# ESTHETIC

## Grade 9





National Vocational & Technical Training Commission (NAVTTC)

# Textbook of ESTHETICS

Grade – IX



## National Vocational and Technical Training Commission H-9, Islamabad

Author: Dr. Shumaila Waqas is a Doctor (Dermatologist) at ACME Medical Center Lahore.

#### **Reviewers:**

- 1. Fauzia Masood, Chief Executive Officer, DIOR Salon
- 2. Gulnaz Hamid , Beauty Educator, Owner of Glamour Institute and Salon
- 3. MusaratAftab, Owner of Aqsaz Beauty Salon
- 4. Adeela Anwar, Beauty Expert, Herbalist, Chief Executive Officer of Naila's Beauty Salon and Clinic
- 5. AsmaAamer, Lady Instructor and National Assessor
- 6. Farzana Aziz, Chief Executive Officer, Flora Saloon by Fari
- 7. Almas Akhtar, Esthetician
- 8. Saba Sadiq, DACUM Facilitator, Lahore.
- 9. Saima Abbas, Education Officer, National Curriculum Council
- 10. Mr. Muhammad Asim, Assistant Director, SS & C Wing, NAVTTC, Islamabad

Designing:	Gul Awan Printers, Blue Area, Islamabad.
Edition:	1 st Edition, 2022
ISBN:	
Publishers:	National Vocational & Technical Training Commission H-9, Islamabad. Website: <u>www.navttc.gov.pk</u> ,

All rights are preserved with the National Vocational and Technical Training Commission. No part of this book can be copied, translated, reproduced or used for guide books, key notes, helping books etc. without permission of NAVTTC.

**Note:** Names of Curriculum Developers will be part of curriculum document. In the book there will be names of reviewers only.

## PREFACE

This book has been designed to meet the pace of gradual development of scientific concepts of ESTHETICS for the 9<sup>th</sup>Class of Matric Tech. Matric Tech in ESTHETICS has been introduced for the first time at Matric level. This textbook an first effort to describe topics related to ESTHETICS.

The main characteristics of the book are as under:

- The subject matter is equipped with specific illustrations for strengthening the concepts.
- Facts and principles are explained succinctly and clearly.
- Tags of interesting information, mini-exercises and the brain teasers under the caption of "Do you know?" are added to steer students through the concepts.
- Skills of practical work in students, scientific activities have been included in each chapter of the book.

Before printing, this book was thoroughly reviewed by a committee of well-known experts to seek its valuable recommendations which have been duly incorporated in the book.

We wish that this book proves to be an good choice for students looking for a supplement to promote their potentials in the field of beauty therapy. As there is always room for improvement, we cordially invite valuable suggestions for betterment of text of this book.

This book of ESTHETICS is the branch of beauty therapy profession which is going to be taught in Matric Tech for the first time in history of Pakistan, indeed it's a great initiative towards the development and growth of beauty industry at national level by NAVTTC and that was the motive for the author to write this book for the students of Matric Tech.

This book explains all the related topics in a soft and convenient manner which is understandable to the level of Matric Tech students. It covers all the domains of ESTHETICS regarding concepts, methodology and practical implementation of the topics. Many new innovations and emerging trends are also explained thoroughly. The sequence of chapters can be adjusted as per convenience of the teacher. It should be read conceptually. Perform all the activities and tasks to have hands on experience of ESTHETICS.

Executive Director National Vocational & Technical Training Commission (NAVTTC)

## TABLE OF CONTENTS

Chapter No.	Title	Page No.
1	Esthetic Concept	01
2	Tools and Equipment of Skin and Massage	16
3	Health, Safety & Environment	31
4	Epilation	47
5	Introduction of Skin	59
6	Skin Care	78
7	Introduction to Massage	86



## Chapter 01

## **ESTHETICS CONCEPT**

#### The students will be able to:

- define esthetics
- know historical background of esthetics
- understand the different branches
- recognize the emerging trends
- know about components of esthetics (skin care, hair removal and fitness) and terminology used for esthetics
- ✤ describe esthetics industry
- know about scope of esthetics industry (entrepreneur and academic opportunities)
- ✤ familiarize with the growing demand for esthetics career options
- recognize collaboration with different sectors (fashion industry, media channels and showbiz industry etc.)

## Introduction

## **1. Esthetics**

Estheticians are skin care professionals who have been trained through formal esthetics programs to perform treatments that promote the health and beauty of the skin, including procedures like waxing and peel, while also educating clients on cleansing, diet, and the application of skin-care products at-home.

Esthetics is the branch of philosophy, but in the beauty industry, esthetics refers directly to the health and beautification of the skin.



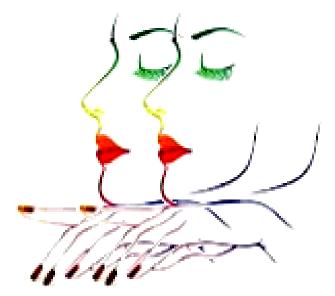


## 2. Historical Background

The first use of the term aesthetics is attributed to Alexander Baumgarten in 1735, although earlier studies in the 18th century mark the first systematic inquiries into aesthetics in its familiar sense as a distinct branch of philosophy. Undoubtedly the 18th century saw the flourishing inquiries into beauty. For many centuries earlier, going back to ancient Greece, there had been philosophical reflection, even if only in a piecemeal fashion, on poetry, painting, music, and the beautiful, and these reflections had a great influence. What is noticeable, that before 18th century it is not always clear where the boundary lies between aesthetics, now on Western aesthetics; it draws quite a narrow boundary around what reasonably counts as aesthetics.

#### **3. Branches of Esthetics**

An esthetician's career can vary significantly depending on which branch you choose to follow. As skin care and appearance specialists, one can end up in one of three types of sub-specialties, A spa, a salon, or a medical facility. Which one to pursue can affect the type of clients we treat and the type of care we provide.



#### **3.1 Spa**

An esthetician provides services based on relaxation and pampering, which includes facials, face masks, body wraps and scrubs, and even non-therapeutic massage.

After initial skin analysis and consultation, we provide services such as eyebrow tinting and shaping, makeup, and recommending products for home care. We can also expand into aromatherapy techniques and other skills that require additional training.

If we want to transition into a medical esthetician career, there are medical spas that operate as a hybrid between a spa and a clinic. There, we can provide more intensive treatments such as microdermabrasion, minor chemical peels, and laser hair removal.



#### 3.2 Salon



Salon setting is designed for higher client turnover. People come in for one treatment time and then go with others as well. Its work is more about making someone look good in the moment and less about skin treatment in the long term. Makeup, eyebrow waxing and tweezing, pore cleansing, and quick facials are more common than body wraps and massage and it's more likely to sell or recommend products to clients.

Working in this setting can be an ideal career move for estheticians who want to own their own business. A salon owner will often have an established client base, with a little competition and more of referrals.

As with spas, salons are also common, and depending on the area there may be more workplace options if we choose this path. However, we should also think ahead in terms of where we might want to open our own salon.





At a medical facility, an esthetician will be more focused on treating acne and other skin problems than making someone look good for the day. Medical facilities will often provide more advanced and intensive treatments than spa or salon. Many in this career end up working in dermatology clinics, plastic surgery. It's an ideal path for those looking to work closely with patients with specific health conditions to improve their quality of life.

A medical esthetician will often work as part of a medical team, giving options and care instructions for before and after surgeries to create the best recovery outcome for the patient. One will also be able to provide referrals to dermatologists and other medical professionals for more serious skin issues.

## **4. Emerging Trends in Esthetics**

Emerging trends in esthetic means recognition of advancement and new therapies to enhance esthetics

#### 4.1 Hydra Facial





A Hydra Facial is a facial treatment using a device to deliver exfoliation, cleansing, extraction, and hydration to the face. This system uses a vortex swirling action to deliver hydration and to remove dead skin, dirt, debris, and impurities while cleaning and soothing skin.

#### 4.2. Radio frequency



Radiofrequency (RF) therapy, also called radiofrequency skin tightening, is a nonsurgical method of tightening of skin. This can be done using energy waves to heat the deep layer of skin(dermis). This heat stimulates the production of collagen which is the most common protein in body.

#### 4.3 Micro Current





A micro current facial stimulates facial muscles for a natural lift

"Micro-current machines are used to work on the muscles of the face, stimulate collagen, and tighten skin; it uses low-voltage electrical impulse to stimulate muscle, and collagen development in the dermis. Micro current facials tighten and smooth the muscles and reduce fine lines.

#### 4.4 Treatments for Males

The emerging trend of men's skin care has been a hot topic in the beauty industry for the past few years. In fact, it can be said that men's skin care is no longer emerging but rather, is here (and here to stay). While most, and certainly the best, products should be applicable to both men's and women's skin

## **5. COMPONENTS OF SKIN**

#### 5.1 Skin Care

Good skin care is important for the following reasons: It helps skin to be in good condition: when skin cells shedding throughout the day, it become important to keep skin glowing and in good condition. An effective routine can help prevent acne, treat wrinkles.

- Cleansing is the first step of any good skincare routine. ...
- Tone. Toner is an optional step, but if one has loose pores, one should absolutely use it.
- Vitamin C Serum.
- Eye Cream.
- Moisturizer.
- Sunscreen.

#### **5.1.1 How to do Skin Care**

#### Best Ways to take care of your skin

- ♦ Wash Your Face. Washing your face removes dirt, oils and bacteria.
- ✤ Get More Sleep. "Beauty Sleep" is a real thing.
- ✤ Breathe Clean Air.
- ✤ Use Antioxidants.
- ✤ Exfoliate Your Face.
- Exercise Regularly.
- ✤ Use A Moisturizer.
- Drink Water.

The following components can create an effective skin care routine:

- **Cleanser:** Wash face gently with a product formulated for different types of skin. For dry skin, choose a cleanser that doesn't have alcohol, and for oily skin, go for an oil-free cleanser.
- **Toner:** Toner is used after washing face, and it helps smooth and calm skin while restoring nutrients.
- **Moisturizer:** Moisturizers should be used every time after washing face, even for oily skin, choose an oil-free or gel based moisturizer.



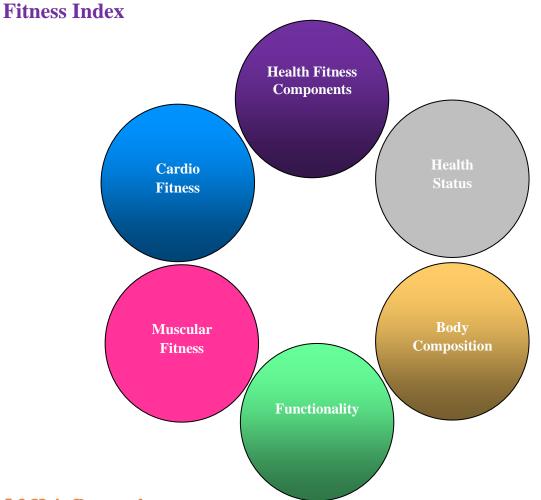
- **Sunscreen:** good moisturizer has a sunscreen, but still there is need to use a separate sunscreen every day, even if it's cloudyweather. Choose broad-spectrum protection which has SPF of 30-60.
- **Exfoliator:** Exfoliators are optional and can be used after a cleanser but before a moisturizer. They should only be used a maximum of once or twice a week.

#### **5.2 Fitness**

Fitness refers to the ability of your body systems to work together efficiently to allow to be healthy and perform activities of daily living. Being efficient means doing daily activities with the least effort possible

Fitness Components	Field-expedient options
Aerobic fitness	Running test (1-3 miles) Beep test
Muscular Strength	Isometric dynamometer pull-up Incremental dynamic lift Push-up
Muscular Endurance	Push-ups Burpee (squat thrust) Squat
Flexibility	Functional movement screen Sit and reach Y-balance
Body	Circumference measurements composition
Speed	A 40-yard sprint
Agility	A 300-yard shuttle run T-test agility drill
Power	Standing broad jump Vertical jump Medicine ball throw
Coordination	Sit-up and stand without using hands Burpees
Balance	Beam walk Y-balance
Reaction time	NA





#### **5.3 Hair Removal**

- 1. Shaving. (quick option)
- 2. Epilating. Mess-free and long-lasting.
- 3. Waxing
- 4. Laser hair removal.

## **6.Esthetics Industry**

Esthetic (skincare)industry revolves around making clients look their best and feel good by providing various beauty products and treatments.

#### Info corner

#### Difference between Aesthetician/ Esthetician

Aesthetic refers to a person licensed to provide cosmetic skin care treatments and services ... Esthetics is a word specifically used for the cosmetic industry that is devoted to beauty and appreciation of human beauty.

Employment of skincare specialists is projected to grow 29 percent over few years and much faster than other occupations.

#### **6.1 Scope of Esthetic Industry**

Beauty industry is briskly growing strong and valued up with an annual growth rate of 4.75% worldwide. The demand for beauty products and services is rapidly increasing because of the fact that women seek to care more for them and are willing to sacrifice their budget for beauty. But also men are getting more conscious about their physical appearances. People are getting more conscious about their looks which are convincing them to get more esthetic services even if they are expensive.



#### **6.2 Scope of Beauty Industry**

There is a high demand of beauty products and services all over the globe as now everyone is obsessed to look good. Even salons, beauty parlors & spas are making good profits.



- Fast growing: Beauty is one of the fastest-growing industries across the world which provides more opportunities for new entrepreneurs which results in good profits and also has many career options for professionals.
- Various career paths: There are various career paths in the beauty field such as make-up artistry, hair styling, nail professionals, colorist and many more.



- Self Employment: There are many self-employed individuals in beauty industry who started their own businesses such as salons, spas, beauty parlors etc. There are many professionals who work independently or do freelancing.
- Own beauty brand: Many celebrities and entrepreneurs are coming up with their own beauty brands, which are also quite successful. Running manufacturing companies for beauty products or even retailing is an option for business as well.
- Demanding field: The demand for beauty products and services in the market is high, as people are becoming more beauty conscious and willing to spend their money for beauty. This provides some good beneficiaries to the new entrants as well as existing ones in this industry.
- **Be a role model:** As a business owner, you can inspire others especially women to change their lives. Create a community of followers and share your vision with the world.
- Innovation propel the industry: The beauty industry has barely changed in years. Now many firms and individuals are coming up with new innovative ideas such as organic and sustainable product and leading the industry and inspiring people.

## 7. Career Paths in Esthetic Industry

## 7.1 Makeup Artist

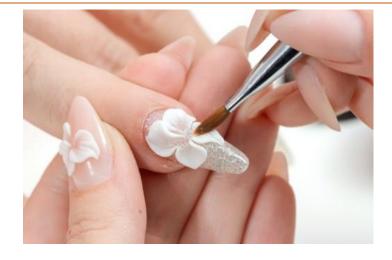
Makeup is an important part of the glamour & beauty industry, especially on Wedding or other events; requirement of a Makeup artist is unavoidable. Makeup artists can start their own makeup studio and work independently or can even work under any other set up. Even starting an Academy for makeup learning courses is a good approach for Makeup Artists.



#### 7.2 Nail Professional

Nail professional provide manicures, pedicures, polishing, and nail extensions to clients. Nail arts & Nail designs are getting fame these days. Job opportunities for nail technicians are also increasing as well.Nail spas are playing wonders with nail arts





#### 7.3 Massage Therapist



Massages works wonders, including treating painful muscles, decompressing tired and overworked muscles, reducing stress, rehabilitating sports injuries, and promoting general health. Work opportunity for a Massage Therapist is increasing as well.

#### 7.4 Beauty Bloggers

These days' beauty bloggers share new products on YouTube tutorials and post about their favorite lipstick on Instagram, discover customer and engage with brands. Many cosmetic companies' direct-to-consumer beauty brands have started advertising, in favorof tapping into the power of influencer marketing and brand ambassadors.

Do you know?

To become a beauty blogger, you have to be extremely knowledgeable about brand you represent.



#### 7.5 Esthetician

An esthetician cleanses and beautifies the skin with facials, body treatments, head and neck massages, and makeup application. They may remove hair through waxing.



#### 7.6Salon/Spa Owner

A salon/spa owner is responsible for all salon management. Most salon owners have some business management experience before investing in a salon. For the individual to purchase a salon, a capital investment and a good credit rating are required.



#### 7.7Cosmetic Entrepreneurship

Setting up a cosmetic business requires not only **creativity** and cosmetic formulation skills, but it also demands knowledge about how to create and market your services to the right group of people. Your business will fail no matter how good your services are, if they never get seen by the right people.



## 8. Importance of Digitalization and Personalization

A study made by Accenture reported that 91% of consumers are more likely to shop with brands thatrecognize, remember and provide relevant offers and recommendations, while 83% of consumers are willing to share their data to enable a personalized experience. However, traditional shopping pre-COVID-19 doesn't sound as attractive as before. According to McKinsey, the trends that had begun before the pandemic will likely accelerate with direct-to-consumer e-commerce, such as brand websites, shopable social-media platforms, and marketplaces. As a consequence, the digital shopping experience is brought to the fore. The use of advanced technologies is most likely to be adopted by a majority if it sustains a personalized experience.

Digitalization helps to maintain high safety measures and promise a more accurate and faster result, both on- and offline. In addition to gathering important customer data, the solutions implemented tend to reinforce the exclusive feeling of consumers who experience personalization.

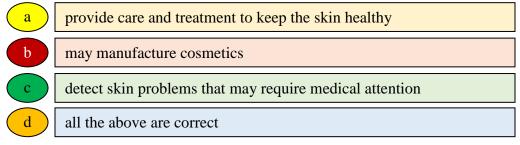
## EXERCISE

## Select the most appropriate options

1. Estheticians

a	deal with the overall health and well-being of the skin
b	were ancient Greek inventors of many of today's pigments
c	are any people who use cosmetics
d	are experts in the history of cosmetic use

#### 2. Estheticians



3. Career options for estheticians include work in

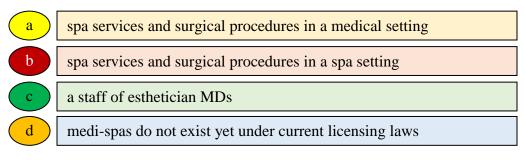
a	art galleries
b	departmenal stores
c	police departments
d	sports medicine

#### 4. Medical esthetics

a	is another term for plastic surgery
b	involves the integration of surgical procedures and aesthic
c	is preformed only by registered nurses
d	is preformed only by a physician



#### 5. A medical-spa offers



#### 6. The skin is nourished by:

a	bones
b	blood & lymph
c	cartilage
d	blood & flesh

7. The tools for galvanic machines are made of...

a	clay
b	metal
c	wood
d	plastic

#### Give short answer to the following questions

- 1. Define Esthetics
- 2. Name Emerging trends in esthetics
- 3. Name 3 components of Esthetics
- 4. What is cosmetic entrepreneurship
- 5. Write how to do skin care
- 6. What is an esthetics business?
- 7. What are esthetics services?
- 8. What is Esthetics skin care?

#### Answer the following question in detail.

- 1. Describe career paths of esthetic industry
- 2. Discuss role of digital media in esthetic industry
- 3. Describe importance of collaboration of esthetic industry with other industries
- 4. Discuss about 4 emerging trends in esthetics.
- 5. Describe emerging trends.

## Chapter 2

## TOOLS AND EQUIPMENT OF SKIN AND MASSAGE

#### **Students Learning Outcomes**

The students will be able to:

- ✤ Identify types of skin tools
  - black heads extractor needle
  - facial bed/stool
  - facial trolley
  - hand sanitizer
  - scissors
  - tweezer
  - wax strips
  - epilation thread
  - gown and towel for facial
  - bowl for creams
  - applicator brushes
  - sponges
  - mirror
  - magnifying glass
- Describe use of tools for skin services
  - describe use of equipment for skin services
- Identify types of massage tools
  - head massager
  - face massager
  - body massager
  - bowl for oil
  - brush for oil application
  - towel
- ✤ Identify types of equipment for massage services
- Describe use of tools for skin services
  - describe use of equipment for skin services

#### Introduction

"Aesthetics of the tool and equipment" needs to know theories of production and usage. To understand precisely how tools, operate as objects of aesthetics and what their relevance is, there is a basic approach. This involves its use, possibilities of manipulation, and zones of hands-on experience and activity.



## **1.Skin tools**

#### **1.1 Facial Bed and Stool**

Facial bed and stool are specially designed to facilitate facial services. They can be made of rot iron, wooden, steel.Facial beds provide a great way of relaxation and comfort to customers. As clients need support while receiving the facial treatment, so a comfortable and soft bed for facial massage.Facial beds are easily movable from one place to another.Such beds are covered and soft and are coated with plastic which makes it easy to clean.



#### **1.2 Facial Trolley**

Facial trolleys are important as they offer a suitable storage space for work tools and they have wheels that enable them to move easily. Using facial trolley actually help to minimize movement during work, as you can move with your tools and supplies in every workstation. It should be pre-prepared according to required service. It can be of different shapes and sizes. They are usually made up of plastic and iron material.



#### **1.3 Hand Sanitizer**

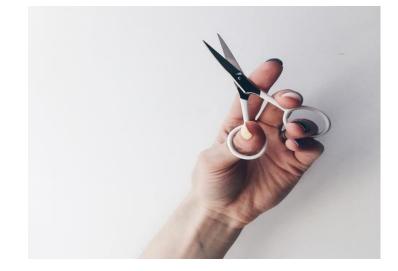
Hand sanitizers are liquids used for disinfection of many superficial germs and viruses like corona virus. Hand sanitizers are alcohol based and best is with 70% in concentration. The can be available in watery form and gel form as well. Washing hands with soap and water whenever possible because handwashing reduces the amounts of all types of germs and chemicals on hands. But if soap and water are not available, using a hand sanitizer with at least 60% alcohol can help you avoid getting sick and spreading germs to others



#### 1.4 Scissors

Scissors are used for the purpose of cutting and they are generally made up of stainless steel. Scissors are available in different sizes and shapes.

## **Different Types of Scissors and their Uses**





We often get asked which pair of scissors should we use?" This is because the ideal pair of scissors varies depending on its use. When it comes to scissors, the shape and length of the scissor blades make all the difference. To help you figure out which pair of scissors is better.



#### 1.5 Nail Scissors

The nail scissors have shorter, curved blades that make them ideal for nail trimming. The curve shaped blades make it easier to cut along the natural nail shape, leaving less jagged nails and therefore less to file down.

Ideal for finger nails and toe nails can also be used on brows if you prefer them over straight blades.



#### **1.6 Tower Nail Scissors**

The tower nail scissors also feature curved blades but they are a bit longer and thinner. This blade shape allows for a super precise trim for areas like your cuticles. This pair of scissors is for more hard to reach and precise trimming.

Ideal for: cuticles & hang nails.





#### **1.7 Brow/Beard Scissors**

Brow/ Beard scissors have longer, thinner, straight blades to trim hair more closely and precisely.

Ideal for: hair such as brow hair or beard hair.

#### **1.8** Tweezer

Tweezer is used to pluck hair from face and eye brows, also known asplucker. It is made up of stainless steel.

- Slant-Tip Tweezers.
- Point-Tip Tweezers.
- Pointed-Slant Tweezers.
- Round-Tip Tweezers.
- ✤ Flat-Tip Tweezers.
- ✤ Arched-Claw Tweezers.
- Wide-Grip Tweezers.



#### 1.9 Wax Strips

Wax strips are made of paper or cloth material. They are disposable; they are used to remove hair by pulling the patch in opposite direction of hair

#### How to use?

First apply powder on the place that need to be removed hair to make larger pores, and then take appropriate depilatory wax strip to spread evenly along the hair. Take out a removal paper to gently fix to hair removal place. 10 seconds later tear down the paper by the reverse direction. Wash the hair removal place and apply skin soothing lotion.

**Do you know?** Strip wax is suitable for longer areas and less sensitive skin, while hot wax is better for more sensitive and delicate areas.





**Hard wax** is thicker than soft wax and works by hardening on skin - as the name shows. Once it hardens, you can remove it with your hands, so there's no need for waxing strips. This makes the process a lot less painful.

#### **1.10 Black Head Extractor Pin**

Longitudinal stain less steel pin with dead ends.one is sharp needle like and other is round blunt n with central hollow space. It is meant to extract soft n hard black n white heads by putting and squeezing with firm pressure on surface of skin.



#### **1.11 Epilation Thread**

It is a special sanitized and antiseptic thread used to epilate or pluck undesired hair. Epilation thread is a 1 time used product it's not supposed to be used on other client to avoid infection spread.





#### 1.12 Gown n Towels

Gowns and towels are important accessories used in any esthetic service; they can be of washable n disposable varieties. Gowns and towels should always be of soft n skin friendly fabric like cotton etc. They should have been washed properly n under hygienic conditions to avoid germ spread from client to client, or use disposable one for every client.



#### **1.13 Applicator Brushes**

Applicator brushes are wooden or plastic brushes with soft end for application of product. As these brushes are re-usable so they need to be washed n sanitized properly before each service, disposable brushes are spatulas are also available.





#### 1.14 Sponges/Wipes

Sponges/wipes are made up of very soft material in square or round shape fitting to the hand size. They are used to wipe of products from the face. They should always be disposed off.



#### 1.15 Mirror

Small size mirrors are used to give view of before and after difference in esthetic procedure. Simple and magnifying mirrors can be used.



#### 1.16 Magnifying Glass

Magnifying glass is actually a simplest form of basic microscope. Which consist of a single convex lens which enlarges the image when glass is held up to it, creating a magnified virtual image in the eyes. Usually the magnification is between 2X to 6X in the simple form of lens. It is an essential piece of equipment for estheticians, dermatologists and spa professionals. Facial magnifying and infrared lamps provide skincare specialists with a close view of a client's skin.



## 2. Different Types of Skin Equipment

#### 2.1 Sterilizer

Sterilizer is the equipment used to disinfect many germs in tools used for esthetic procedures. Steam or heat or hot water is the mode of disinfection on controlled high temperature for like minimum 30 minutes. Steel, metal and other hard tools can be disinfecting with sterilizer.

Plastic tools cannot be sterilized on high temperature as they can melt or diffuse so can be boiled or steam on moderate temperature.



#### 2.2 Steamer

Facial steamer is the equipment used to loosen the skin pores for better cleansing and exfoliation of the skin.Steamerscan be used on any skin type but are best used on dry, dehydrated skin and in cold weather. Over steaming can make your pores loose for permanent. Steamers are designed for controlled discharge of heat with stream. Effect of steam also varies with skin to skin, means, acne prone skin can be ruined rather benefit.



#### 2.3 Skin Scanner

Skin scanner is electrical equipment based with a sensor for skin and it has to be attached with some monitor or TV screen to see images of the depth of skin.

Skin scanner is the latest technical equipment used to monitor problems on skin. It can produce different pictures to reveal skin conditions which we may not be able to find with naked eye examination.



#### 2.4 Wax Warmer

It is an electrical appliance based on silver steel bowl enclosed in hard plastic cover attached with electrical supply used to warm the hard and soft wax.



#### **Description of Uses of Skin Tools**

- Skin tools makes treatments easy
- Skin tools provide more precision in working
- Skin tools help to identify problems of skin
- Skin tools makes application of products easy and proper



#### **Description of Uses of Equipment in Skin**

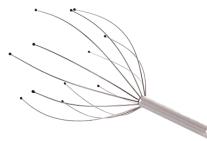
- Skin equipment like sterilizer and sanitizer help to control infections
- Skin equipment like steamer helps to prepare skin in a better way for further procedures.
- Skin scanner help to identify skin problems which can be missed with human eye examination
- Wax warmer help to softenand warmthe wax to spread on skin in a easy and practical way.

## **3. Massage Tools and Equipment**

#### **Identify Types of Massage Tools**

#### **3.1 Head Massager**

Head massager tools are available in different shapes like combs, brush and gentle rods. They promote blood circulation of scalp for the nourishment of hair. Head massager can help to relief



stress, migraine and headache. It also lowers blood pressure and promotes hair growth.Scalp massage increases hair thickness by stretching the cells of hair follicles. This, in turn, stimulates the follicles to produce thicker hair. It's also thought that a scalp massage may help dilate blood vessels beneath the skin, thereby encouraging hair growth.

#### **3.2 Face Massager**

It is commonly available in different types of brushes, lymphatic roller, and electrical massager and stone. It can be used manual or electrical. The purpose of facial massager is to help promote healthy skin while relaxing your facial muscles and gives rejuvenating effect through lymphatic drainage. It can be 5-8 minutes duration for muscle relaxation. The technique involves stimulating pressure points on the face, neck, and shoulders. You can use lotions, oils, or cleansing balms with facial massages,







#### **3.3 Body Massager**

There are two types of body massager like massage bed, massage chair, Simple massage tools include balls, rollers, thumb tools, handheld massage tools, hot stone massage tools, head and neck massage tingles and massaging sticks. It helps in relaxing your muscles, improving blood circulation and help to be a physically and mentally relax. If you want to enjoy a massage session on own at home, there are various options available in electric massagers that can help get stress relief.

Body massagers are kind of vibratory tools with different strength n impulses types.



#### 3.4 Bowl for Oil

Bowl is a small to medium size bowl with open-top, rounded cup like container used for mixing the aromatic oils and other fluids for massage.

Ceramic and plastic bowls of different sizes can be used to pour oil for massage.

Wooden bowls should not be used in massage as it gets absorbed by wood







#### **3.5 Brush for Oil Application**

Soft plastic brushes can be used to apply oil on body

#### **3.6 Towel**

The cotton flannel sheets are used for massage therapy. Cotton flannel sheets are warm in the winter and comfortable in the summer when air conditioning can make a room too cool. Flannel linens are not measured by thread count, but by weight.

#### The uses of Equipment for Massage Services

- ✤ Massage table.
- Massage chair.
- Pillows, linens, and towels, enough to change between clients.
- ✤ Massage oils, lotions, and creams.
- Music and candles for ambiance.
- Storage such as cupboards for your supplies.
- ✤ A way to wash linens and towels.
- Personal lockers for clients to save their valuables.
- These commonly used massage equipment helps to make massage better n easy
- Each equipment has been discussed previously in this chapter



## EXERCISE

#### Select the most appropriate option.

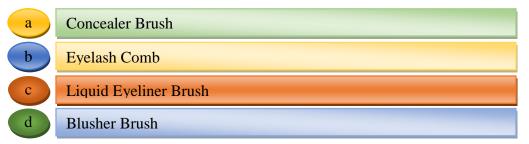
1. This tool is great for those who don't have lashes with a natural curl.

a	Eyelash Curler
b	Liquid Liner
c	Lipstick Brush
d	Gloss

2. This is usually the biggest make-up brush in your collection.

a	Powder Brush
b	Fan Brush
c	Blusher Brush
d	Lipstick Brush

3. This is used to provide colour to the cheeks and to define the cheekbones.

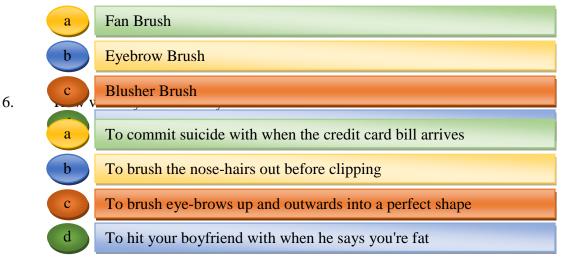


4. This brush is used to apply color and to enhance the "Windows of the Soul".

a	Concealer Brush
b	Eye-shadow Brush
c	Powder Brush
d	Blusher Brush



5. This is the slimmest brush in your collection, and tapers to a sharp point.



7. This brush is used to apply a sticky substance to the most expressive feature of your face.



#### Give short answer to the following question.

- 1. How does head massager help in hair growth?
- 2. How skin scanner help to identify skin problems?
- 3. What is the mechanism involved in sterilizer in sterilization
- 4. What are the benefits of face massager?
- 5. What injuries can be caused by black head pin?
- 6. Name different scissors.
- 7. Name skin analyzing tools.

#### Answer the following question in detail.

- 1. Name any 10 skin tools and describe their uses in detail?
- 2. Name 5 massager equipments and their uses in detail?
- 3. Describe massage tools.
- 4. Describe skin analysis tools and equipment.
- 5. Discuss about different scissors used in esthetics.

#### Activity / Practical

- Demonstrate tools and equipment for skin services.
- Demonstrate tools and equipment for massage services.

## Chapter 03

#### The students will be able to:

- ✤ define health safety & environment
- know basic principles of safety
- understand standard operating procedure regarding health and safety
- $\diamond$  observe the basic rules of health & safety in workplace environment
- $\diamond$  understand the types of hazards and preventive measures
- ✤ adopt basic certification of safety
- learn awareness on physically transmitted diseases
- learn sterilization (tools and towel) and sanitization
- know-about ventilation and illumination
- know-about the importance of personal hygiene
- learn the importance of personal protective equipment (ppe).
- use personal protective equipment (ppe)
- know the hazards/damage posed by equipment
- make safe use of tools, equipment and products
- know the use of disposable utensils
- understand about manual handling of equipment
- know about the operation of electrical equipment
- learn storage of left-over products before expiry
- know about fire triangle
- ✤ identify types of fires and fire extinguishers
- ✤ learn correct evacuation procedures
- ✤ identify and report hazards to concerned

## 1.Health& Safety Definition

#### Health

The state of being free from illness /disease is called health. For example, toxic chemicals like fumes of ammonia releasing from hair treatment products can affect lungs, liver, eyesight and chronic effects cause severe disease. Health relates not only to physical ill health but also to psychological ill health (e.g. exposure to extreme stress can lead to acute mental collapse or a nervous breakdown).

#### **Safety**

The absence of risk of serious personal injury is called safety. For example, walking under a load suspended from a crane during a lifting operation is not safe because if the load falls, serious personal injury or death could result. Using damage electrical equipment of salon like blow dryer, electric tong and straightened etc. can cause electric shock or in severe cases can lead to death, staying out of the danger area results in safety.

#### 2. Health and Safety Requirements in the Salon

Health and safety regulations must be adhered to in the salon to maintain high standards of practice, safety and protection of themselves and the client. One aspect of health and safety

responsibility would be ensuring continuous professional development is maintained to keep up to date with changes or new product usage information.

# **Importance of Working Safely and Hygienically in a Salon**

Stylists and therapists must work safely at all times and adhere to all health and safety legislation within the salon. Responsibilities would include:

- Work hygienically with the use of clean towels, sterilized tools and equipment
- Follow workplace and suppliers' or manufacturers' instructions for the safe use of equipment, materials and products
- protect yourself, client and service area in accordance with salon requirements
- Use appropriate personal protective equipment for self and client, e.g. the client's own clothes must be fully protected with gown and towels
- Remain alert to risks and hazards throughout the service and understand how this may affect services – spillages, obstacles, obstructions, broken equipment and trailing wires. Adopt correct posture of self/client to avoid fatigue and minimize injury
- Ensure that the service area is clean and tidy throughout the service
- Proceed with the service without causing danger or damage to self, client or work area. Adopt the correct methods of waste disposal – dilute chemicals with running water, recycling and environmental protection.
- Prevent contact dermatitis wear gloves when using chemicals, wash and dry hands thoroughly and use moisturizer/barrier cream.

# **3.Standard Operating Procedure (SOP) regarding Health and Safety**

The foundation stone of an effective organization is the health and safety policy. A good health and safety policy sets out the organization's general approach and commitment to achieving particular aims and objectives. It provides a framework of general and specific health and safety responsibilities for staff, and guidance on the detailed operational arrangements to be taken to protect employees and others from harm as a result of workplace activities.

#### Activity

Search some beauty sector relevant policy regarding health & safety, Prepare one page policy of concerned beauty salon/ institute with the guidance of tutor.

# 4. Risk Assessment

All staff, whether employed or self-employed have a responsibility to assess their working areas and identify hazards and evaluate any potential risk of harm the hazards may cause to themselves, their work colleagues and members of the public. A risk assessment must be carried out in a workplace at regular intervals. All staff and visitors to a salon have a right to be protected from harm. An examination of the work area is carried out on what can cause harm and a decision made on whether reasonable steps to prevent that harm are in place.





### Hazard

A hazard is anything that may cause harm and presents a risk to safety, such as: use of electricity, the trailing wires from hair dryers or beauty equipment, the use of chemicals, spilt products, e.g. shampoo or massage oil, lifting or moving heavy objects or working with hot equipment e.g. hair strengtheners or a wax heater.

### Risk

Risk is the likelihood that someone may be harmed by the identified hazard with an indication of the severity of harm that may be caused, such as: the hairdresser, beauty therapist or a client tripping over trailing wires, slipping on any spillage or be burnt from electrical appliances or wax.

# 5. Potential Hazards in a Salon Environment

In any salon environment, there are a number of potential hazards.

Facilities	<ul> <li>Floor surfaces – these need to be swept regularly and clean, e.g. hair removed and any spilled substances mopped up. The work area must be kept free of clutter and chairs, trolley etc., placed back into position for safety.</li> <li>Temperature in the environment – may be too hot or too cold; if too hot, there may be the potential for hyperthermia and dehydration, leading to fainting, can also effect the efficiency of some product usage services.</li> <li>Fire exits – these need to be clearly signed and accessible.</li> <li>Fire extinguishers – these need to be appropriate to serve the area in which they are located; they must be regularly maintained and staff should be instructed on their use.</li> <li>Safety signs used when appropriate, e.g. wet floor</li> </ul>
Equipment	<ul> <li>Manual handling – when lifting or moving equipment</li> <li>Broken equipment – this should be removed and labelled as 'out of use' Improper technical use – all equipment should be used correctly and only for its' specific purpose.</li> <li>Maintenance – equipment, furniture and trolleys etc. should be regularly maintained</li> <li>Chemicals – safe storage, safe use and safe mixing</li> <li>Electrical equipment – no trailing wires or trip hazards; turned on only when required and turned off and stored correctly after usage</li> </ul>
Security	<ul> <li>Signing in book - to log all visitors and guests using a salon or spa</li> <li>Secure entrances and exits to prevent unauthorized access</li> <li>Lockers to maintain security and prevent theft</li> <li>Suspicious parcels should be alerted to emergency services and facility evacuated</li> </ul>
Hygiene	<ul> <li>Use of showers before using spa to prevent any cross-infection, e.g. bacteria and chemicals (deodorant and perfumes)</li> <li>Use of protective clothing to deal with hazardous substances to prevent contact with the skin or inhalation</li> </ul>

# **6. Preventive Measures**

Assessing risk, risk assessment can be used to minimize any potential risk of harm through accidents. It may be informal or formal.



**Informal risk assessment** would include a visual inspection and appraisal of possible hazards in all work areas prior to use. Any new risks identified would need to be recorded formally.

**Formal risk assessment** would include the completion of a written risk assessment form to identify the hazards and the likelihood and severity of harm and ensure appropriate control measures are in place to prevent accidents. Formal risk assessment reports should be reviewed and updated regularly. The purpose of risk assessment is to ensure as far is reasonably practicable, that all steps have been taken to minimize the risk to the safest possible level.

The Health and Safety Executive (HSE) provide five simple steps for assessing and managing risk:

- 1. Identify the hazards (anything that may cause harm)
- 2. It's important to know who can be harmed
- 3. Evaluate the level of risk (likelihood and severity) and decide on precautions needed
- 4. Record all findings
- 5. Review and update regularly

#### Activity

Make a list of some of potential hazards in the salon environment.

Who may be at risk of harm? Individuals who may be at risk of harm from hazards may include:

• Hair stylists or barbers • Beauty therapists • Clients • Visitors • Guests • External work contractors • Cleaner • Other staff

#### **Case study : Hair**

One stylist has completed an intense quasi vibrant red color on their client. The client has additionally had a complete restyle to compliment the new color. The stylist has mixed the color in the dispensary alongside some freshly laundered white shampooing towels. The whole tube of color was not required and whilst mixing the stylist became distracted when answering a question from another colleague leaving the cap off the tube of color. Once the color was applied, the stylist removed the gloves and left then on top of the work area – ready to re-use when checking the development of the color. The unused color is left on the trolley in case it was needed. The stylist reused the gloves to test the hair color development and kept them on taking the client to the wash basin to remove the color. Once the color was removed the stylist disposed of the gloves and outer towel that was protecting the gown and client's clothes in the sink. The client was taken to the work area with hair dripping and a cutting collar attached. The trolley still contained the unused color bowl, with cutting and blow drying tools alongside ready for use. The hair was restyled and blow dried, it had been a busy morning for the stylist. The stylist then took a lunch break

# 7. Incidents in Beauty Salon

#### The types of accidents and emergencies that can happen in a salon environment

There are different types of emergency that may occur in a salon environment. These can generally be grouped as:

Accidents- which include those caused by slips, trips or falls, such as mild sprains or cuts to the skin; or accidents from using products or equipment, such as: electric shock,



burn or scald from electrical items, inhalation of products. Most accidents can usually be handled and dealt with by a duty first aider

- Medical emergencies which include those brought on by underlying medical conditions or allergies, e.g. asthma attack, epileptic seizure. Medical emergencies will nearly always require the involvement of the ambulance and paramedic services
- Fire building, electrical equipment, flammable products Fire emergencies will always require the involvement of the fire services
- Security and safety alerts, which may include: breaking and entering the building; theft of items; suspicious items or parcels; chemical spillage; fire; missing persons, abuse or vulnerable persons. Security and safety alerts will require the involvement of more than one emergency services, such as the police, ambulance and paramedic fire services, bomb disposal team etc., and which may require evacuation from a building.

# **8.** Basic Certification of Safety

These certifications include national and international safety legislation as per occupation requirement.

# 9. Sterilization and Sanitization



Tools, equipment and work surfaces must be kept clean, well maintained and sterilized or disinfected. Sterilization and disinfecting will prevent cross-infection/contamination.

Sterilization- the killing of organisms such as bacteria, fungi and parasites

**Disinfecting/Sanitization**– the elimination of the most harmful microorganisms (not including their spores) from surfaces or objects.



# **Examples:**

Disinfecting/sterilization	Tools	Use/Instructions
Chemical sterilizers	Scissors, tweezers, combs, brushes, sectioning clips	Mostly used in chemical jars, a solution is made following manufacturers' instructions. Tools are submerged for 20 minutes to be fully sterilized
Moist heat	Towels, gowns	Hot cycle on washing machine used to kill bacteria and clean effectively
Cleaning detergents	Work surfaces	Must be used at correct concentrations and is used mostly to decontaminate surfaces and air
Ultra-violet cabinet	All tools	Ultra-violet rays sterilize tools, turn tools after 20 minutes to ensure both sides are fully sterilized

# **10.** Workplace Conditions for Health and Safety

Temperature, humidity, ventilation and lighting are major determinates of comfort in the workplace. Departures from satisfactory conditions can reduce efficiency and may have harmful health effects. Legislation, in particular the Workplace Health, Safety and Welfare Regulations make general rather than specific requirements. In essence they require reasonable conditions.

# **10.1** Temperature

Temperature is a physical quantity that expresses hot and cold. It is the manifestation of thermal energy, present in all matter, which is the source of the occurrence of heat a flow of energy, when a body is in contact with another that is colder or hotter.

Temperature is measured with a thermometer. Thermometers are calibrated in various temperature scales that historically have used various reference points and thermometric substances for definition. The most common scales are the Celsius scale (formerly

called centigrade, denoted as  $^{\circ}$ C), the Fahrenheit scale (denoted as  $^{\circ}$ F), and the Kelvinscale (denoted as K), the last of which is predominantly used for scientific purposes by conventions of the International System of Units (SI).

World Health Organization recommends a maximum of 24 degrees Celsius for working in comfort. A degree of flexibility must be adopted when determining if a workplace is too cold or too hot. Arrangements may have to be made in particular circumstances, e.g. if there is a breakdown of the heating system or the weather is exceptionally hot. The provision of heaters or fans may be a solution.





# **10.2 Humidity**

Humidity is the amount of moisture in the air. Low levels of humidity can affect respiratory and skin conditions. There may be a build-up of static electricity in dry air leading to electrostatic shocks. There is no specific legislation dealing with humidity. Generally, the relative humidity should be between 40% and 70%. If there is a problem with humidity it tends to be because it is too low and the air feels 'dry'. This can be improved by several means ranging from having indoor plants to humidifiers.

# **10.3 Ventilation**

Fresh air is need respiration, to dilute and remove impurities and odors and to dissipate excess heat. Legislation requires that every enclosed workplace has effective and suitable ventilation, which provides a sufficient quantity of fresh or purified air. In many cases windows or other openings will provide sufficient ventilation. If they do not mechanical ventilation systems may have to be used. Replacement air should be as free of impurities as possible. Air inlets should be sited where they can draw fresh air; they should not therefore be sited near ant source of fumes or other impurities. Recirculated air (e.g. in air conditioning systems) should be adequately filtered to remove impurities and the purified air should have some fresh air added. Care should be taken to ensure people are not exposed to drafts.



# **10.4 Illumination/Lightning**

Lighting should be sufficient to enable to work, use facilities and move about safely and without eye strain and other ill health effects. Legislation requires that every workplace has suitable and sufficient lighting and it shall, as far as it is reasonable practicable, be by natural lighting. Good lighting conditions involve: • Maximum provision of natural daylight. • Careful planning to

minimize the effect of shadows. • Maximum control by individual workers of ambient lighting, (e.g. by the provision of desk lights). • Selection of suitable lighting for the task being performed, (e.g. very intricate work may need additional lighting). • Avoidance of dazzle or glare, including natural light, by the repositioning of the lighting or the workplace. Additionally, there should be suitable and sufficient emergency lighting where people are especially exposed to danger if the artificial lighting fails.





# **11. Personal Hygiene**

Personal hygiene is keeping the body clean, and helps prevent the spread of germs. Grooming is caring for fingernails and hair examples of these activities would be Styling hair, shaving, trimming and painting fingernails. Feeling and looking good are important to each individual's emotional and physical well-being.

The hygiene of your hair, skin, nails, teeth and body must be perfect. Working within any of the hair and beauty industries, treatments and services involve close contact with clients. Broken skin or infection on exposed parts of the body of the salon staff should be kept covered with a waterproof plaster or handy tape (available from pharmacies). Single-use disposable gloves must be worn if the procedure involves skin penetration.

Personal hygiene which is also referred to as personal care includes all of the following: Bathing and Showering

- Skin care
- ✤ Hair care
- ✤ Nail care
- ✤ Hand and foot care
- Dental care

# **11.1 Physically Transmitted Diseases**

The concept of a salon is linked to beauty, an establishment dealing with cosmetic products and tools to improve the appearance of one's hair, face, and body. Cosmetics are generally mixtures of chemical compounds derived from natural (such as coconut oil) or synthetic sources. Salons provide a wide range of services including hairdressing, nail care (manicures and pedicures), hair removal by waxing and threading, mud baths, and many other services. However, they are also considered a major health concern.

- ✤ Hepatitis from Pedicures
- Blood-Borne Infections from hair cutting area
- STDs from Waxing

# **Personal Protective Equipment (PPE)**

#### Definition

#### **Personal Protective Equipment**

Equipmentorclothingthatiswornorheldbyaworkerthatprotectsthemfromoneormoreriskstotheirsaf etyorhealth.

There are instances where none of the other control measures can be used and there are times when some of them can but residual risk still remains. If this is the case, then it may be necessary to use PPE. Many different types of PPE are available, such as:

- Ear defenders for noise.
- Gloves to prevent contact with substances hazardous to the skin.
- Respiratory protection against substances hazardous by inhalation (breathing in).
- Eye protection against splashes of chemicals and molten metal's, mists, sprays and dusts, projectiles and radiation including laser lights.



Using the correct personal protective equipment (PPE) is essential for all salon services to maintain health and hygiene to the client and the stylist or therapist. The consequences of inadequate client protection during salon services may result in legal proceedings (negligence), where the client has the potential grounds to sue or claim against the salon for replacement of damage to themselves of their property, e.g. clothes.

# **Examples:**

Following table highlights some common example of PPE with wearing reason:

Service or Treatment	PPE • Beauty expert • Client	Examples/reasons
Shampoo and	Gloves	• Prevent the client's clothes from getting
conditioning	• Gown, plastic	wet whilst at a back basin
	cape, towel	
Cutting/blow-	Closed toed shoe	• Prevent hair entering feet and causing
drying/setting and	• Gown, towel,	infection
dressing	cutting collar	• Preventative measure for accidental
		dropping of products and/or equipment
		causing injury

Coloring, bleaching	<ul> <li>Gloves and apron Optional: Face mask, goggles</li> <li>Gown, plastic cape, towel, barrier cream</li> </ul>	<ul> <li>Prevents staining of clothes and hands Gloves also add protection against possible contact dermatitis/chemical damage to hands</li> <li>Individuals who suffer from allergies or asthma should wear a mask to prevent chemical inhalation</li> <li>In extreme cases of effects from inhalation of products, eye protectors should be worn, particularly bleaching powders to prevent further respiratory problems</li> </ul>
Epilation	<ul><li>Gloves</li><li>N/A</li></ul>	• Gloves to protect the therapist and client from cross-infection
Stone Therapy	<ul><li>Thermal glove</li><li>Towel</li></ul>	<ul> <li>Gloves to protect the therapist's skin from high temperatures of warm stones.</li> <li>A towel to act as a barrier protecting the client's skin from direct contact with warm placement stones</li> </ul>
Electrical filing for nails	<ul> <li>Gloves, apron, safety glasses or goggles, dust mask</li> <li>Safety glasses or goggles, dust mask</li> </ul>	<ul> <li>Gloves for hygiene reasons and to protect the therapist's skin.</li> <li>Safety glasses/goggles will protect both the therapist's and client's eyes and a dust mask should be available for both to avoid inhaling dust</li> </ul>

# 12. Chemical and Biological Agents

# **12.1** Forms of Chemical Agent

The physical form of a chemical makes a big difference to how easily it can enter the body. For example, emitted particles from hair chemicals during keratin, extenso and dying process can be inhaled into the lungs and can cause chronic effects on body to therapist and client.

The physical form greatly affects the hazard presented and the route of entry into the body:

- Dust-very small solid particles normally created by grinding, polishing, milling, blasting, etc. and capable of becoming airborne (e.g. flour dust, rock dust).
- Fume-very small, metallic particles that have condensed in the air during work with molten metal (e.g. welding) to create an airborne cloud.
- Gas- a basic state of matter; it expands to fill the space available (e.g. carbon dioxide).
- Mist-very small liquid droplets suspended in air, normally created by spraying (e.g. hair spraying liquid).
- ✤ Vapour- the gaseous form of a substance that exists as a solid or liquid at normal temperature and pressure (e.g. vapour given off by acetone solvent).
- Liquids- a basic state of matter; free-flowing fluid (e.g. water at  $20^{\circ}$ C).



# **12.2 Biological Agents**

- Fungi- moulds, yeast and mushrooms. Most are harmless to humans but some can cause disease, such as fungal infections (e.g. athlete's foot) and farmer's lung (an allergic irritation caused by inhaling mould spores).
- Bacteria- single-celled organisms that are found in vast numbers in and on the human body. Some are harmless, some are beneficial (e.g. certain gut bacteria) and some cause disease (e.g. Legionnaires' disease caused by the Legionella bacteria).
- Viruses- very small, infectious organisms that reproduce by hijacking living cells to manufacture more viruses. Many cause diseases (e.g. hepatitis B, caused by the hepatitis B virus, COVID virus).

#### CH: 03

# 12.3 Classification of Chemicals Hazardous to Health

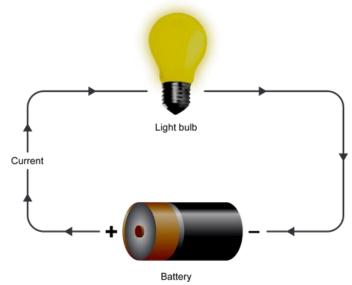
- Toxic-Small doses cause death or serious illness
- Harmful-Larger doses cause death or serious illness
- Corrosive-Destroys living tissue
- Irritant-Inflames skin or mucous membranes
- ✤ Carcinogens-Cause cancer
- Respiratory sensitizers-Cause asthma, e.g. flour dust, isocyanides
- Skin sensitizers-Cause allergic dermatitis, e.g. epoxy resin



# 13. Electrical Hazard in Salon

# 13.1 Basic Principal of Electricity

An electrical circuit comprises 3 elements: Pressure = potential difference - Measured in volts (V) Flow rate = current - Measured in amps (I) Resistance = obstruction in circuit - Measured in ohms (R) Linked together by Ohm's Law:  $V = I \times R$ 





# **13.2 Hazards/Damage Posed by Electrical Equipment**

- Electric shock
- Electrical burns
- Fire and explosion
- Arcing
- Secondary effects(Physical injury caused by an electrical incident, such as: Cuts,Bruises and Broken bones

# **13.3** Fire Safety in Salon

**13.4** Fire Triangle



### What is Fire?

Fire is a rapid chemical process in which oxygen combines with another substance ("fuel") in the presence of a source of heat.

- Fuel a combustible material or substance (such as paper, wood, petrol, diesel, butane or acetylene) that is consumed during the combustion process.
- Oxygen consumed during combustion when it is chemicallycombined with the fuel. Oxygen is present in air at a concentrationof21%.Duringafire,oxygencanalsocomefromother sources,including certain oxygen-rich chemicals (usually called oxidizing agents), such as ammonium nitrate.
- Sources of ignition (heat) a heat or ignition source is essential to start the combustion process. Once combustion has started, it generates its own heat which is usually sufficient to keep the fire burning (in other words, once the fire starts, the heat source can be removed and the fire stays alight).

**13.5** Types of Fires and Fire Extinguishers Types of fires: This is the UK/EU classification system

Class A- Solid materialsClass B- Liquids and liquefiable solidsClass C- GasesClass D- MetalsClass F- High-temperature fat

Why we do close fire doors?

Extinguisher	<b>Class of Fire</b>
Water	А
Carbon dioxide	A and B
Foam	A and B
Dry powder	All
Wet chemical	F

Types of fire extinguishers: This is the UK/EU classification system

# 14. Emergency Procedures and First Aid

An organization has to develop procedures to deal with foreseeable incidents. Such incidents might include:

- ✤ Fire.
- Somb threat.
- Spillage of hazardous chemical.
- Release of atoxicgas.
- Outbreak of disease.
- Severe weather or flooding.
- Multiple casualty accident.
- Terrorist/security incident.

The foreseeable incidents will vary depending on many factors, such as the type of organization and its location.

# **14.1 First-Aid Requirements**

An employer has a duty to provide appropriate first-aid services for their employees. This is to allow an immediate emergency medical response to foreseeable injuries that might occur in the workplace. Three elements must be provided:

- Facilities-anappropriatelocationwherefirst-aidtreatmentcanbegiven.
- Equipment–suitablystockedfirst-aidkitsandotherequipmentasnecessary.
- $\label{eq:personnel-staff} \bullet \qquad \text{Personnel-staff} with appropriate training to deliver first-aid treatment$

The employer must notify staff of these first-aid arrangements and, in particular, the identity of trained first-aid personnel.

### **14.2 First-Aid Facilities**

Suitable facilities should be provided where first-aid treatment can be given. As a minimum, this might consist of a room that is used for other purposes but can be quickly converted into a treatment area. In a larger workplace, a dedicated treatment room should be provided. This room should be:

- Centrally located in an area that can be accessed by the emergency services.
- Clean and adequately heated, ventilated and lit.
- Provided with hand-wash facilities, a chair and a clinical waste bin, etc.



# 14.3 First-Aid Equipment

As a minimum, one fully stocked first-aid kit (box) might be provided for a small, low-risk workplace.

- ✤ Large triangular bandages (preferably sterile).
- Sterile plasters (individually wrapped; appropriate to the type of work).
- Disposable gloves.
- Safety pins.
- Sterile eye pads.
- Large- and medium-size unmediated wound dressings (sterile; individually wrapped).





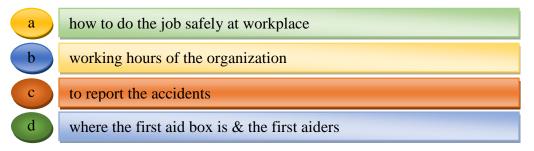
# EXERCISE

### Encircle the correct option.

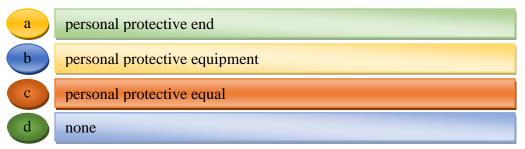
1. Workplace related injuries, illnesses and deaths impose costs upon

a	the community
b	employer
C	employee
d	all of the above

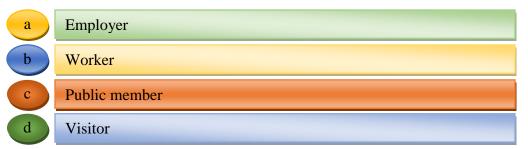
2. What does the risk assessment tell you?



3. PPE stands for



4. A/An ..... has a duty to provide appropriate first-aid services for their employees





#### 5. Which of the following is not a chemical-related health hazard?

a	Harmful
b	Toxic
c	Carcinogenic
d	Ттір

#### Write Short Answers of the following questions.

- 1. Why is health and safety important in a salon environment?
- 2. What are some of the possible hazards in a salon environment?
- 3. What is the role of the hair stylist, barber or beauty therapist during an emergency?
- 4. Describe some of the personal protective equipment that can be used in a salon.
- 5. Name the different types of fire extinguisher and the class of fire they can be used on.
- 6. Outline different PPE's for salon services.
- 7. What are some electric hazards in salon?
- 8. Define forms of chemical agents.
- 9. Highlight some incident which can cause harm in salon.
- 10. What is difference between hazard and risk?

#### Answer the following question in detail.

- 1. Explain the importance of sterilization and disinfecting in the salon with some examples.
- 2. Explain salon policy for security of staff, clients and visitors.
- 3. Write a note on personal hygiene in salon.
- 4. Discuss the reasonable health condition for salon environment.
- 5. Write note on emergency procedure and first aid facilities at salon.

#### **Practical Activities**

- 1. Group Syndicate Activity: What factors do you think should be considered when selecting suitable electrical equipment for beauty salon?
- 2. Divide the class into groups and ask them to find out common causes of fire in the workplace/salon.
- 3. Group Syndicate Activity: Under your tutor's direction, take a tour of an area of the building you are in

#### Note:

- Fire compartmentation, e.g. stairwells, fire doors, etc.
- Travel distances
- Fire detection and alarms
- ✤ Fire extinguishers, etc.
- Emergency lighting, signage

# **Chapter 04**

# **EPILATION**

#### Student will be able to know

- ✤ define waxing and threading
- ✤ recognize types of threading and waxing
- $\boldsymbol{\diamondsuit}$  know the usage of thread and tweezer
- ✤ identify the effects of wax w.r.t skin type know suitable temperature for applying wax
- \* know about the proper way of hair removal and wax quantity to be used
- ✤ define eyebrows shaping
- ✤ describe face mapping for eyebrow shaping
- explain eyebrow shaping according to face structure
- ✤ identify suitable temperature of wax for eyebrow
- ✤ identify suitable temperature of wax for upper lips
- ✤ know about the removing of hair according to direction
- comprehend post wax precautions
- ✤ know about the client preference for threading or waxing
- ✤ know suitable temperature of wax for face

Threading and waxing are two techniques that help in removing hair from the face, and these methods are employed by beauticians in salons all over the world. Both threading and waxing can be used to remove not just facial hair, but the hair from all body parts. Both techniques are temporary, in the sense, re-growth of hair takes place after a session of threading or waxing in a few weeks, and a woman.



#### 1.2Waxing

Waxing is a quick, inexpensive and semi-permanent way of removing unwanted body hair. In this process, wax is applied on the skin and then the hair is pulled off from the roots with the help of waxing strips. It is done generally on clean skin that has no oil or other residue over it.

Waxing works great for many and it leaves the skin soft and smooth. If done correctly, it causes minimal pain. Also in most cases, it takes longer time for the hair to re-grow and hence said to be apt for hair removal be it on your legs, hands or face.



#### Do you know?

Wax technique of hair removal originated in Egypt in 3000 BC

### CH: 04

# **Advantages of Waxing**

- Lasts for a long time- It is said to be effective as it lasts for a longer time that is 4-6 weeks in most cases. However, for some it grows within a week when some of the hair has a different hair growth cycle.
- ✤ Hairs that regrow is finer- After waxing, generally there is finer re-growth of hair. This means less itchiness when they start growing.
- Free from shaving rashes or stubble-it makes your skin smooth and soft so you will be free from the coarse prickly stubble or shaving rashes.
- No cuts-it is much safer as far as cuts are concerned. It is overall gentle on skin and does not result to any cut.
- Quick method-it is an easy and quick method of removing hair from body. It is also a cost effective method.

### **Disadvantages of Waxing**

- **Can be painful** While some has stronger resistance power, others may really find it painful.
- Red patches on skin- Waxing leads to redness on your skin and sometimes these rashes take longer time to go.
- Skin allergies Some are allergenic to the ingredients used in waxing which may lead to severe form of allergies that might leave behind patches on your skin.
- Skin may burn- Generally a professional knows how much heat a skin can bear but in case of any mistake, you may end up burning your skin. Moreover, if they use any anti aging or acne creams be careful as they may contain retinoid that harms your skin. Therefore, you need to be cautious with sensitive body parts.

#### Do you know?

Sugar wax is a Persian waxing method that has been used in 1900 B.C.

# **2.Types of Waxing**

Waxing has become incredibly popular over the years, and for good reason. It's a great way to remove unwanted body hair, and keep your skin looking smooth and attractive. Here are the some types of waxing that salons offer.

# 2.1 Cold Waxing

In this method, a semi-solid form of wax is already applied to the strips that will gently press against the skin. They are done so in a way that is against the growth of the hair. This helps give the wax strips a strong hold on the skin when they are pulled out. One of the many advantages of cold waxing is the fact that it is effective from the first application. You won't need repeated sessions to see a change—this means that you can save a lot on continuous treatments. Another advantage is that it's generally less painful than hot waxing methods, which take a while to get accustomedto.





### **2.2 Hot Waxing**

Hot waxing is a method where hot wax is applied on the body, before a strip is applied and the hair is removed. This is the most prevalent form of waxing there is, and for good reason. One of the many advantages of hot waxing is that you can see very accurate results, making this an ideal method for small areas like eyebrows. Another advantage is that you can see instant results with just one application. It doesn't have to be repeated, unlike other forms of hair removal such as electrolysis and shaving.

### 2.3 Soft Waxing

This is another method of waxing that a number of salons offer. As the name suggests, soft waxing is a method used when the wax is soft. It can be used with both cold and hot waxing methods. After applying it on your skin, it is promptly covered with a muslin cloth and left to dry. After that, the strip is removed; thereby removing the hair. This method is more suitable for large areas of skin like the legs and hands.

### 2.4 Hard Waxing

This is also known as 'Strip less waxing'. It is directly applied to the body in a thick manner and there is no use of strips or cloths. When the wax gets hardens, this is skilfully pulled out by the therapists.

Advantages: As there is no stripe is used, the wax does not cling to the body which is why it is very beneficial for sensitive skin. This also helps to remove smaller and finer hairs from the body.

**Disadvantage:** In this action, you can have certain skin issues. If someone is prone to skin infections due to sensitive skin, he/she should avoid this process.



# **2.5 Sugaring Wax**

This is the natural way to get your waxing done. Ingredients, like sugar, water, and lemon juice is used here. All get heated up to make a sticky substance.

Advantages: As being made from the natural ingredients, this is perfect for every skin type. The process itself is an easy one so it can also be used at home.

**Disadvantages:** The process cannot beneficial for the finer hairs and also is not been able to clear all hairs at the first application.

Hopefully, you get ideas about waxing types and their pros and cons. If you take good care of your skin, you won't have any after effects of waxing. So don't wait to have a glowing skin. Rushed to a waxing salon Croydon and get it done.



### Precautions

- The most important precaution is that; always get your waxing done by trained personnel.
- Do not expose your face to the sun right after being waxed to avoid skin disease or tanning.
- Do not apply any sort of creams for a while after waxing; just let the skin breathe for some time.
- Try not to take a shower couple of hours before getting your face waxed as it may open up pores and make it vulnerable to infections.
- Post waxing, powder your face to adhere thewas to your hair and not your skin, thus, minimizing the redness.
- After getting your hair uprooted, you should soothe your skin post waxing by applying aloe vera-based gel for cooling.
- You can also apply ice to cool the burning sensation.
- \* Avoid frequently touching the face as it can cause irritation and small pimples to occur.
- Avoid waxing while on periods as it may cause more redness.
- Scrub your face properly at regular intervals to delay the facial hair growth.
- Do not go to the pool after waxing as it is a must to stay away from chlorine for a day or so. Chlorine can react with your waxed face and cause irritation or rashes.
- Once you have waxed, your skin seems to be tender. To get it back to its previous state, you should gently massage your skin.
- \* Wash your face with raw milk since it helps in minimizing redness and nourishes your face

# 3. Threading



Another technique of removing unwanted hair is threading which began in India almost 6000 years ago and slowly became popular across the other Asian, Middle Eastern and more recently in the European countries. In this process, the unwanted hair follicles are plucked in a twisting motion with a help of cotton thread. Generally, the motive is to get rid of the complete hair follicles.

It targets the removal of line of hair rather than removing single hair. Threading is more commonly used while shaping your eyebrows or while removing unwanted hair from your upper lip, cheek, neck and forehead.

#### Do you know?

The average person has about 250 hairs per eyebrow.

### CH: 04

### **Advantages of Threading**

- 1. **Fast process** Not all women has lot of time for beauty routine and threading is ideal for them. This is a fast process and it hardly takes 5 minutes to shape an eyebrow. Therefore, it is good for busy women.
- 2. Lasts long– Threading is long lasting and the hair takes more than a month to grow back (exceptions are there). Even the small hairs that often cannot be removed by waxing are sometimes removed with the help of threading.
- 3. **No redness or swelling** Threading is a better option for people with sensitive skin as it is comparatively gentler on skin. Threading targets the hair and barely touches your skin in comparison with waxing that often removes a layer of skin, which harms your skin more.
- 4. Very precise– Most people go with threading in case of eyebrows. This is because it is more precise and gives you the desired shape. The hairs on the above and below are mainly targeted with the middle hairs remaining full. This gives a fresh and clean look to your eyebrows.
- 5. Less pain– Well some people find threading less painful in comparison to waxing. However, it various from person to person and also depends on the skill of your professional or beautician. Nevertheless, little pain is worth it if you are getting a perfect clean removal of unwanted hair as a result.
- 6. Very inexpensive– Threading is inexpensive and can be afforded by maximum women.
- 7. No chemicals– Since the process of threading involves cotton threads, there is no use of chemicals. This does not lead to burning of your skin unlike waxing and hence is considered safe by majority of people.

# **Disadvantages of Threading**

- 1. Works only on flat surfaces– Threading is good only on flat surfaces where the professional can work with the strings. Whereas in case of uneven or curvy surfaces like knees or bikini lines, it creates a lot of difficulty.
- 2. Skin problems– If you have an over sensitive skin, even threading can cause problems. And, if you are prone to acne, it may instantly leads to rashes or breakouts.
- 3. **Painful** Well, this becomes a neutral point in both the pros and cons list. This is because not everyone is properly skilled, so if your professional is not an expert, it may cause you a lot of pain.
- 4. **Can easily go wrong** Threading is precise but if by chance one hair is wrongly plucked, it can ruin the full shape of your eyebrows. In other words, there is always a risk factor while threading (mainly your eyebrows).

# Information box

- Permanent hair removal techniques
- Electrolysis
- Photo epilation (intense pulsed light)
- Laser hair removal



# 4. Types of Threading can be done

(1)Eyebrows: The eyebrow is an area of fleshy, sensory hairs above the eye that follows the shape of the lower margin of the brow ridges of some mammals.

(2) Upper Lip: Threading is the best method for upper lip hair removal for sensitive skin. It is advisable to have it done at the salon and once you get the concept you can do it from the comfort of your home.

(3)Full Face Special: Full Face threading is continuing process like one month then show the beauty effect in your face.

(4)Neck: This type of threading specially uses to removes the neck hairs. it happens in rare case of body skin.

(5)Forehead: Forehead threading is most important because without forehead threading your face looks ugly. Thus forehead threading removes the unnecessary hair form the head part of the face and makes your face shine and glow completely.

5. Eyebrow



The perfect eyebrow is a game-changer. The eyebrow shapes matter when it's about overall appearance. It creates a difference in how we look. So it is important to always keep eyebrows in check. One can put effort in her makeup and everything, but unless she does not tame her eyebrows, it's going to be a mess.

One wrong hair plucked out can ruin it. That's why eyebrow shaping needs to be very precise. Highly recommended to never take a risk with eyebrow shape and always visit professional stylists for perfect eyebrows.

# **5.1 Steps for Mapping Eyebrow Shapes**

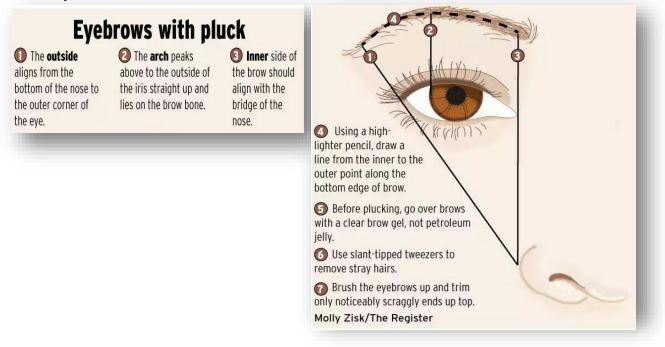
- Get a piece of a clean thread of dental floss. Then stain it with some gel liner or an eye pencil. We will use this string to map out the eyebrow shapes.
- Pinch the bridge of your nose and try to identify the center point of your face. Mark it by drawing a small point with an eye pencil.
- Then line the stained piece of thread or floss on the center point of the nose and extend the line from the forehead to the middle part of the nose.
- Mark the beginning of the brow by lining the thread with the outer edge of the nostril and extending up to the brow. Repeat this step for both eyebrows. This is an integral part of getting refined shape eyebrows` look.

#### CH: 04

- While keeping the eyes open, mark the length of the brows by placing the thread at the corner of the nose to the corner of the open eye and up to the eyebrow.
- With the eyes still open (and while you look exactly straight) it is time to mark the highest point of the arch for the perfect shape eyebrows` look. So it by placing the thread at the corner of the nose extending through the outer part of the iris up to the brows.
- Using the calipers or brow sticker, measure the arches to ensure they are even. Uneven arches are a total disaster to shape eyebrows.
- Now you will need to mark the lowest part. Place the thread horizontally underneath the brows to map the lowest part of the bulbs.
- Then place the thread above the brows horizontally to mark the highest part of the bulbs.
- Now place your thread on the lower line. Cross it through the center line, extend it to the arch and mark the upper edge of the brows.
- Place your thread on the upper line, crossing through the center line to meet the
- Lower line of the opposite eyebrow. Extend the line further to the arch and mark the upper edge of the brow.
- Place your thread on the upper line, crossing through the center line to meet the lower line of the opposite eyebrow. Extend the line further to the arch and mark the upper edge of the brow.
- Now place your thread at the end of the tail of your eyebrows and mark the lower edge of the tail.
- Place your thread on the arch point of one brow and place your thread across the forehead to check that the height of both the arches is similar.

# **Tips to Shape Eyebrows by Plucking**

Avoid over plucking eyebrows. A lot of people have got thin brows due to over plucking. So to avoid it, the rule of thumb is to mark the brow territory and don't pluck anything inside the boundary line.





Pluck in the right direction – always pluck the hair in the direction it is growing. Plucking the brow hair from the opposite side can not only be painful but can also make the hair break instead of getting pulled out. Consequently, you are left with the overall messy eyebrow shapes.

Keep the length of your brow tail in check – some people naturally have long eyebrows which makes their eyes appear droopy. So one non-surgical face and eyelift that you can give yourself any time is by checking the tail of your eyebrow, while shaping eyebrows, make sure that you trim the extra hair.

### **5.3 Eyebrow Measurements**



Your perfect eyebrow shape can be defined by drawing three main lines starting from the outer corner of your nose: a vertical line, a diagonal line over the pupil, and another diagonal line towards the outer corner of the eye. These lines will define the head of the brow, the arch, and the length of the tail respectively. The thickness of the brow depends on the thickness of the fullest part of it, the head. Many women prefer to have a fuller head and a progressively thinner tail. Your esthetician takes these measurements with a pencil to make sure that your eyebrows are on point

# **5.4Shaping the Eyebrow**

Once all the measurements are done, the esthetician will proceed to remove most stray hair with soft body waxes and muslin strips, or with pre-waxed strips. The reason why soft wax is more common is that it is more malleable, so it is better to follow the shape of the brow with precision. Both procedures are easy, and they cause minimal pain or discomfort. After that, any other hairs outside of the drafting of the brow can be tweezed out.

### **Eyebrow Shapes According to Face Type**

The first obvious step in finding your perfect eyebrow shape is making sure you know your face type. In case you don't know them, we have put together a list of the main face types and paired them up with the perfect eyebrow shapes like the pros do.



### a). Round Face: High Arches for Vertical Balance



This face type has equally wide forehead and cheeks, with a rounded jawline. To balance the round lines out, this type of face looks best when the eyebrows are shaped to have a steep arch since this visually elongates the shape of the face.

#### a. Square Face: Subtle Arch for Softer Features

This face type is about the same width and length, with an angular hairline and jawline. The angular lines of this type of face call for a soft arch and a medium thickness. Women with this type of face should avoid strong angular arches and very thin brows.

#### b. Long Face: Elongated Tail for Horizontal Balance

This type of face is twice as long as it is wide, and it needs to be balanced out horizontally. To achieve this, the tail of the brow should be elongated. You can choose to keep the arch very soft or make it a bit higher; just do not make it too high as you don't need it to accentuate the length of the face. It is also advisable to preserve the thickness of the brow instead of plucking too much since thin brows would leave more "empty space", and this type of face needs look little fuller. to а



### c. Heart-shaped Face: Soft, Rounded Arch for a Harmonious Shape

The focus of this face is on the width of the forehead and cheeks, which are considerably wider than the chin. If the brows on this type of face have a very pronounced arch or they are plucked too thin, all the attention will be drawn to the forehead, and this is not advisable. Instead, soft-arched and medium-thick brows will flow better with the heart shape of the face.



#### d. Diamond Face: Slightly Rounded and Arched for Soft Balance

In this type of face, the hairline is narrower than the jawline, which ends in a slightly pointy chin. Diamond faces are somewhat angular, so slightly rounded brows balance this out. Try not to lift the brow arch too high!

#### e. Oval Face: Simple for a Natural Look

Many believe that this is the ideal face shape. It has soft contours and looks somewhat like an upside-down egg. Different brow shapes suit this type of face. The best bet is to keep the shape close to the natural arch and give the whole brow a balanced thickness.

**Know the Direction:** Ever noticed how your beauty expert removes hair from other body parts using body wax? They check the direction your hair grows and while removing hair, go against the direction. The same method is followed in removing your pubic hair too. Stretch your skin tightly and grab end of the wax strip. Pull against the direction of hair growth.

In case you are using razor, shave in the direction of hair growth. This is because by shaving in the same direction; there will be less chances of skin nicking and abrasions.



2.

3.

d

quick

# EXERCISE

### Fill in the blanks

1. Threading is technique of removing unwanted hair which began in ...... almost 6000 years ago.



4. Facial waxing should not be performed on clients with which condition?

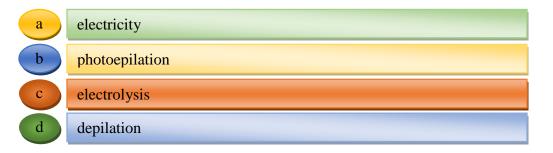




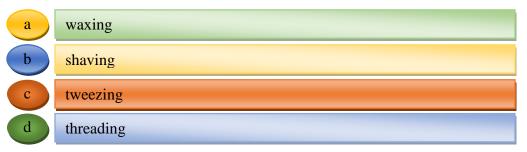
5. What are the three methods of permanent hair removal?



6. Hair removal by means of an electric current that destroys the growth of cells of the hair is \_\_\_\_\_.



7. What is the most common form of temporary hair removal, most often thought to cause hair to grow thicker or stronger?



### Write short answer of the following questions.

- a) Define threading and sugaring.
- b) Which hair removal techniques should not be performed in the salon without special training?
- c) What is the difference between a depilatory and epilator?

### Answer the following question in detail.

- a) What are two major types of hair removal? Give examples of each.
- b) List safety precautions that must be followed for soft and hard waxing.
- c) Activity

#### Activity / Practical

Make a presentation about the temporary and permanent hair removal techniques and present to your class

# Chapter 05

# **Introduction to Skin**

# **Students Learning Outcomes**

The Students will be able to:

- learn about skin
- classify the layers of the skin involved in salon services
- learn the function of layers of skin
- identify skin tests to recognize allergies and other skin issues
- learn different types of skin (oily, dry, normal, sensitive and combination)
- identify skin problems (blemishes, freckles, acne, pigmentation, black and white heads, milia, saggy etc.)
- learn about washing the face
- know about the hydration of skin
- apply cleansing, toning and moisturizing(CTM) skin as per SOP

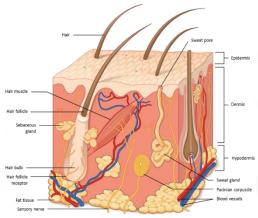
# **1.** Definition of Skin

The thin layer of tissue forming outer covering of the body of a person or animal is called skin. Its total thicknessis 2mm.99% of the body is covered with skin .skin has its 2 appendages Nails and hair.

The skin is one of the largest organs and constitutes 16% of the human body weight. It weighs around 5kgs and covers an area of about 2 square meters. It is one of the tissues in our body that rejuvenates the most and the fastest.Study of skin has undergone significant transformations. In early 17 century, Egyptian discovered first treatment on skin and have marked the skin as specialty in esthetics. Now In the 20<sup>th</sup> century, the scientific revolution transformed skin practice as aesthetic domain. Here description about skin structure, skin functions, types of skin, skin problems and its solutions are given.

The primary function of the skin is to protect the body. It provides protection from mechanical impacts, pressure, micro-organisms, radiation and chemicals. Skin also regulates several aspects of the body such as temperature via sweat and hair,

Changes in peripheral circulation and fluid balance,skin contains an extensive network of nerve cells that detect and relay changes in the environment. There are separate receptors for heat, cold, touch, and pain.





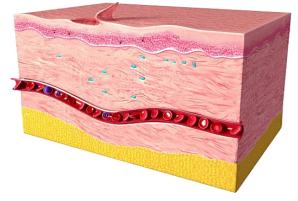
# 2. Layers of Skin

The skin is comprised of three main layers:

The epidermis: Its most superficial and thinnest layer of skin,measuring about 0.8mm in thickness.Its main job is to protect the body acting as a barrier and help control body temperature. It is made up of four types of cells: keratinocytes (which comprised the 90% of the epidermis), melanocytes, Langerhans cells and Merkel cells.

# 2.1 The Epidermis has Five Further Layers

- 1. Stratum basale
- 2. Stratum spinosum
- 3. Stratum granulosum
- 4. Stratum lucidum
- 5. Stratum corneum



# Layers of Skin Cross Section 1

- ✤ The dermis
- ✤ Is second layer which is most thick layer .it lies between epidermis and hypodermis?

#### **2.2 Dermis is Comprised of Two Layers**

- 1. Papillary dermis
- 2. Reticular dermis

The papillary dermis is the more superficial of the two, and lies just beneath the epidermal junction. It is relatively thin and is made up of loose connective tissue, which includes:

- Capillaries
- ✤ Elastic fibers
- ✤ Reticular fibers
- ✤ Collagen

The reticular dermis is the deeper and thicker layer of the dermis, which lies above the subcutaneous layer of the skin. It contains dense connective tissue, which includes:

- Blood vessels
- Elastic fibers (interlaced)
- Collagen fibers (in parallel layers)

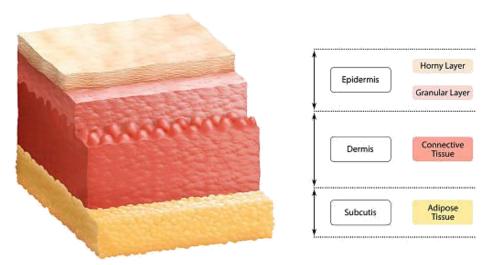




- Fibroblasts
- ✤ Mast cells
- ✤ Nerve endings
- Lymphatics

Additionally, there is a substance surrounding the components in the dermis. This has a gel-like consistency, because it contains mucopolysaccharides, chondroit in sulfates, and glycoproteins.

# **Equation 1**



# **2.3 Hypodermis**

The hypodermis is the subcutaneous tissue, which means "below the skin". It is mostly made of fat and connective tissue. It connects the skin to muscles and bones and it also saves body heat, stores energy, and absorbs shock to protect the body from injury.

# **3. Functions of the Layers of Skin**

The skin is divided into 3 different layers, the epidermis or top layer, dermis, and subcutaneous layer. Each of these layers performs important roles in keeping our body healthy. The skin performs six primary functions which include, protection, absorption, excretion, secretion, regulation and sensation.

### **3.1 Functions of Epidermis**

- Provides a protective barrier against mechanical, thermal and physical injury and hazardous substances.
- Prevents loss of moisture.
- Reduces harmful effects of UV radiation.
- Acts as a sensory organ (touch, detects temperature).
- Helps regulate temperature.
- An immune organ to detect infections etc.
- Functions of dermis
- Controlling body temperature: The skin does a fantastic job of controlling body temperature and keeping it stable. ...
- Storing blood: The skin acts as a reservoir to store blood. ...

CH: 05

- Protection: ...
- Sensation: ...
- ✤ Absorption and excretion: ...
- ✤ Vitamin D production: ...

# **3.2 Functions of Hypodermis**

- Storing fat (energy storage)
- Protection (think buttocks and sitting on a hard chair)
- Attaching the upper skin layers (dermis and epidermis) to underlying tissues such as your bones and cartilage, and supporting the structures within this layer such as nerves and blood vessels.

# 4. Analysis of Skin for Testing Skin Allergies

Skin testing and analysis is very important to identify skin sensitivity and its problems. It can be started with proper history of any known allergies leading to skin examination/ analysis which can be done with modalities described below.

# 4.1 Naked Eye Examination

Naked eye, also called bare eye, is the practice of engaging in visual perception unaided by a magnifying or light-collecting tool. By looking at client face, you can identify skin texture, skin complexion, and many gross skin problems like

- ✤ Acne
- Melasma
- Freckels
- Wrinkles
- Scaretc
- 4.2 Magnifying Lamp/Glass



It increases image of skin almost 8 times bigger to show the flaws in specific part of skin. It's like shining a flashlight on a dark wall. As you move the flashlight (magnifier) closer to the wall, you are reducing its distance (focal length). As you move the flashlight back from the wall, the distance (focal length) increases.

### 4.3 Skin Scanner/Dermoscopy

A skin scanner is a handheld device using visible light (such as from incandescent or LED bulbs), that can be used as part of the clinical examination of suspicious skin lesions,



#### Introduction to Skin

skinanalysis is better with it works by taking multiple images of the face (and layers of the skin). This incredible camera does not only capture the face in nearly microscopic detail, it also shows face problems that could never be seen with the naked human eye.

Skin scanner/ Dermoscopy have become an important tool to assist diagnosis by specialist clinicians and is also increasingly used in primary care settings.



### 4.4Woods Lamp

A Wood's lamp is a light that uses long wave ultraviolet light. When an area of skin which is infected can be viewed under a Wood's light, the fungus may glow, melasma appears dark blue. This test may be done to detect the presence of a fungal scalp,skin infection, depth of pigmentation....etc



### 4.5 Skin Patch Test

In this test we need to know the sensitivity of the specific area of skin for the procedure. So, allergens/products are applied to patches, which are then placed on your skin. During a patch test, your skin may be exposed to 20 to 30 extracts of substances that can cause skin irritation.



# **5. Skin Types**

Type of skin is determined by genetics, although it will also be affected by other factors and can change with time. Based on these characteristics, there are five types of healthy skin.

Normal Skin. This skin is neither too dry nor too oily. ...



- Sensitive Skin. Sensitive skin is more prone to react to stimuli to which normal skin has no reaction.
- Dry Skin. ...
- ✤ Oily Skin. ...
- ✤ Combination Skin. ...
- Scaly Skin. ...
- dry damaged skin
- dehydrated skin

Skin types can be visualized with naked eye examination and can be checked with skin analyzing tools.

### Human'sSkinCombination

- ♦ Oily / Clogged Pores / Severe Breakouts All-Over.
- Oily / Combination / Occasional Breakouts / Anti-Aging.
- Oily / Combination / Sensitive / Consistent Breakouts.
- Oily / Combination / Sensitive / Occasional Breakouts.
- Normal / Sensitive / Red / Anti-Aging.
- Normal / Anti-Aging.
- Dry / Tired / Aging.

# 6. Skin Problems.

Common skin problems are given below Common skin problems are given below

### **6.1 Oily Skin and its Problems**



Under each of your skin pores is a sebaceous gland that produces natural oils called sebum. This helps keep your skin hydrated and healthy. In some people, though, the sebaceous glands can produce too much oil. This creates oily skin

Although oily skin can clog pores and lead to increased acne breakouts, oily skin also has many benefits. Oil helps preserve the skin, and people with oily skin tend to have thicker skin and fewer wrinkles. The key is to strike a balance between having too much oil and maintaining your skin's natural moisture.



- ✤ Acne.
- Blackheads and whiteheads. Excess oil on your skin settle into the pores and gets oxidized which results in blackheads. ...
- Dull skin. Sometimes, it feels like you could actually live with your oily skin if it didn't come with dullness. ...
- ✤ Visible pores. ...

### **Super Shiny Zones**

To help control oily skin, following tips are recommended:

- 1. Do wash your face every morning, evening, and after exercise. While washing, resist the temptation to scrub your skin, even to remove makeup. Scrubbing irritates your skin, which can make it look worse.
- 2. Do choose cleansers, moisturizers, makeupproducts and skin care products that are labeled "oil free" and "non-comedogenic."
- 3. Do use a gentle, foaming face wash. Many people believe that they need to use a strong face wash for oily skin in order to dry out their skin. However, using a face wash that is too harsh can irritate your skin and trigger increased oil production. Instead, look for a mild, gentle face wash.
- 4. Don't use oil-based or alcohol-based cleansers. These can irritate your skin.
- 5. Do apply moisturizer daily. Although you have oily skin, it is still important to apply moisturizer to keep your skin hydrated. To save time and protect your skin from the sun's harmful ultraviolet rays, look for a moisturizer that also contains a broad-spectrum sunscreen.
- 6. Do wear sunscreen outdoors. Sunscreen helps prevent sun damage that could lead to wrinkles, age spots and even skin cancer. To prevent acne breakouts, look for sunscreens that contain zinc oxide and titanium dioxide, and do not use sunscreens that contain fragrance or oils.
- 7. Do choose oil-free, water-based makeup.
- 8. Don't sleep in your makeup. Always remove all makeup before going to sleep.
- 9. Do use blotting papers throughout the day. Gently press the paper against your face and leave it on for a few seconds to absorb the oil. Don't rub the paper on your face, as this will spread the oil to other areas.
- 10. Don't touch your face throughout the day. Although it's tempting to touch your face, doing so can spread dirt, oil and bacteria from your hands to your face. Only touch your face when you're cleansing, moisturizing or applying sunscreen or makeup, and make sure your hands are clean first.

### **6.2 Dry Skin and its Problems**

Dry skin isn't usually serious. In most cases it's caused by factors like hot or cold weather, low moisture in the air, and soaking in hot water. You can do a lot on your own to improve your skin,



including using moisturizers and avoiding harsh, drying soaps. But sometimes dry skin happens often or is severe.



#### 6.2.1 Dehydration

Excessively dry skin has lost a lot of moisture, so it's noticeably dehydrated. Signs of dehydrated skin include dryness, more noticeable fine lines, and itch.



#### **6.2.2 Flakes, Rough Texture**

When the skin loses enough moisture, it starts to flake off. This causes the rough texture.

#### 6.2.3 Cracks in the Skin

As the skin dries out, it shrinks. This shrinking causes cracks to form. Some cracks can become deep and may bleed.



#### 6.2.4 Itch

Some people who have excessively dry skin say their skin itches all (or most of) the time. The nearly constant itch can make it difficult to focus on everyday tasks, such as driving or getting your work done. The itch can make it difficult to fall asleep and can wake you from a sound sleep.





#### 6.2.5 Skin Feels Painful, May Sting or Burn

Dry, cracked or raw skin often feels painful. When something touches the already painful skin, such as water, some people say their skin burns. In a cold, dry climate, this can happen to hairdressers and others who often have wet hands while at work.

Wrinkled with a rough, loose texture

When skin loses a lot of moisture, it wrinkles and develops a rough texture. With age, it also becomes loose, as shown here.



#### **6.2.6 Skin Infections**

Excessively dry skin has breaks in its outer layer. This allows germs to get inside, which can lead to a skin infection. Signs of an infection are:

- ✤ Yellow crusts on the skin
- An area of skin leaks pus or other fluid
- Swelling and discoloration





#### 6.2.7 Peeling Skin

The outer layer of our skin continually renews itself. As it does so, the body sheds dead skin cells. You usually don't see this shedding. When the skin sheds more than the usual number of skin cells, such as when the skin becomes excessively dry, skin can peel off.



#### 6.2.8 Raw, Irritated, and Painful Skin

When skin becomes excessively dry, it can feel raw from the cracking and bleeding. This woman's hands have nicks and cuts that bleed. What causes people to develop excessively dry skin varies? Some people get it from immersing their hands in water frequently throughout the day. Hairstylists frequently develop excessively dry skin due to having frequently wet hands and using hair dyes and other beauty products. All of these can strip the much-needed oils from their hands.



## 6.3 Normal Skin

'Normal' is a term widely used to refer to well-balanced skin. The scientific term for wellbalanced skin is endemic. The T-zone (forehead, chin and nose) may be a bit oily, but overall sebum and moisture is balanced and the skin is neither too oily nor too dry.

## How to Identify Normal Skin

A velvety, soft and smooth texture is a sign for a healthy and radiant skin.

Normal skin has:

- Fine pores
- ✤ Good blood circulation
- ✤ A velvety, soft and smooth texture
- ✤ A fresh, rosy colour uniform transparency
- No blemishes and is not prone to sensitivity.



## 7. Skin Problems and their Solutions

## 7.1 Hyperpigmentation

Pigmentation refers to the coloring of the skin. Skin pigmentation disorders cause changes to the color of your skin. Melanin is made by cells in the skin and is the pigment responsible for your skin's color. Hyperpigmentation is a condition that causes your skin to darken.

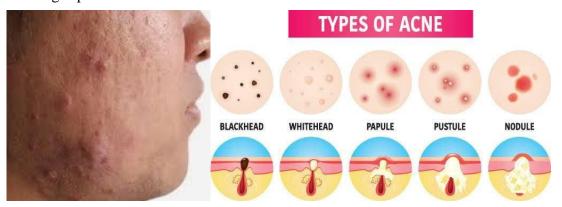
#### **7.1.1Types of Hyperpigmentation**

Here are several types of hyperpigmentation, the common ones being melasma, sunspots (liverspots), and post-inflammatory hyperpigmentation.

- Melasma is believed to be caused by hormonal changes and may develop during pregnancy. Areas of hyperpigmentation can appear on any area of the body, but they appear most commonly on the stomach and face.
- Sunspots. Also called liver spots or solar lentigines, sunspots are common. They're related to excess sun exposure over time. Generally, they appear as spots on areas exposed to the sun, like the hands and face.
- Post-inflammatory hyperpigmentation. This is a result of injury or inflammation to the skin. A common cause of this type is acne.

#### **7.2 Acne**

Acne is a common skin condition where the pores of your skin become blocked by hair, due to hyper activity of sebaceous glands, sebum (an oily substance), bacteria and dead skin cells. Those blockages produce acne.







## What are the different types of acne?

- 1. Blackheads: Open bumps on the skin that fill with excess oil and dead skin. They look as if dirt has deposited in the bump, actually it's because of the oxidation in clogged follicle.
- 2. Whiteheads: Bumps that remains closed by oil and dead skin.
- 3. Papules: Small red or pink bumps that become inflamed.
- 4. Pustules: Pimples containing pus. They look like whiteheads surrounded by red rings. They can cause scarring if picked or scratched.
- 5. Fungal acne: This type occurs when an excess of yeast develops in the hair follicles. They can become itchy and inflamed.
- 6. Nodules: Solid pimples that is deep in your skin. They are large and painful.
- 7. Cysts: large in size, soft in consistency, more in deeper layers of skin. These can cause scars and pits.

### 7.3 Freckles vs. Moles



Freckles are small brown spots on face and exposed parts of the bodyFreckles are caused by an increased production of melanin. They commonly develop in parts of your body frequently exposed to sunlight, like your hands and face. Even though nobody is born with freckles, your genetics play a large role in determining how prone you are to developing them.

Moles can be mistaken with freckles, but they're different. Also called "nevi," moles form when a bunch of skin cells clump together.

Molescan be finding anywhere on your body. Like on scalp, between toes, and under nails.

Almost everyone has at least a few moles. Even having dozens is normal. Lighter skin tone is prone to have more moles. They often appear in childhood.

### **Moles Look Like**

- Round
- ✤ Flat or slightly raised
- Tan, black, red, pink, blue, skin-toned, or colorless



## 7.4 Milia



Milia are tiny white bumps that appear across a baby's nose, chin or cheeks. Milia are common in newborns but can occur at any age. You can't prevent milia What is the best way to get rid of milia?

- 1. Clean the affected area daily. Use a mild soap to prevent skin irritation. ...
- 2. Steamopens the pores. This can be done by sitting in the bathroom and running a hot shower.
- 3. Exfoliate the area regularly. ...
- 4. Use sunscreen. ...
- 5. Using topical Retinoids.

### 7.5 Saggy Skin

Saggy/loose skin, on both the face and body, is often associated with the loss of fat. The deterioration or reduction of collagen and elastin in the dermis are another cause of saggy skin. While anyone can get saggy skin, it's more likely to occur in people as they age.





## 8. Washing of Face

Skin type does not matter, wash face at least once a day — in the evening to remove any dirt, makeup, oil, that's built up on skin throughout the day.

- 1. Use a gentle, non-abrasive face wash/cleanser that does not contain alcohol.
- 2. Wet your face with lukewarm water and use your fingertips to apply face wash.
- 3. Avoid rubbing on skin because it can irritate the skin.
- 4. Rinse with lukewarm water and pat dry with a soft towel.

## 9. Hydration/Miniaturization of Skin

Hydration" is the absorption of moisture from the air and then infusing your cells with water to improve skin's ability to absorb moisture and nutrients. "Moisturizing" is about trapping and locking in the moisture to build your skin's natural protective barrier.

Moisturiser is a cosmetic preparation, as a cream or lotion, used to restore moisture to the skin, especially of the face and neck.

Ingredient	Moisturizer (Occlusive) or Hydrator (Humectant)
Hyaluronic Acid	Hydrator
Glycerin	Hydrator
Aloe	Hydrator
Honey	Hydrator
Nut or seed oil, such as coconut, almond, hemp	Moisturizer
shea butter	Moisturizer
Plant Oils, such as Squalene, Jojoba, Rose Hip, Tea Tree	Moisturizer
Mineral Oil	Moisturizer
Lactic Acid	Hydrator
Citric Acid	Hydrator



#### Introduction to Skin

## **10. Cleansing of Face**

Cleansing means cleaning of skin surface n pore from dust, dirt, extra oil, germs and viruses with the help creams, lotions n gels.



## **10.1 Method of Cleansing**

Soft circular massage of cleanser on wet face with help of pulp of your fingers in circular movements from down to upward n in to outward the face for 2,3 minutes

## **10.2 Benefits of Cleansing**

- ✤ It makes skin neat n radiant
- ✤ It makes skin fresh n glowy
- It promotes blood circulation so even the tone of skin
- ✤ It drains toxins through lymphatics.

## **11.Moisturizing**

Is a process done with the help of cream or lotion, used to restore moisture to the skin, especially of the face and neck?



## 12. Toning of Skin

- Is an important step after cleansing?
- Because if you don't use toner on skin,pore will remain loose n there are more chances to trap impurities inside pores to make pores clogged.
- Toners are watery in consistency but having ability to tighten skin pores.



# EXERCISE

## Tick ( $\checkmark$ )the correct option

1. Sweat or perspiration is secreted by what gland?

a	adrenal
b	endocrine
c	sebaceous
d	sudoriferous

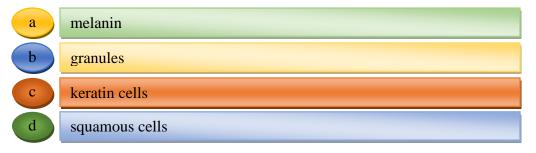
2. What part of the skin is often referred to as "true skin"



3. Where the blood vessels are found that supply the skin?

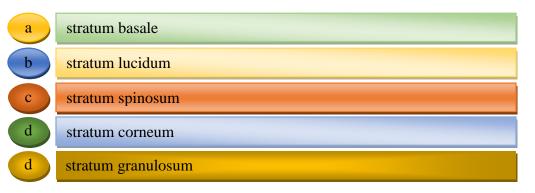


4. The stratum corneum is composed of?





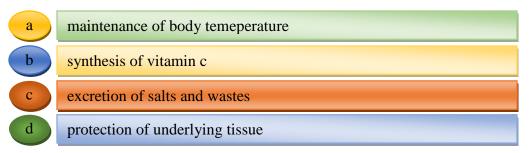
5. The layer of the epidermis that contains melanocytes is the



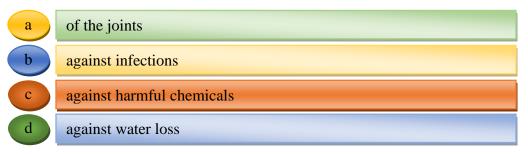
6. The layer of the skin that provides protection against bacteria as well as chemical and mechanical injuries is the



7. Functions of the integumentary system include all of the following except

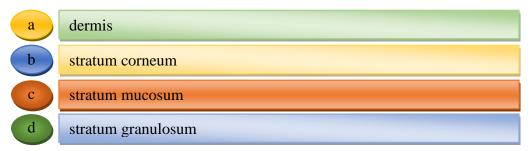


8. Protective functions of the skin include all of the following except protection





9. Which layer is the top, or uppermost, layer of the epidermis?



### Write short answer of the following question

- 1. Name layers of the skin?
- 2. How can skin problems be diagnosed?
- 3. What causes acne?
- 4. Enlist seven functions of the skin?
- 5. Write names of tools for skin analysis?
- 6. What is the process of cleansing?
- 7. Define acne

### Answer the following question in detail

- 1. Describe cleansing, moisturizing and toning (CTM)?
- 2. Write down skin problems and describe types of acne?
- 3. Explain problems related to dry Skin?
- 4. Describe skin tips to balance /control oily skin?
- 5. Write down different modalities of skin analysis?

## Activity/Practical Activity 1

Perform a role model on client consultation about skin treatment

Client consultations are not only a legal requirement before treatment, but also an opportunity to discover what your client wants, along with possible contraindications, and achieve the perfect end result. Even regular clients need a consultation as hair, nails and skin condition can change over time.

In this activity Teacher is required to make a group of students to facilitate group discussion and practice client consultation among each other with appropriate language and terminologies. Perform practical step wise on each other and on dummy client as well.

### **Key Points**

- ✤ Always seek permission to start discussion
- Make comfortable sitting environment for consultation
- Open and closed questions to get answers to help tailor the treatment to the client's needs.
   Listening. Paying attention to the clients answers to find out what they want from the treatment.

#### CH: 05

- Review the intake form.
- Perform a needs assessment.
- Determine and rate the client's preferences.
- ✤ Analyze the client's skin.
- Review the client's lifestyle.
- Show and tell.
- Make recommendations as part of the needs assessment.

### Activity 2

- Recognize different types of the skin (dry, oily, sensitive, combination and ageing) of your class fellows.
- Categorize issues of the skin (blemishes, freckles, acne, pigmentation, black and white heads, Melia).

The main goals of practical tasks are to engage students in the subject and help them get a better grasp of the topics studied during science lessons. In fact, practical group work can support learning in a variety of ways.Performing good esthetician needs lots of practice and specially dealing with human skin is very sensitive and needs lots of experty, in this regard teacher has to engage and make the students to practice by dividing the students into groups.

#### **Key Points**

- ✤ Always seek permission to start discussion
- Make comfortable sitting environment for consultation
- Open and closed questions to get answers to help tailor the treatment to the client's needs.
   Listening. Paying attention to the clients answers to find out what they want from the treatment.
- Try to identify all skin types by looking at other group member's skin as every human different.
- Identify shapes and sizes and location of the skin problems on face .like different types of acne ,different types of pigmentation
- Most importantly try recognizing differences between all kinds of acne and pigmentation
- Review the intake form.
- Perform a needs assessment.
- Determine and rate the client preferences..
- Review the client's lifestyle.
- Show and tell.
- Make recommendations as part of the needs assessment.

## Activity 3

Perform cleansing toning and moisturizing (CTM)

CTM (Cleansing, toning, moisturizing) is an essential part of our facial skincare routine. The cleanser removes all dust, dirt, pollution particles and other impurities from the skin avoiding acne and breakouts. Toner gently revitalizes skin and help to maintain pH balance ensuring the preservation of natural moisture.

# **Chapter 06**

# **Skin Care**

#### The students will be able to:

- know concept of skin care
- learn importance of skin care
- know about products of skin care
- learn about tools and equipment for skin care
- understand trolley setting for skin care
- know about personal hygiene for skin care
- know about client and environment preparation for skin care
- learn basic principles of:
  - daily skin care(cleansing, serum, eye cream, sunscreen, moisturizer etc. as per skin type)
  - weekly skin care(deep cleansing, steam, mask and massage)
  - monthly skin care(facial)

## **Concept of Skin Care**

Skincare is the act of tending to the largest organ of the body — your skin. Some view skincare with a medical lens, while others look to it for purely cosmetic reasons. Every person's skin reacts to the environment and ingredients differently, which means there will never be a one-size-fits-all method to skincare. Skincare can embody the full range of approaches, from a daily regimen consisting of topical creams and serums to more procedural treatments like micro needling and filler injections. The world of skincare is constantly advancing as we discover new strategies and ingredients for fighting acne, aging, sun exposure, and other threats to the integrity of one's skin.



Wearing a best sunscreen protects skin from antiaging effects.

## 1. Importance of Skin Care

The following are some of the importance of quality skin care:

Quality ingredients: Similar to the benefits that healthy food provides for your body, quality skin-care ingredients can improve your skin.



Protection from environmental damage: Skin care protects from external pollution which causes damage to skin.

Anti-aging effects: It helps fighting the effects of aging, such as wrinkles and sunspots.

Results for the money: Even if quality products cost more in some cases, they're worth the money. If you use ineffective products, you're wasting money.

Exceeding standards: Quality skin care products are more refined, with fewer bacteria and impurities

## 2. Products of Skin Care

The following products can create a good, effective skin care routine:

Cleanser: A substance that cleanses something, especially a cosmetic product for cleansing the skin is called cleanser.

Toner: Toner is used after washing your face, and it helps smooth and calm skin while restoring nutrients.

Moisturizer: Moisturizers should be used every time you wash your face, even if you have oily skin. If you have this type of skin, choose an oil-free or gel product.

Sunscreen: Even if your moisturizer has a sunscreen, it can still help to use a separate sunscreen every day, even if it's cloudy. Choose one that provides broad-spectrum protection and has an SPF of at least 30.

Exfoliator: Exfoliators are optional and can be used after a cleanser but before a moisturizer. They should only be used a maximum of once or twice a week.

Serum: A serum can help address specific issues, such as redness.



## **3.** Personal Hygiene for Skin Care

Personal hygiene is very essential to lead a healthy life. Most of the infections and diseases can be prevented by personal hygiene. It should be developed since early years of life. Personal hygiene is a healthy way of living. Personal hygiene make a person comfort and confident. Personal hygiene include mouth care, skin care, hair care, nail care, eye care, care of ears, care of nose and other parts. Following are some basic rules of personal hygiene for skin care.

Never touch your face unless your hands are clean. Bacteria on your hands "feed" pimples.



- Don't pick pimples! Pimples don't scar, picking does.
- Always wash your face before bedtime no matter how sleepy you are. It is best to wash and apply medications or night creams one hour before bed to allow products to fully absorb.
- Change your pillowcase often.
- Be consistent with your routine. Remember: it's what we do or don't do every day that has the biggest impact on our skin over time.
- Avoid strong toners. They remove the essential, necessary oils in your skin causing an "over-production" of oil to make up for the difference.
- Purchase non-comedogenic make-up.
- Wear the least amount of make-up you can. All make-up can cause pimples.
- Never share cosmetic products.
- Clean make-up brushes and replace sponges regularly.



## 4. Daily Skin Care Routine

After assessing your skin, it's time to build your skin care routine. There are some things that should never change, and that includes certain daily essential skin care routine steps. These are mainstays for a good reason.

### Wash your Face

Clean skin lends to healthy skin. So, reach for a facial cleanser as part of your morning skin care routine and before you go to sleep to help wash away any excess dirt and oil that may have built up on the surface of your skin throughout the day (or while you slept).

If you have mature skin, consider using a creamy facial cleanser. This facial cleanser helps replenish oils and gently removes traces of makeup.



## **Apply Serum**

Serums are concentrated formulas that target specific skin concerns. You can use one in the morning and one at night, or apply the same formula twice a day depending on the formula. In order to ensure that your serum works its best, apply it after cleansing and before your moisturizer.

#### Moisturize

Using moisturizer two times a day is vital—even if you have oily skin. Be sure to choose a moisturizer that's appropriate for your skin type. If you have oily skin, consider opting for a water based moisturizer. Normal/Oily Skin which is lightweight yet still hydrating. If you have dry skin, try moisturizer with collagen to deeply hydrate and plump your skin.

#### Pat on an Eye Cream

The eye area is not only delicate, but it can also be the area where signs of aging like crow's feet and dark circles first appear. To ensure your eye area is best taken care of, use a hydrating eye cream eye treatment, which not only moisturizes, but also helps to reduce the appearance of dark circles and under-eye bags with continued use over time.

### **Apply Broad-Spectrum Sunscreen in the Morning**

You've probably heard this before, but it's worth repeating: Sun protection isn't just a good skin care routine step, it's a must. In the morning, apply a broad-spectrum sunscreen with an SPF of 30 or more—after moisturizer but before applying makeup.

### **Remove your Makeup/Cleanse at Night**

When you sleep in a full face of makeup, it can mix with the dirt and oil on your skin, leading to clogged pores (and clogged pores can lead to breakouts and blackheads). Start by removing your makeup with the Complete Cleanser Waterproof - All Skin Types. Micellar water is powered by tiny micelle molecules that cluster together to surround and lift away impurities from the skin's surface. The particular micellar water removes all makeup—including waterproof—and leaves skin with a hydrated feel. Once you've removed your makeup, ensure your skin is as clean as possible by cleansing with your face wash.

### **Use a Night Cream**

Night time is when you can use skin care products without having to worry about what they look like on your skin or how they sit under makeup. We recommend using a night cream before bed because night creams are typically ultra-moisturizing and a bit thicker than daytime moisturizers. Try Anti-Aging Overnight Mask which is a rich night cream formulated with hyaluronic acid, Pro-Retinol and vitamin C to deeply nourish and brighten the skin while reducing the appearance of wrinkles.

#### Activity

Perform trolley/tray setting for daily skin care routine with the direction of teacher.

## **5. Weekly Skin Care Routine**

Maintaining a morning and night-time skin care routine is important, but there is one skin care staple that you don't need to use daily—a few times a week will suffice.

## Exfoliate

Exfoliating face masks are great not just for their ability to make the skin look amazing, but also for the self-care that they represent. For best results, use your face mask twice a week. To get your skin care routine order right, post-mask, you'll also want to moisturize.



## 6. Monthly Skin Care Routine

Some skin care routine steps are needed to be done once in month.

#### **Inspect Expiration Dates**

Never get into the habit of using up all your beauty essentials without being mindful of their expiration. Check for their due dates and discard the ones that are already expired. Special precaution should also be given on skin care products that you scoop out using your fingers as these are prone to contamination and may cause skin breakouts.

#### Examine your Skin

A monthly skin care routine isn't all fun and games. It's important to ensure that your skin is healthy. Once a month, check your skin for any moles or spots that have changed. If you do notice any changes, play it safe, and schedule an appointment with your dermatologist.

#### **Beauty Treatments**

Consider visiting an esthetician once a month for more intensive skin treatments like facials, microdermabrasion, microneedling and more. They're often quite effective for targeting dark

spots, fine lines, texture and enlarged pores. These treatments can be invasive and costly, so incorporating them into your maintenance routine monthly or bi-monthly is ideal.

#### Achieve the Appearance of Bronzed Skin

Rocking a bronzed glow can be considered a bonus to some, but if it's part of your regular routine, add a self-tanner to the mix for a safe application.

### Perform a basic pre-facial procedure:

- Analyze skin
- Set trolley
- Discuss skin issue with class
- Give some tips for skin care





## EXERCISE

## **Encircle the correct option.**

1. Skin is ..... organ of the body

a	smallest
b	largest
c	round
d	oval

2. Serums are ..... formulas that target specific skin concerns.



3. Moisturizer is the best defense against .... Skin.

a	oily
b	dry
c	thin
d	none

#### Write Short Answers of the following.

- 1. Define skin care.
- 2. Why exfoliation is not needed on daily basis?
- 3. Define weekly skin care.
- 4. What are some basic personal hygiene rules for skin care?
- 5. What is difference between normal face wash and cleanser?

## **Explain Following Long Question.**

- 1. Discuss the daily skin care routine.
- 2. Explain the difference between daily and monthly skin care.



## **Practical Activities**

- 1. Group discussion on importance of skin care Perform trolley setting for skin care
- 2. 3.
  - Practice skin care routine
    - ✤ Daily skin care
    - ✤ Weekly
    - ✤ Monthly

# Chapter 07

# **Introduction to Massage**

Massage is a general term for pressing, rubbing and manipulating your skin, muscles, tendons and ligaments. It is commonly applied with hands, fingers, elbows, knees, forearms, feet, or a device. It is one of the oldest healing arts for human body and mind relaxation. Chinese records dating back 3,000 years document its use. Please add massage standard definition.

Massage therapy is the scientific manipulation of the soft tissues of the body for the purpose of n ormalizing those tissues and consists of manual techniques that include applying fixed or movable pressure, holding, and/or causing movement of or to the body.



## 1. Types of Massage

#### Do you know?

More than 80 different types of massage treatments with emphasis on different body parts and type of treatment are available.

There are many different types of massage, including these common types:

- Swedish massage. This is a gentle form of massage that uses long strokes, kneading, deep circular movements, vibration and tapping. It helps you feel relaxed and energized.
- Deep massage. This massage technique uses slower, more-forceful strokes to target the deeper layers of muscle and connective tissue. It's commonly used to help with muscle damage from injuries. It is generally covered by physiotherapist.
- Sports massage. This is similar to Swedish massage, but it's geared toward people involved in sport activities to help prevent or treat injuries. It is generally covered by physiotherapist.



Trigger point massage. This massage focuses on areas of tight muscle fibers that can form in your muscles after injuries or overuse. It includes technical pressure point which is applicable to relax the body and mind. This is commonly covered by estheticians.

## **1.1 Aromatherapy Massage**

Aromatherapy massage is a variant of Swedish massage in which the therapist uses essential oils along with the usual massage oil. Essential oils are extracts made from plants that are believed to have healing properties. Many of them also smell good.

Different essential oils provide different benefits. For example, rose and lavender oils both promote relaxation. Other oils can relieve headaches, digestive problems, back pain, insomnia, and premenstrual symptoms. Some oils can provide emotional benefits like reducing stress, improving mood, or increasing energy. The therapist will choose the oils based on your needs and wishes.

## **1.2 Hot Stone Massage**



Hot stone massage, as the name suggests, involves the use of hot stones, most commonly basalt, a volcanic rock that can hold heat for a comparatively long time. The therapist will place the heated stones on specific parts of the body. They will also massage you with the stones by pressing them against your muscles. The heat from the stones relaxes tight muscles and enables the therapist to reach deeper tissues more easily.

Some practitioners believe that the stones symbolize natural forces for they have been shaped and smoothed by the river. They believe that the smoother the stone is, the more healing power it contains. Other therapists will follow acupressure traditions and thus place the stones along the body's meridians. As per Chinese tradition, meridians are pathways or channels through which vital energy flows. Some therapists will also use especially carved stone tools called body rocks to help focus the pressure the therapist puts on the client's body.

## **1.3 Thai Massage**



Thai massage is a blend of massage, passive stretching, and assisted yoga. It is believed to be over 2500 years old and incorporates elements of the Ayurvedic healing traditions from India.



The therapist will have you lie down, often on a mat on the floor. They will then stretch your body in a series of positions. They will use their fingers and palms to press down on your body. Thai massage helps to improve the balance of the body's energies.

## **Benefits of Massage**

**Do you know?** A 60-minute massage has the same effect with 7 to 8 hours of good sleep, in which your body gets instantlyrelaxed and the stress level is reduced.

Massage is generally considered part of integrative medicine. It's increasingly being offered along with standard treatment for a wide range of medical conditions and situations. Now with the increasing trends and benefits of massage, this is considered an integral part of esthetic industry.

## **Massage Benefits can Include**

- Reduce stress, pain and muscle soreness
- Improving circulation, energy and alertness
- Lowering heart rate and blood pressure
- Improving immune function
- Physical and mental relaxation
- Improve blood circulation, which nourishes cells and improves waste elimination
- Relief for stiff muscles (knots), other aches and pains
- Release of nerve compression (carpel tunnel, sciatica)
- Greater flexibility and range of motion
- Enhanced energy and vitality
- Some clinical styles may help heal scar tissue as well as tendon, ligament, and muscle tears
- Reduce hormonal issues
- Improve mobility of joints

## Apart from it, Research Some Studies have found Massage may also be Helpful for

- Anxiety
- Digestive disorders
- Fibromyalgia
- Headaches
- Insomnia related to stress
- ✤ Lower back pain
- Myofascial pain syndrome
- ✤ Nerve pain
- Soft tissue strains or injuries
- Sports injuries
- ✤ Joint pain
- Upper back and neck pain

Today, the benefits of massage are varied and far-reaching. As an accepted part of many physical rehabilitation programs, massage therapy has also proven beneficial for many chronic conditions,



including low back pain, arthritis, bursitis, fatigue, high blood pressure, diabetes, immunity suppression, infertility, smoking cessation, depression, and more.

## 2. Principals for Massage Precaution for Massage

Massage is comparatively safe; however, it should not be used if the client has one of the following conditions.

- ✤ Advanced heart disease
- Hypertension (high blood pressure)
- Phlebitis
- Thrombosis
- Embolism
- ✤ Kidney failure

If the client has cancer, massage is not advisable if the cancer is the kind that can spread to other organs (metastatic cancer) or if it involves tissue damage due to chemotherapy or other treatment. Massage may also not be advisable if the client has any of the following conditions.

#### **Infectious Disease**

- Contagious skin conditions
- ✤ Acute inflammation
- Infected injuries
- ✤ Unhealed fracture
- Dislocations
- Frostbite
- ✤ Large hernias
- Torn ligaments
- Any condition prone to hemorrhage
- Psychosis

Any other psychological state that may impair communication or perceptioncold.

#### Measure Taken before and after Massage

Going for a massage requires little in the way of preparation. Generally, one should be clean and should not eat just before a massage. Massage therapists generally work by appointment and usually provide information about how to prepare for an appointment. To receive the most benefit from a massage, parents should give the therapist accurate health information about the child and report discomfort of any kind (whether it is from the massage itself or due to the room temperature or any other distractions). The child can be encouraged to be as receptive to the process as possible.

There are no special recommendations for after a massage. A period of quiet activity or rest following the massage helps maintain full benefits from the procedure.

#### **Principles of Massage**

A proper body massage is consisted of the strokes, shaking, vibrations, kneading, tapping, squeezing, which are provided on required areas of the body to release stress and heal the



problems. Each stroke of massage has its own purpose in the body to serve. A proper body massage should be provided maintaining all the requirements of it, including time, strokes, intricacies and sequence etc. Hence, massage should always be done by a professional massage therapist.

Intricacies of Massage

To provide a proper massage one should maintain the intricacies of it. One should look at the formation and function of the musculature and follow the natural contours and flows of the body to provide the most effective massage. Working counter to the natural formation of the body creates imbalances and diseases. To understand the intricacies of massage, one need to study the three prime regions of the body- the region from the base of the spine to the head, the region from the pelvis to the toes and the region from the collar-bones to the fingertips. The massage should be given regions wise. The regions are detailed below:

Base of the Spine to the Head: The shape of the muscles in the first region is round and the energy flows in this region from top to button and vice versa. In the formation of the limbs in the embryo, this part develops first. The head develops first, and then the rest of the fertilized ovum undergoing mitosis and meiosis becomes the rest of the torso, up to the base of the spine. Thus, these parts are actually accumulated as a unit and so should be massaged as a unit.

From Pelvis to the Toes: In the second region, energy moves down from the pelvis to the feet. The circulation is downward as this part keeps in contact with the earth and it is the lower region of the body. This part of the body is designed for the function of pushing.

From Collar-Bones to the Fingertips: In the third region, the upper arms, elbows, forearms, wrists, palms and fingers form a coordinated unit to draw energy into the body. This is the pulling section. In both the second and third regions the formation of the musculature is linear, and the energy flows from the torso downwards and outwards.

#### **Sequence of Massage**

For a perfect and proper body massage, it should always begin from the front portion of the upper and then the back side of it should be massaged. After this, lower legs should be massaged followed by the foot massage maintaining the same front and back principle. Then hips and sides should be worked upon along with the lower back moving upwards then to cover the upper back portion. Then the front portion of the body would be having the massage followed by arms. Finally, massage of the head should be started; head should always be massaged at the end.

## **3. Equipment Used for Massage**

Whether you're starting a professional massage business or getting started with massage at home, you'll want to have the right equipment and supplies. Oils, a massage table, and bolsters can ensure your massage experience is both comfortable and effective. Before you set out to grab some supplies, check out this list of top items you'll want to have.



## 1. Massage Table

A massage table is essential for any massage therapist. Always choose lightweight wooden tables with an adjustable face cradle, arm rests, and width extensions so you can accommodate different clients.

Allow for a generous working weight, and make sure your table is stable, durable, and height adjustable. Tables with high density memory foam are ideal, because the foam tends to be more durable and long-lasting.

## 2. Massage Table Cover

Spare massage table covers keep your massage table surface clean and refreshed as you move from one client site to another. If you're working in your own massage therapy clinic, you'll still want to have spare covers to switch them out between client consultations. Look for a comfortable, durable, and breathable fabric, such as a cotton-polyester mix.

To ensure a good fit, check that your cover has an elastic trim to allow it to snap into position. Other features include solid Velcro straps to prevent slipping. Massage table covers often come in separate pieces, such as a main one for the table, and two other separate pieces for the face cradle and arm rests.

### 3. Massage Oil

As a massage therapist, you're probably selective about the oil you use. Look for massage oil that acts as an effective moisturisers and emollients, which will hydrate the client's skin as you massage. High-quality massage oils are longer lasting, non-greasy, and non-stain. For people with sensitive skin, you'll want to choose a non-allergenic product to avoid irritation. Ideally, you'll find oil to which you can add your own essential-oil blend.



### 4. Massage Bolster

A high-quality, durable massages bolster lets you improve access and give support to clients when they need it. A good bolster will be your best friend when you need to, for example, align a client's vertebrae or relieve stress on their back.

Bolsters come in different shapes and sizes, but one of the best and most versatile shapes to have is a half-round shape with a flat base. You can place this directly on the table and give your



client stable support in most-needed places. Look for a bolster with a waterproof cover so you can easily clean them. Other features to look for are high-quality foam filling and handles for easy grasp.

### 6. Bolster Cover

Having a few extra bolster covers on hand can let you quickly change them between clients if necessary. Bolster covers are also great for protecting your bolsters. Choose a comfortable texture such as terry toweling, ideally made from cotton and polyester. Look for a cover with a zip for easy change-outs.

## 7. Massage Table Bag

A massage table bag allows you to carry your massage table to client sites without hassle. Look for a bag especially designed for your particular massage table. You'll want a bag made from lightweight materials and with large handles so you can sling it over your shoulder.

## 8. Massage Therapist Pack

An easy way to make sure you have everything you need is to buy a massage therapist pack. Your pack might include everything from a massage table and bolsters to massage table bag and massage oil. Extra bolster covers and table covers will come in handy for your clinic.

### **10. Mega Towel**

A large towel is essential for client comfort after your massage, so stock up with a few towels for clients. Look for comfortable textures like terry toweling. Cotton towels are durable and absorb moisture effectively.

## **5. Preparation Client for Massage**

A massage is a very relaxing experience. In an era where pampering the self is becoming a known priority in today's hectic world, a massage therapist can be the superhero of the day for stressed out individuals ranging from stay-at-home moms to high-powered business executives. When starting the massage process, there are a few tips that will help to make the experience even more fulfilling and enjoyable. Read on to learn how to prepare a client for a massage. Introduce yourself. Touching another person is very personal and can be intrusive to some people even though they pay for a service that involves touching. Introductions remove the "stranger" component of the experience.

Explain what type of massage you will be providing. This clarification either confirms the client of the service they requested or gives the client the opportunity to let you know what they really want.

Explain the length of time that the massage will take. Explain how much time you will be spending on certain areas. This gives your client the opportunity to request more time being spent on one area over another

Confirm that your client does not have any medical conditions that may be irritated by a massage. If such a condition exists, you may request a doctor's permission or have the client sign a waiver removing you from any possible liability of irritation to the condition. It is a "best business practice" to address this issue at the time the massage appointment is scheduled but is a good idea to follow up just before the massage itself.



Remind client before and after massage that your client will need to drink plenty of water after massage in order to replenish hydration.

Ask your client if he or she prefers music or silence during the massage. One purpose of the massage is to relax your client and if music is a distracting agent for your client then your ultimate goal of providing quality service will not be met.

Massages can be conducted with or without clothing. If you offer massages to your clients that where clothing is removed due to the use of oils or lotions, give your clients the opportunity to decide what articles of clothing are most comfortable to remove. If a client is not comfortable removing undergarments, then the undergarments can remain on and you will do the service the best that you can while working around the garments. The client will benefit more if he or she is a comfortable state.

## **6.** Techniques for Massage

## 6.1 Effleurage Method

Naturally, this technique applies very gentle stroking motions. Hands are laid flat, side by side, and glide softly over the body.

This technique often bookends the beginning and the end of a massage, or is used to as a bridge when combining two different techniques.

## **6.2 Applied Pressure**

This is used to relax the body and to alleviate tension built up in pressure points.

 Pressure is applied using various parts of the hand, including the palm, thumbs, and space between the index finger and thumb. Some massage methods not only incorporate hands, but also elbows and feet.

## 6.3 Rubbing

- Rubbing massages are used to treat muscles, joints and to stimulate blood and lymphatic circulation.
- This type of deep tissue massage undoes knots and relieves muscle pain. The method applies pressure with the thumbs in circular motions while targeting specific areas.

## 6.4 Kneading

- Kneading is another deep tissue technique used to relax the muscles and stimulate circulation. It reduces tension, aches and pain. It is usually very pleasant and deeply relaxing. It often focuses on the trapeziums muscles located between the neck and shoulders.
- The therapist's two hands move in opposite directions using the thumbs, fingers and heel of the hand. A higher degree of pressure is applied directly on the muscles to make them move under the skin, which releases tension.

## 6.5 Tapping Massage

- This method involves tapping the body, often the back, buttocks and thighs, alternating between the two hands while using swift motions. The level of pressure depends on your needs.
- Tapping can be done with cupped hands (only the tip of the fingers and the heel of the hand are in contact with the skin) or by resting the hands side by side. This technique is often used in sports therapy and is excellent for stimulating blood circulation.

## 6.6 Vibrating Method (Shaking)

- Among the six most common techniques of massage therapy used, this one stimulates and energizes the nervous and circulatory systems through vibration, as follows:
- The practitioner may lay their hands flat on the body, and without rubbing, gently but quickly shake the muscles. The therapist may also use their fingertips to push the muscles, swinging them from left to right.
- Other vibration techniques hold the arm (or leg), and gently but rapidly wobble the extremities from side to side.



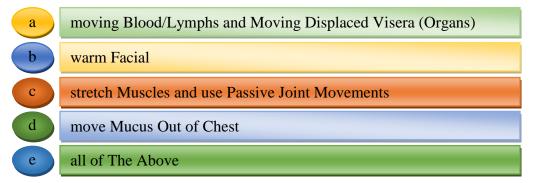


# Exercise

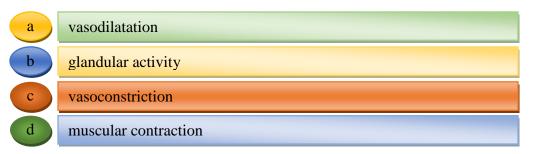
1. What is Effleurage?

a	hard Friction, Without Lube
b	light Friction, Without Lube
c	light Friction, With Lube
d	starts Massage

2. What are the Mechanical Effects of Massage?



3. Kneading, percussion, vibration and friction causes



4. Friction, reflexive stroking, spitting and vibration causes

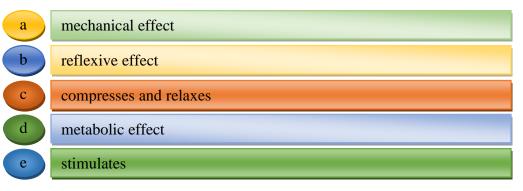




5. Kneading Pumping of Blood is a \_\_\_\_\_\_ effect?



6. The vacuum pump in kneading causes? Choose 2.



7. Kneading and strong percussion causes



8. Which of the following techniques is a stroking or smoothing movement that signals the beginning and end of a massage?

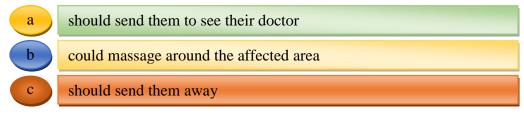


9. What temperature is best for a massage room?

a	18° to 20°C (64° to 68°F)
b	30° to 34°C (86° to 93°F)
c	Tap22° to 24°C (72° to 75°F)



10. During a consultation a client tells you that they have a localized contra-indication (for example a bruise). You ...



## Write short answer of the following questions.

- 1. How many different types of Massage treatments are there?
- 2. On which areas the trigger points focuses on?
- 3. What are some benefits of essential oil?
- 4. What are benefits of massage?
- 5. In which condition massage should not be done?
- 6. How does a mega towel can help in perfect massage?
- 7. How do you prepare a client for massage?
- 8. What is effleurage method of massage?
- 9. What does vibrating method of massage do?
- 10. What are the measures to be taken before and after massage?

## Answer the following question in detail.

- 1. Describe different types of massage.
- 2. What are the benefits of massage?
- 3. What are the precautions of massage and also define how to measure it before and after result?
- 4. What is the equipment used in massage?
- 5. What is common technique used in massage therapy?
- 6. What are the things needed for body massage?

# **ABOUT AUTHOR**

Dr. Shumaila Waqas is a Doctor (Dermatologist) by profession. She did MBBS from University of Health & Sciences Lahore, followed by MCPS Dermatology from (CPSP) Gangaram Hospital Lahore. She is B.Sc from Punjab University. She has done her Aesthetic Graduation from UK. She served in Mayo Hospital, Ghurki Trust Teaching Hospital, Jinnah Hospital, Surgimed Hospital, District Headquarter Hospital and many private renowned setups. She is working as Consultant Dermatologist at ACME Medical Center Lahore. She is the Chief Executive Officer of Acme Esthetic Clinic.

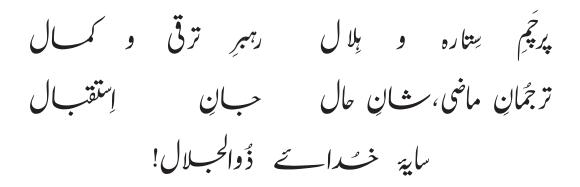
Apart from all qualification, she is serving as internal and external verifier in university of health sciences for past 6 years. She has 10 years teaching experience in medical colleges. She served as senior lecturer in anatomy in Lahore Medical and Dental College, Lahore. She is working as assistant professor of anatomy in PSRD College of rehabilitation sciences from 2015

She is working with well reputable NAVTTC, Giz, and TEVTA for past 8years in developing different curriculums and TLMs. She is the Author of 1-year Skin Care Beauty Therapy Diploma by TEVTA. Last but not the least working as Instructor and Educator in ACME Institute of Beauty Therapy for past 7 years.

فومي ترانه

پاک سَرز مین ثاد باد! مَتُورِ همین ثاد باد! تو نِتانِ عسزمِ عالی شان ارض پاکستان مسرکزِ یقین شاد باد!

پاک سرزمین کا نِظام فَوَتِ اختُوتِ عوام قوم، ملك، سلطنت باتنده تابنده باد! ثاد باد مستزل مسراد!





National Vocational & Technical Training Commission (NAVTTC) Plot No.38, Sector H-9/4, Kirthar Road, Islamabad. Tel: +92-51-9207518 Website: www.navttc.gov.pk