



Study of **CLINICAL COSMETOLOGY-1** *A Hands-on Guide*



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Foreword
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Contents

1. Introduction to Cosmetology	1
❑ Terminologies in Cosmetology	1
2. Skin and Skin Analysis	3
❑ Skin	3
❑ Structure of Skin	3
❑ Functions of Skin	8
❑ Skin Analysis	9
3. Chemical Peels	13
❑ Definition	13
❑ Principles of Chemical Peels	13
❑ Chemical Agents Used for Peeling	13
❑ Types of Peels	13
❑ Different AHAs with their Sources	14
❑ Priming	14
❑ Peel Sensitivity Test	15
❑ Post-peeling Care	16
❑ Other Peels	16
❑ Different Methods of Peel Application	18
❑ Herbal Peels	18
❑ Fruit Peels	19
4. Microdermabrasion	20
❑ Types	20
❑ Definition	20
❑ Crystal Microdermabrasion	20
❑ Diamond Microdermabrasion	22
❑ Frequently Asked Questions	23
❑ Complications	24
5. Iontophoresis	25
❑ Definition	25
❑ Skin Type	25
❑ Procedure	25
❑ Benefits	26
❑ Contraindications	26
❑ Precautions for Iontophoresis	27
❑ Desincrustation	27
6. Electroporation and Ultrasound	29
❑ Introduction to Electroporation	29
❑ Introduction to Ultrasound	30
❑ Benefits of Electroporation and Ultrasound	30

<ul style="list-style-type: none"> ❑ Indications of Electroporation and Ultrasound 31 ❑ Contraindications of Ultrasound 31 ❑ Contraindications of Electroporation 32 ❑ Procedure 32 	
7. High Frequency	33
<ul style="list-style-type: none"> ❑ Action 33 ❑ Benefits 33 ❑ Indications 33 ❑ The Machine 34 ❑ Indications 35 ❑ Benefits 35 ❑ Procedure 35 ❑ Precautions 36 ❑ Contraindications 36 	
8. Serums	37
<ul style="list-style-type: none"> ❑ Lifting Serum 37 ❑ Regenerating Serum 37 ❑ Hydrating Serum 37 ❑ SulforaWhite 38 ❑ NanoWhite 38 ❑ Eye Depuffing Serum 39 ❑ Hyaluronic Acid 39 ❑ Vitamin C 39 ❑ Coenzyme Q10 39 ❑ Stem Cells 39 ❑ Minoxidil 39 ❑ Finasteride 40 ❑ Biotin 40 ❑ Venofresh 40 ❑ Glutathione 40 ❑ Indications of Serums 40 	
9. Modified Blend	41
<ul style="list-style-type: none"> ❑ Electrolysis and Thermolysis 41 ❑ Blend 42 	
10. SuperPulse Facelift	44
<ul style="list-style-type: none"> ❑ Signs of Aging 44 ❑ The “Nonsurgical Facelift” 44 	
11. Radiocautery	49
<ul style="list-style-type: none"> ❑ Warts 49 ❑ Moles 49 ❑ Specifications 51 ❑ Radiofrequency Surgery Offers 51 ❑ Cut and Coagulation Blend 52 	
12. Stretch Marks	54
<ul style="list-style-type: none"> ❑ Causes of Stretch Marks 54 ❑ Common Sites of Stretch Marks 54 	

- ❑ Symptoms 54
- ❑ Treatment 54
- ❑ Prevention 55

13. Dark Circles **56**

- ❑ Periorbital Melanosis 56
- ❑ Diagnostic Test for Dark Circles 56
- ❑ Modalities of Treatment 56
- ❑ Consultation 57
- ❑ Peels (Steps) 57

14. Sunscreens **59**

- ❑ Active Sunscreen Ingredients 59
- ❑ UVB Protectants 60
- ❑ UVA Protectants 60
- ❑ Use and Effectiveness: Suggested SPF 61

15. Nonsurgical Earlobe Repair **64**

- ❑ Procedure 64

Tender Skin Cosmetology Academy **65**

- ❑ Our Student Endorsements 65
- ❑ Student Testimonials 67

Index *73*

Introduction to Cosmetology

INTRODUCTION

Cosmetology is the science of beautifying the skin and its appendages, which play an important role in sociosexual communication.

Therapeutic cosmetology involves passage of active ingredients across the skin, thereby altering the physiology of the area.

The common cosmetic problems which come to a consultant are acne (pimples), diffuse hair loss, excessive growth of hair, scars, premature aging of skin, excessive dryness of skin, premature greying of hair, pregnancy-induced pigmentation on face, etc.

Scientific knowledge of cosmetology enables dermatologist to give rational treatments and aesthetically acceptable results, thereby preventing patient's indulgence in unscientific methods.

TERMINOLOGIES IN COSMETOLOGY

Matter: It is anything that occupies space. It exists in 3 forms: Solid, liquid and gas.

Atom: It is the smallest particle of an element. It can take place in a chemical reaction.

pH:

- pH is a measure of hydrogen ion concentration in dilute aqueous solutions. It is the measure of the acidity or alkalinity of a solution
- pH level of water is 7.0 at 25°C and defined as 'neutral'
- Solutions with pH less than 7 are acidic. Lower the pH, greater the degree of acidity
- Solutions with pH greater than 7 are basic or alkaline. Higher the pH, greater the alkalinity
- pH of normal skin is 4.5 to 6 (slightly acidic) due to the secretion of sebum and sweat which act as a protective film against bacterial infection.

Solution: It is a mixture made by dissolving solutes in the solvent.

A solution typically consists of the dissolved material called the solute and the dissolving agent called the solvent. A common example is sugar (the solute) dissolved in water (the solvent).

Dilute solution: It is a solution with small amount of solute in proportion to the quantity of solvent.

Concentrated solution: It is a solution which contains large quantity of solute in proportion to the quantity of solvent.

Saturated solution: A saturated solution is a solution containing the maximum concentration of a solute at the given temperature. Additional solute will not dissolve in a saturated solution at that given temperature.

Suspension: It is a temporary mixture of insoluble powder in liquid. For example, sand in water, calamine lotion, etc.

They are typically clear products with visible particles like gelatin beads or inorganic minerals (e.g. titanium dioxide) suspended throughout. They are used for sunscreens, hand washes, shampoos, etc.

Emulsions: It is a permanent mixture of 2 or more unmixable liquids united and stabilized by an emulsifier. They are used for products like hand moisturizers, make-up, hair conditioners, sunscreens, etc. To create them, you need three formula components including an oil phase, aqueous phase and an emulsifier. The formulas are made by heating up the oil and water phases separately, mixing them together (along with the emulsifier) when they are hot, and cooling them down with thorough mixing the following:

- **Oil in water (o/w):** Emulsion made of oil droplets dispersed in watery base. Due to higher water content, it is often an easy flowing liquid or milk.
- **Water in oil (w/o):** Emulsion is made up of water droplets scattered within the oily base. For example, cold cream, cleansing creams, etc.

Humectants: It is a natural content present in products that has the ability to attract and retain water to itself. These substances are called *hygroscopic*, which means that they are able to absorb ambient water. For example, glycerine present in lotions, hand creams, humectant in food products is sorbitol. This humectant is a sugar alcohol-derived from sugar.

A humectant like mineral oil, however, can actually build up under the skin and prevent the skin from absorbing essential vitamins and nutrients. It gives a velvety feel to the skin. Humectants are derived from cherries, plums, pears, apples and seaweed.

Soybean oil: A vitamin-rich emollient that absorbs well into the skin. It has a nourishing, softening and moisturizing effect on skin. Propylene glycol is generally used as a humectant.

Collagen: Collagens have great tensile strength, and provide these body structures with the ability to withstand forces that stretch them.

Acids: Acids have pH less than 7. They are sour to taste. Acid neutralizes bases producing salt and water. For example, HCl.

Bases alkalis: Bases have pH more than 7. They are bitter to taste. Bases turns red litmus to blue. Acid neutralizes bases producing salt and water. For example, NaOH.

Study of **CLINICAL COSMETOLOGY-1** *A Hands-on Guide*

Cosmetology is the science of beautifying the skin and its appendages, which play an important role in sociosexual communication today. This book mainly covers therapeutic cosmetology that involves altering the physiology of the skin for better physical appearance of an individual.

Scientific knowledge of cosmetology enables the doctors and allied beauty consultants to give rational treatments and aesthetically acceptable results, thereby preventing client's indulgence in unscientific methods.

This book is an up-to-date hands-on guide based on practical application of cosmetic procedures in this industry. It provides a professional guided approach on how to structure the standard operating procedures of the daily cosmetology treatments performed at every salon and beauty clinics across the country today. It is to facilitate a better and simpler understanding of the anatomy and physiology of the skin and its appendages. This book can be used as an introduction to understand the science of beauty in its simplest terms by anyone who has the remotest inquisitiveness about pursuing cosmetology.

A thorough read of this book will also aid in making an informed decision if or not cosmetology is your career calling.

Dr Sonia Tekchandani MBBS DMLS DDV is an insightful, results-driven medical professional with more than 25 years of clinical experience, and holds a commanding position in the field of medical aesthetics today.

She is a renowned Dermatologist and Cofounder of Tender Skin Clinics and Cosmetology Academy in India and UAE, and also a Skin Speak Panel Expert—an e-portal by Hindustan Unilever Limited (HUL) for one-on-one interaction with consumers on daily skin care.



She is a certified Laser Consultant by CEEP/CNEP (France, Europe) and Dubai Health Authority (UAE) and a member of many prestigious organizations across the world like the American Academy of Aesthetic Medicine (AAAM), The British Academy of Beauty Therapy and Cosmetology, and World Society of Interdisciplinary Anti-aging Medicine, France.

She is internationally trained in the field of beauty and wellness and a staunch supporter of 'Women Empowerment'. She believes in training women from all walks of life in the field of clinical cosmetology and empowers them to start their own enterprise.

An established trainer and teaching enthusiast, Dr Sonia has over 25 years of teaching experience and has trained over 500 students, both doctors and beauticians in the field of cosmetology and medical aesthetics across the world. Her zest for education led her to start the Tender Skin International (TSI) Cosmetology Academy that imparts comprehensive professional and vocational training in cosmetology, laser treatments, trichology, weight management, and clinical nutrition.

Tender Skin International Academy has been instrumental in filling a need—the gap in the market for trained professionals in the ever-growing beauty care industry, and has also empowered many students to kick-start their career in this field. Taking Dr Sonia's vision for education in beauty a step forward, TSI has now launched an online platform for beauty and wellness courses to transform the learning for vocational studies in tier 2 and tier 3 cities.

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