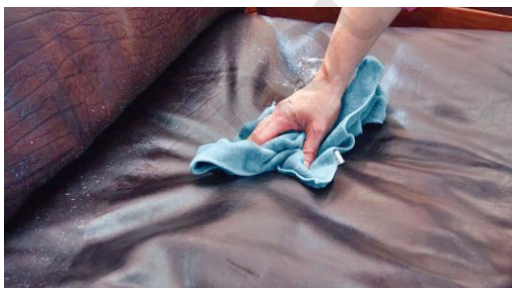
The work surface includes the treatment area, desks, glasses, mirrors, etc. Ensure that they are clean and disinfected prior to use to prevent infections (Fig. 1.36). Use clean sheets for covering the work surface.



*Fig. 1.36: Keep the work surface clean and disinfected*

### Chairs and couches

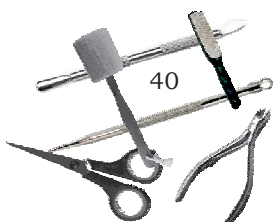
Chairs and couches must be cleaned daily (Fig. 1.37). Couches and chairs are, usually, made of material like Polyvinyl chloride (PVC), also known as polyvinyl or vinyl. They are easy to clean but cannot be disinfected with ethanol containing disinfectants as they react with the material, making it brittle. The cracks that appear due to brittleness are prone to microbe accumulation.



*Fig. 1.37: Keep the chairs and couches clean*

### Tools and instruments

All tools and instruments must be cleaned and disinfected before use. Read the manufacturer's instructions before cleaning an equipment.



## Floor

The floor must be cleaned with a disinfectant regularly. Make sure that nothing spills or drops on the floor. If something spills on the floor, then clean it immediately.

## Personal Protective Equipment (PPE)

PPE is important for the safety of the salon staff as it protects their clothes from stains and getting soiled. It also protects them from various chemicals, which might be harmful, and cause injuries or infections. It includes the following.

### Apron

It protects the clothes from stains and reduces the risk of injury.

### Gloves

It protects the hands from getting contaminated and catching infections.

### Head cover

It prevents the hair from coming in contact with a chemical, and causing hindrance during a treatment.

### Shoes

It protects a worker's feet from spills or broken things.

### Mask

It prevents cross-infection and inhalation of chemical fumes and gases.

## Practical Exercises

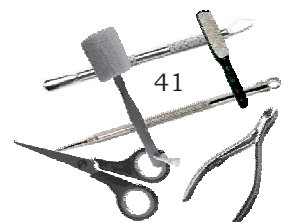
### Activity 1

Prepare a first aid box.

Material required: cardboard box and various first aid material (cotton, anti-septic liquid, cotton swabs for cleaning wound, sterilised gauze, forceps, scissors, safety pin, Band-Aid, bandages, etc.), white chart paper, sketch pens, pen, pencil and eraser

#### Procedure

- Take a cardboard box and cover it with a chart paper.
- Now, make the first aid symbol on it with a red sketch pen.



- Put different first aid material in the box.
- Demonstrate it in the class.













### Activity 2

Prepare a chart on the use of fire extinguishers.

Material required: chart paper, sketch pens, pen, pencil and eraser

#### Procedure

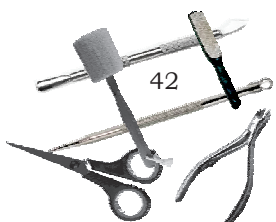
On the chart paper, draw a table as given below and put a tick (✓) or cross (✗) mark in the blank space provided.

Fire extinguisher used	Colour						
Type		Fires caused by wood, paper, etc.	Fires caused by flammable liquids	Fires caused by flammable gases	Fires caused by burning metals like magnesium and aluminium	Fires caused by electrical equipment	Fires caused by cooking oils
Water							
Foam							
Dry powder							
M28/L2							
CO <sub>2</sub>							
Wet chemical							

### Check Your Progress

#### A. Multiple Choice Questions

- Class \_\_\_\_\_ fire is triggered by wood, paper, cloth, trash and plastics.  
(a) A                      (b) B                      (c) C                      (d) K
- Water and foam fire extinguisher is the most suitable for Class \_\_\_\_\_ fire.  
(a) D                      (b) B                      (c) C                      (d) A
- Dry powder fire extinguisher is used for Class \_\_\_\_\_ type of fire.  
(a) B                      (b) D                      (c) C                      (d) A
- Personal Protective Equipment include \_\_\_\_\_ .  
(a) scissors    (b) forcep  
(c) apron    (d) tweezers



**B. Fill in the Blanks**

1. In extinguishing fire, \_\_\_\_\_ works by eliminating the heat element.
2. Wet chemical works by eliminating the heat and creating a barrier between \_\_\_\_\_ and fuels.
3. Carbon dioxide \_\_\_\_\_ is effective in extinguishing electrical fires.
4. A \_\_\_\_\_ prevents cross-infection and inhalation of chemical fumes.

**C. Subjective Questions**

1. What is electrocution? Write down the effects of electrocution.
2. Write a brief note on the type of fire extinguishers.

**What have you learnt?****After completing this Session, are you able to:**

- prepare for emergencies.
- identify hazards and evaluate risks associated with them at a workplace.
- sterilise and disinfect equipment and tools.
- segregate and dispose of the waste accordingly.

