

# BEAUTY THERAPY ADVANCE

Level-3

**ORANE**   
INTERNATIONAL

# ORANE<sup>®</sup>

INTERNATIONAL

Edition : Third

2019

Author :

**Monica Sood**

Master of Arts (Political Science)  
National Certificate for Beauty & Wellness Trainers - B&WSSC  
National Examiner ABTC - CIDESCO Section  
Post Graduate Diploma in Beauty Therapy - CIDESCO  
Diploma in Reflexology (Level-3) - CIBTAC  
Award in Thermal Auricular (Level-2) - CIBTAC  
Award in Indian Head Massage Services (Level-3) - CIBTAC  
Certificate in Fashion and Photographic Makeup (Level-3) - CIBTAC  
Diploma in Beauty, Body & Hair Designing  
Professional Makeup  
Permanent Nail Extension, Nail Art & Gel Nail

email: [info@orane.co](mailto:info@orane.co)

Visit us at: [www.oranebeautyinstitute.com](http://www.oranebeautyinstitute.com)

## Preface

Change is the only constant.  
-Heraclitus

**A**nd ever-changing are the concepts and techniques in the profession of Beauty and Wellness. Orane maintains the highest bar of standards of quality education in the national and international market, hence mandating us to constantly upgrade our curriculum. This book is to provide authoritative and useful information aimed at a beauty practitioner. In this edition of coursework of Beauty Therapy Advance, we have strategically simplified the language and broken down the techniques of execution of latest styles in easiest of means. This book would increase the reader's understanding of many aspects beyond one's particular area of focus and specialization. Because the book is intended to be useful in a practical sense, the material clearly informs us the practical methodology and various practices to be incorporated for every procedure.

# Contents



Beauty Therapy  
Advance

## Part 1

### COSMETIC SCIENCE

- 1.1 Introduction
- 1.2 Definitions
- 1.3 Common Ingredients used in Cosmetics
- 1.4 Self Assessment Questions

## Part 2

### ELECTRICITY

- 2.1 Introduction
- 2.2 Electric Current
- 2.3 Electrical Units
- 2.4 Electrical Devices
- 2.5 Safety Precautions
- 2.6 First Aid
- 2.7 Self Assessment Questions

## Part 3

### FACIAL GALVANIC

- 3.1 Introduction
- 3.2 Dis-incrustation
  - a. Indicated for Use
  - b. Contra-indications
  - c. Precautions
  - d. Dangers
  - e. Working of the Machine
  - f. Sterilization
  - g. Benefits
- 3.3 Ionisation
  - a. Indicated for Use
  - b. Contra-indications
  - c. Precautions
  - d. Dangers
  - e. Working of the Machine
  - f. Sterilization
  - g. Benefits
- 3.4 Procedure:
  - A. Deep Cleansing Treatment with Disincrustation
  - B. Anti Pigmentation Treatment with Ionisation
- 3.5 Self Assessment Questions

## Part 4

### HIGH FREQUENCY

- 4.1 Introduction
- 4.2 Direct High Frequency
  - a. Indicated for Use
  - b. Contra-indications
  - c. Precautions
  - d. Dangers
  - e. Sterilization
  - f. Benefits
- 4.3 Anti Acne Treatment for Oily Skin with Direct High Frequency
- 4.4 Indirect High Frequency
  - a. Indicated for Use
  - b. Contra-indications
  - c. Precautions
  - d. Dangers
  - e. Sterilization
  - f. Benefits
- 4.5 Hydrating / Rejuvenation Treatment for dry skin with Indirect High Frequency.
- 4.6 Self Assessment Questions

## Part 5

### VACUUM SUCTION

- 5.1 Introduction
  - a. Indicated for Use
  - b. Contra-indications
  - c. Precautions
  - d. Dangers
  - e. Sterilization
  - f. Working of the Machine
  - g. Procedure
  - h. Benefits
- 5.2 Lymph Nodes of the Face and Neck
- 5.3 Strokes for Detoxifying Treatment
- 5.4 Self Assessment Questions



## **Part 6**

### **FACIAL FARADIC**

- 6.1 Introduction
  - a. Indicated for Use
  - b. Contra-indications
  - c. Precautions
  - d. Danger
  - e. Sterilization
  - f. Working of the Machine
  - g. Benefits
- 6.2 What is a Motor Point?
- 6.3 Facial Muscles
- 6.4 Strokes for Facial Faradic
- 6.5 Bio Lifting or Facial Skin Tightening with Faradic Machine
- 6.6 Self Assessment Questions

## **Part 7**

### **ULTRASOUND**

- 7.1 Introduction
  - a. Indicated for Use
  - b. Contra-indications
  - c. Precautions
  - d. Danger
  - e. Sterilization
  - f. Benefits
- 7.2 Anti Pigmentation Treatment with Ultrasonic
- 7.3 Self Assessment Questions

## **Part 8**

### **INFRA RED LAMP TREATMENT**

- 8.1 Introduction
- 8.2 Infra Red Lamp Treatment
  - a. Indicated for Use
  - b. Contra-indications
  - c. Procedure
  - d. Dangers
  - e. Benefits
- 8.3 Self-Assessment Questions

## **Part 9**

### **CHEMICAL PEELS**

- 9.1 Introduction
- 9.2 Classification of Chemical Peels
  - a. Indicated for Use
  - b. Contra - Indications
  - c. Before the Peel Precautions
  - d. Requirements
  - e. After the Peel Care
- 9.3 Glycolic Acid Peels
  - a. Indicated for use
  - b. Action
  - c. Procedure
  - d. Sample Treatment Plan
- 9.4 TCA Chemical Peels
  - a. Indicated for use
  - b. Action
  - c. Procedure
  - d. Sample Treatment Plan
- 9.5 Self Assessment Questions

## **Part 10**

### **COMMON TERMS OF DERMATOLOGY**

- 10.1 Terms
- 10.2 Self Assessment Questions

## **Part 11**

### **ADVANCE FACIAL ANALYSIS SHEET**

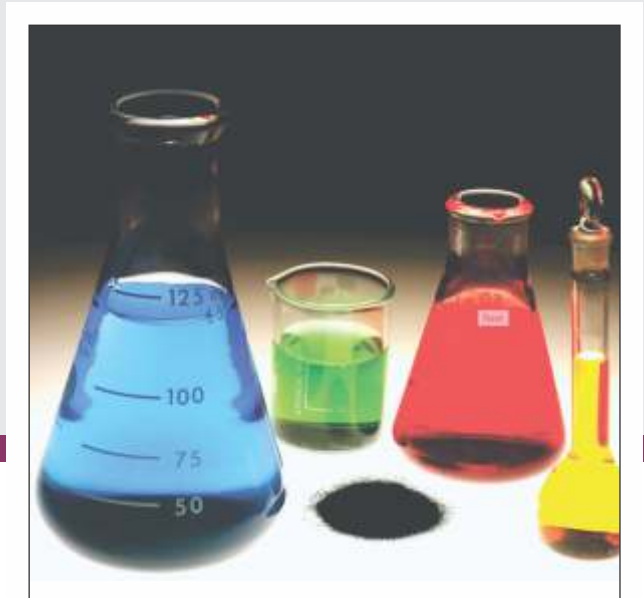
- 11.1 Introduction
- 11.2 Procedure
- 11.3 Consent Form
- 11.4 Advance Facial Analysis Sheet
- 11.5 Chemical Peel Analysis Sheet

### **ANSWER KEYS**

# Part 1

## COSMETIC SCIENCE

- 1.1 Introduction
- 1.2 Definitions
- 1.3 Some common Ingredients used in Cosmetics
- 1.4 Self Assessment Questions



1

### 1.1 INTRODUCTION

Cosmetics in a variety of forms date back to early civilizations, with the need to improve one's personal appearance being an important factor in attracting a mate. Over the years, the ingredients have changed dramatically as we discovered how to manufacture our own scents and cosmetic formulas. The realization of the dangers of many common ingredients also greatly affected the growing industry.

When it comes to beauty products, the effects of the ingredients they contain can be more than just skin deep. The cosmetics industry uses thousands of synthetic chemicals in its products, in everything from lipstick and lotion to shampoo and shaving cream.

Cosmetic ingredients come from a variety of sources but, unlike the ingredients of food, are often

not considered by most consumers. Cosmetics often use vibrant colors that are derived from some unexpected sources, ranging from crushed insects to rust. Many new techniques have allowed manufacturers to synthesize such colors; the use of animal products has been reduced, due in part to the efforts of NGO's for Beauty without cruelty.

### 1.2 DEFINITIONS

**a. Chemistry** – The science which deals with the composition, structure and property of matter and how matter changes under different chemical conditions.

**b. Matter** – Matter is anything that occupies space. It exists in a physical form, that is in solid, gas and liquid.

**c. Atom** – Smallest particle of an element that

can take place in a chemical reaction.

**d. Water** – H<sub>2</sub>O make up 75% of the earth's surface and about 65% of the human body. Impurities can be removed from water by:

1. **Filtration** – passing water through a porous substance, such as filter paper or charcoal.
2. **Distillation** – water is heated in a closed vessel arranged so as the resulting water vapour passes off through a tube and is cooled and condensed to a liquid. This process purifies water used in the manufacture of cosmetics.

#### Soft Water/Hard Water

Rain water is the softest water. Hard water contains mineral substances, such as the salts of calcium and magnesium, with curdle of precipitate soap. Hard water may be softened by distillation, or by use of phosphate. To soften water effectively in salons, special equipment, such as zeolite tanks are used.

**e. Solution** – A solution is a mixture made by dissolving a solute in solvent. Eg. of a solution-salt in water.

1. **Dilute** – solution contains a small amount of solute in proportion to the quantity of solvent
2. **Saturated Solution**–It will not dissolve or take up anymore of the solute that is already held at a given temperature.

**f. Suspension** – Temporary mixture of insoluble powder in liquid e.g. Calamine lotion.

**g. Emulsions** – Permanent mixture of two or more immiscible substance (i.e. oil and water) which are united and stabilized by an emulsifier. There are two types of emulsions used in cosmetic preparations.

1. **oil in water (o/w)** – The emulsion is made up of less oil in more water base. Because of the water content (o/w) emulsion is often a milk and easy flowing liquid. Once applied the oil forms a film on the skin surface, acting as an extreme lubricant to smoothen and help protect the skin. The water molecules restore the natural moisture content of the skin.
2. **water in Oil (w/o)** – The emulsion is made up of less water in more oily base e.g. cold cream or cleansing cream.

**h. Humectant** – A Natural moisturizing factor that has the ability to attract water to itself. Humectants are found in moisturizing lotion and night cream. When applied onto the skin, it draws moisture to the surface of the skin and help soften and moisturize. Examples are :

1. **Glycerin** – A warm sweet tasting oily fluid. It absorbs moisture from the air therefore helps keep moisture in cream and other products. Also help to spread the product better products that contain glycerin smoothing the rough creams also. The products that mainly contains glycerin are hand cream and lotions.
2. **Sorbitol** – A humectant that give a velvet feel to the skin. It consists of water,



powder flakes or granules with a sweet taste. Medically used to reduce body water.

**3. Propylene glycol** – A clean, colourless viscous solution slightly bitter taste.

**1. Emollient** – It correct dryness and restores flexibility to the skin. It is used in cosmetics to retain the moisture of the skin. An emollient is a substance that softens the skin by increasing its water content and maintains the softness by retarding moisture loss. Emollience may be achieved by.

1. Prevention of moisture lose
2. Supplementing the skin's water content by means of humectant
3. Involves uses of oils and waxes. Probably the best emollients are lanolin & preen land oil (from the duck).

**j. Oil, Fat and Waxes used in cosmetic include**

**1. Lanolin** – A product of the oil glands of sheep. Also known as wool fat or wool mixture. It has water absorbing base and a natural emulsifier. It improves emollient effects of creams and helps prevent excessive dryness of the skin. It is the one that causes allergies eg. Lipstick, Mascara, foundation and eye-shadow.

**2. Collagen** – Protein substance found in connective tissue. Usually derived from animal tissue, used for nourishing the skin eg. Night cream for dry matured skin.

**3. Protein** - The chief nitrogen constituent of all plants and animal. It is colourless, odourless and generally tasteless and vary in solubility. It also acts as a lubricant.

### 1.3 SOME COMMON INGREDIENTS USED IN COSMETICS

**ACETONE** – Clear, colorless, volatile, inflammable liquid. Miscible with water, alcohol and essential oils. Used as a solvent.

**ALCOHOL** – Clear, colorless, volatile, inflammable liquid, Commonly used as ethyl or isopropyl alcohol. Miscible with water, acetone, glycerin and all organic solvent. Used in toners. Has degreasing and disinfectant properties.

**ALGAE** – Derived from seaweed. Has high vitamin and mineral contents and has water retaining properties.



**Algae**

**ALMOND OIL** – Pale yellow oil with bland nutty taste. It is nutritive and soothing. Is used as an emollient in creams, lotions, masks etc.



**Almond Oil**

**ALOE VERA** – Juice obtained from the leaves of the aloe Vera cactus. Used for its healing properties.

**ALPHAHYDROXY ACIDS** – Includes lactic, glycolic, malic, citric and (AHA) pyruvic acids. Used in moisturizers for its humectant properties.

**ALUM** – (potassium aluminum sulphate) is a colorless, odourless and transparent granular powder with a sweetish, astringent taste. Is used as an astringent.



**Alum**

**ANTIOXIDANTS** – Are the agents that neutralizes the oxidant effect of free radicals, which are the molecules that damage collagen causing skin dryness, finelines and wrinkles.

**ASCORBIC ACIDS** – A solid crystalline substance also known as Vitamin-C. Used as a preservative and an antioxidant and may be used in

bleaches.

**BHA (butyl hydroxyanisol)** – Crystalline powder or waxy solid , soluble in fatty oils. Has anti-oxidant properties. Used as a preservative in cosmetics to prevent rancidity of fats and oils.

**CARNAUBA WAX** – Derived from carnauba palm in Brazil, used to give solidity to lipsticks, deodorant sticks and to increase melting points of many cosmetics.



**Carnauba Wax**

**CETYL ALCOHOL** – A fatty alcohol, white flakes or granules and is non irritating. Highly emollient, has lubricating qualities, used in body and hand lotions and creams.

**COCO BUTTER** – From coca bean. Unstable fat, has a protective action. Used in soap, face creams and lip balm.



**Coco Butter**



**COLLAGEN** – Is an extract of the collagen fibers of the skin of the calves. Used in the anti ageing skin products.

**DHA-dihydroxyacetone** – Is a simple sugar which is applied to the skin as a lotion or cream, causes slow development of a brown coloration similar to a suntan. Found in fake suntan products.

**ELASTIN** – Is an extract of the elastin fibers of the skin of the calves. Used in the anti-ageing skin products.

**GLYCOLIC ACID** – Is an alphahydroxy acid derived from sugar cane. It is used in larger concentrations as medical peeling and treatment for warts and sun damage.

**HYALURONIC ACIDS** – Is a water binder which works differently from other humectants. It is a large molecule which cannot be absorbed by the skin, but can hold 400 times its own weight in water and is thus a powerful hydrating agent.

**HYDROQUINONE** – Agent that blocks conversion of tyrosine to melanin in the process of melanin pigment formation. Blocks pigment formation. Used in skin whiteners.

**NETTLE EXTRACT** – Rich in mineral and



**Nettle Extract**

plant hormones. Used in hair products, as stimulant to hair growth and conditioning.

**POTASSIUM HYDROXIDE** – Is a strong alkaline and corrosive substance which rapidly destroys organic tissue. It is used to treat warts. 2.5% solution in glycerine may be used as a cuticle solvent.



**Potassium Hydroxide**

**PROPYLENE GLYCOL** – Is a synthetic liquid substance that absorbs water. Is a type of alcohol made up of fermented yeast, carbohydrates and is commonly used in a wide variety of products.

**RETINOIC ACID** – Derived from vit. A has a specific effect against acne and is believed to have an effect in reversing the effect of photo ageing.

**RICE STARCH** – From rice plant, used in powders.



**Rice Starch**

1

**SILICA GRANULES** – Naturally occurring mineral that is purified and processed into either granular or beaded form. Used due to its moisture absorbing properties.

**STEARIC ACID** – Is used as a lubricant. It forms a creamy basis. Is a saturated fatty acid and is a waxy solid substance.

**SWEET ALMONDS** – There are 2 types of plants one which produces white flowers, that grows sweet almonds and other which grows pink flowers produces bitter almonds. The extracted oil is an essential carrier oil.



**Sweet Almonds**

**TALC** – Purified magnesium silicate. Very fine white powder, adheres readily to the skin. Reduces irritation.



**Talc**

**THIOGLYCOLLIC ACID** – Unpleasant odour. It is used in chemical depilatories and perming lotions. highly alkaline, can be irritant to the skin.

**THEOGLYCOLLIC ACID** – Purified magne

**TITANIUM DIOXIDE** – Physical UV blocker, recommended for broad spectrum UV protection.

**VITAMIN A** – Has a molecular structure that is tiny enough to get into the lower layers of the skin, where it finds elastin and collagen. It helps to improve fine lines, wrinkles, skin texture, skin tones, color and hydration level.

**VITAMIN E** – Is an antioxidant that protects and repairs the skin.

**VITAMIN F** – Is made of two fatty acids—omega 3 and omega 6. Used to repair and improve skin texture.

### 1.4 Self Assessment Questions

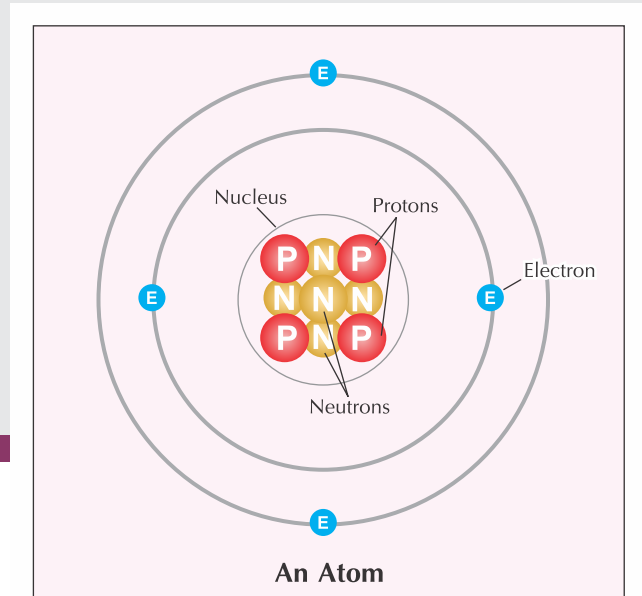
1. Dihydroxyacetone (DHA) is found in :-
  - a. Anti-sunburn products
  - b. Self-tanning products
  - c. Nail polish remover
  - d. Nail polish
2. Algae are used in cosmetic because they:-
  - a. Have a water retaining properties
  - b. Increase the pigmentation of the skin
  - c. Reduce inflammation
  - d. Have an antiseptic effect on the skin
3. Which one of the following ingredients is obtained from a succulent cactus-like plant?
  - a. Algae
  - b. Aloe vera
  - c. Alum
  - d. Almond Oil
4. Collagen is used in cosmetics because it:-
  - a. Replaces collagen lost in ageing skin
  - b. Helps the skin retain moisture
  - c. Is absorbed into the skin
  - d. Eliminates wrinkles
5. Chemical used in depilatories & perming lotion:
  - a. Titanium Dioxide
  - b. Propylene glycol
  - c. Thioglycollic acid
  - d. benzyl peroxide



# Part 2

## ELECTRICITY

- 2.1 Introduction
- 2.2 Electric Current
- 2.3 Electrical Units
- 2.4 Electrical Devices
- 2.5 Safety Precautions
- 2.6 First Aid
- 2.7 Self-Assessment Questions



### 2.1 INTRODUCTION

**Electricity:** Is a form of energy which cannot be seen. This is found everywhere. It comes in two forms: Static & Dynamic.

**Law of Electricity :** Like poles repel and unlike poles attract each other.

**An atom is composed of:**

- a. **protons** – positively charged (+).
- b. **neutrons** – are neutral.
- c. **electrons** – negatively charged(-).

For an atom to take part in an electrical current, the atom must have either positive (+) or negative (-) charge. Charging an atom consist of taking away or adding electrons. These charged atoms are known as 'Ions'.

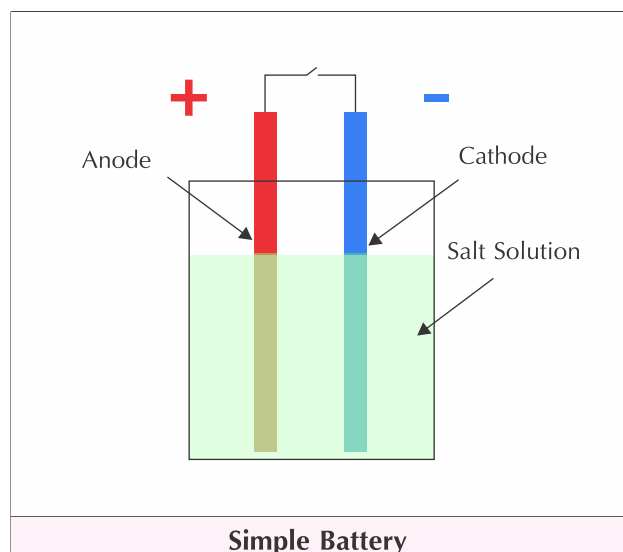
**Ions are of two types:**

- a. **ANION:** Is negatively charged. (-)
- b. **CATION:** Is positively charged. (+)

In a battery, there are platinum plates known as Electrodes. One electrode is Anode(+) and other is Cathode(-)

### 2.2 ELECTRIC CURRENT

Electric current is a flow of electrons along the conductor. The path of the current from the



generating source along various conductors and back to the source is called ELECTRIC CIRCUIT.

**Conductors :** A substance which allows a free passage of electrical current are called conductors. Metals are the best conductors . Other good conductors are watery solution of acids, alkaline or salts and these are all termed as electrolytes.

**Insulators :** A substance which does not allow electrical current to pass through them are called insulators. There are solid insulators such as rubber, glass, plastic and wood and some are liquid insulators such as oils and pure distilled water.

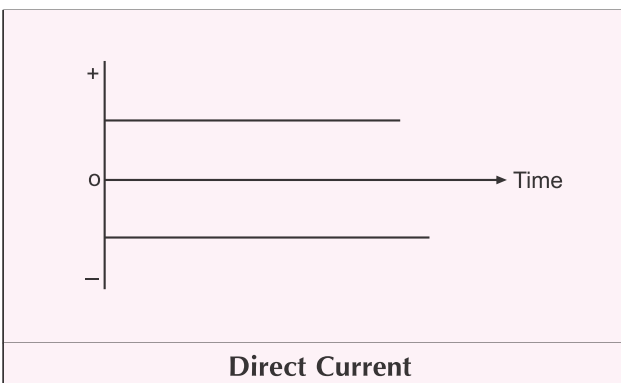
**Polarity :** Polarity is the property of having either a negative or positive charge.

**Frequency:** The number of cycles occurring in a second is called frequency of the current.

**Hertz:** Is the unit to measure frequency.

**a. Direct Current:**

Is a current in which the flow of electrons is in one direction only, either positive or negative polarity.

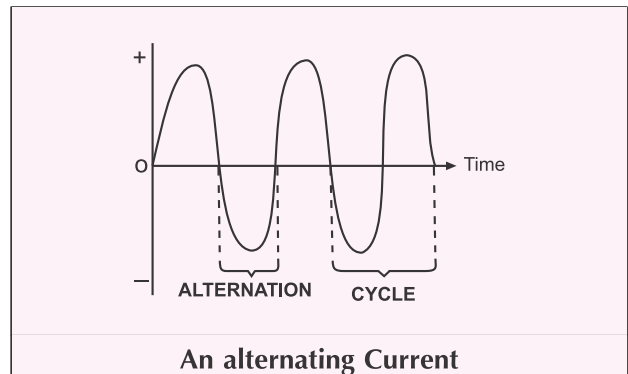


**b. Alternating Current:**

Is the current that changes polarity in a series of cycles and reaches peaks in a wave form called alternations.

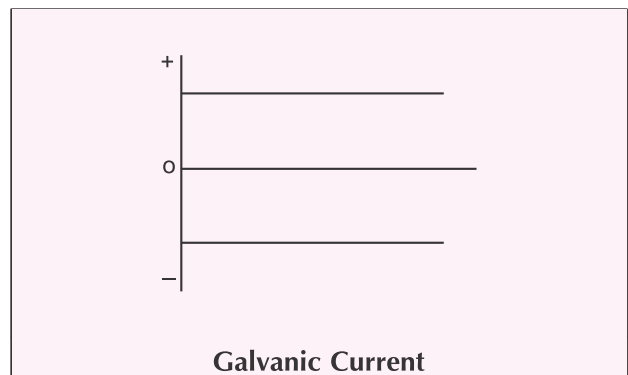
Alternating current comes from the MAINS outlet (220 – 240 volts). It is extremely dangerous, a shock

(discharge of current) from the MAINS can kill a person. It is used to power electrical machines, e.g. G-5 or vacuum suction.



**c. A Galvanic Current:**

A constant direct current of either polarity, which is used to produce a chemical reaction on the skin. Used in electrolysis (permanent hair removal), Galvanic Machine-Iontophoresis and Disincrustation.

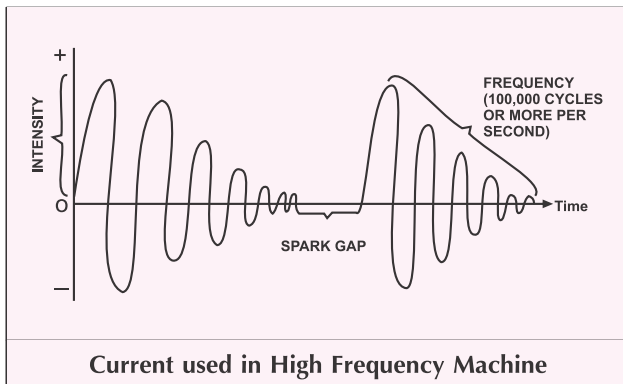


**d. A High Frequency Current:**

In a high frequency machines, an alternating current is modified so that the frequency is so rapid that its oscillations create local heat. It no longer stimulates sensory nerves and is used directly or indirectly on the skin.

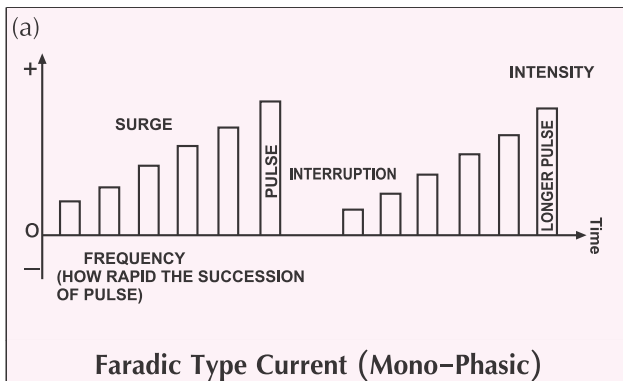
There is a spark gap in the current which prevents the current from surging to an uncomfortable intensity . “SPARKING” is a technique used during Direct High Frequency treatment on the skin.

For a current to be called High Frequency, there must be a minimum of 500,000 cycles per seconds.

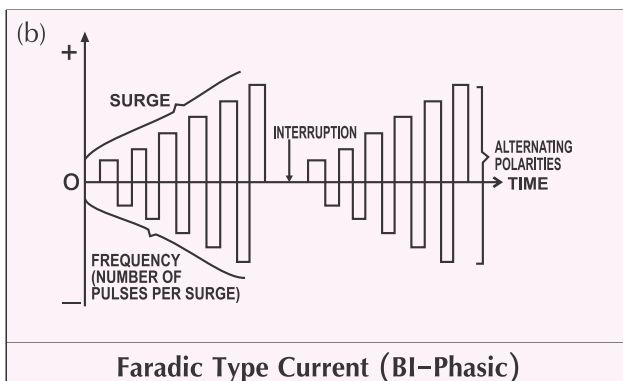


**e. Faradic Type Current:**

It is an interrupted, surging direct current that does not alternate polarities. It is called Mono – Phasic. If it is used, it gives an uneven pull on muscles where it is applied. It is used by Physio – therapists.



The faradic type current that alternate in polarities is called Bi – Phasic. This is used by Beauty Therapists



(BT) as it is comfortable for clients.

True faradic current is not used by BT as it is too strong and uncontrollable.

**2.3 ELECTRICAL UNITS**

**a. Ampere :-** Measurement of electrical strength. Amperage of the electrical circuit refers to the reading on the meter.

**b. The Ohm :-** Measurement of electrical resistance. The resistance is determine by the length, diameter and material of the conductors.

**c. The Volt :-** Measurement of the electrical pressure or the electromotive force or push. The Voltage of normal domestic supplies is 220 – 240 Volts.

**d. The Watt :-** Measurement of the power output of an electrical machine. It`s expressed as the total amount of the electrical energy or power.

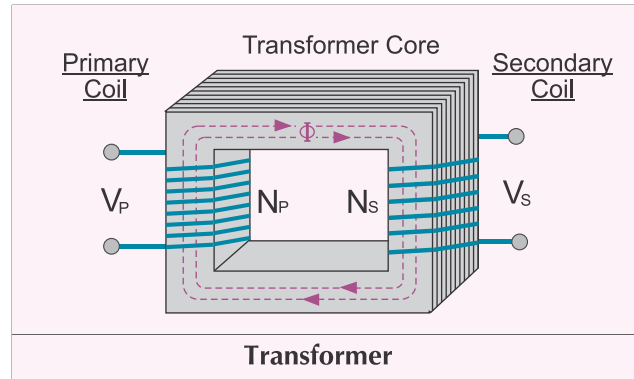
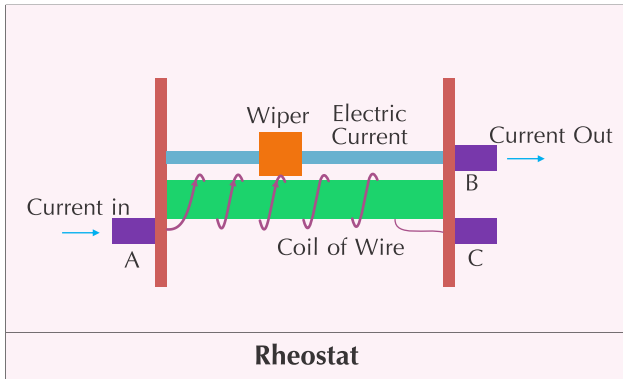
**2.4 ELECTRICAL DEVICES**

**a. The Rheostat :-** An electrical device used to control the strength of the current by varying the resistance to the electrical flow in the circuit. It automatically cut of the power when reaches the desired heat. Eg: In geysers, Iron (Press) etc.

**b. The Transformer :-** An electrical device used to step up or step down the electrical Voltage. Eg: Transformers on old fridge.

**c. A capacitor or Condenser :-** An electrical device used to store electricity in a circuit i.e. to speed up an electric current.

**d. A Rectifier :-** An electrical device that changes alternating current to direct current. It allows the flow of electrons in one direction only. Thus, in Galvanic



machine rectifier is there to change the AC to DC.

**e. A Fuse :-** A safety device used in the electrical circuit. It is made of a short length of wire with low melting point. If the current is too great, the heat generated will cause the wire to melt by breaking the circuit, preventing the flow of the current and possible damage to the equipment and injury to the operator. It also gives warning of a defect which may cause the machinery to be dangerous. Eg: Fuse in bulb.

- h. Have machinery checked regularly by experts to ensure proper maintenance.
- i. Have any repairs carried out by an electrician to ensure proper workmanship.
- j. Place machinery on a stable trolley, not glass topped, to avoid accidents.
- k. Do not trail wires over the bed, when the client is being treated.
- l. When replacing blown fuses, switch off electricity at mains before handling.

## 2.5 SAFETY PRECAUTIONS IN THE USE OF ELECTRICAL APPLIANCES

- a. Ensure plug is wired correctly and fitted with the correct size of fuse.
- b. Ensure that leads are not tangled or frayed.
- c. Do not touch plug or machinery with wet hands or pull out the cord.
- d. Wires should not be trailed across the floor or under the carpet.
- e. Do not connect more than one appliance to a socket.
- f. Make sure that machinery is switched off at the socket after working.
- g. Do not join two or more pieces of cable together with insulating tape.

## 2.6 FIRST AID

It is the skill to give medical aid in case of accident or emergency to save the life of the effected person. First aid is given to:

- a. To preserve the life.
- b. To prevent the condition turning worsening.
- c. To promote recovery.

First box should be kept at prominently positioned so that it is easily accessible to everyone.

### A First Aid Box must contain: –

- a. Triangular bandages.
- b. One sterilized pad in sealed packet
- c. Sterilized absorbent cotton wool.
- d. Medicated adhesive plaster of various sizes.

- e. Unmedicated wound dressing.
- f. Antiseptic cream./lotion
- g. Hydrogen peroxide.
- h. Lint
- i. Scissors
- j. Asprins
- k. Gauze.
- l. Panadols
- m. Smelling salts
- n. Pain killers/Antibiotics.

**TREATMENT FOR:**

| Treatment For     | Cause                                    | Characteristics                                                                                                | First Aid Treatment                                                                                                                                                                                                                                                                                                                                                                                                                                 |
|-------------------|------------------------------------------|----------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 1. Burns          | By electricity or hot air of the flames. | *First Degree -Redness<br>*Second Degree – Redness and watery blisters.<br>*Third Degree – Charring to tissue. | First Degree burns or scars only:<br>*Hold the area under slow, cold running water or by application of cold water compress for 10 minutes.<br>*Apply a dry sterile dressing if necessary.                                                                                                                                                                                                                                                          |
| 2. Electric Shock | Electricity.                             | Causality's face may be ashed because breathing and heart beat have stopped simultaneously.                    | *Loose tight clothing especially neck, chest and waist.<br>*Switch off the main and remove the patient to a cool and safe place.<br>*Lie the patient down with head raised to bring the tongue forward and prevent choking.<br>*If the patient is having difficulty in breathing, apply artificial respiration.<br>*If the patient has stopped breathing, apply external heart compress immediately.<br>*Alcoholic stimulating should not be given. |



**2.7 Self Assessment Questions**

1. A necessary precaution that should be taken in using electrical apparatus is to:-
  - a. Isolate the client
  - b. Put the couch on a conducting base
  - c. Remove jewellery from the client and the beauty therapist
  - d. Warn the client that sometimes she can feel a slight electric current
2. Examples of solid conductors are:-
  - a. Glass
  - b. Keratin
  - c. Metals
  - d. Plastic
3. Examples of liquid conductors are:-
  - a. Body fluids and alkali solutions
  - b. Body fluids and pure distilled water
  - c. Liquid alcohols and alkali solutions
  - d. Liquid alcohols and pure distilled water
4. Examples of insulators are:-
  - a. Body fluids
  - b. Inert gases
  - c. Plastics
  - d. Salt solutions

5. An example of an insulator is:-  
 a. Copper                      b. Water                      c. Rubber                      d. Desincrustation gel
6. A current with a constant strength used in beauty therapy is called:-  
 a. Interferential              b. Faradic                      c. High frequency              d. Galvanic
7. A so-called "faradic type current" is;  
 a. A current with high frequency                      b. A current with low frequency  
 c. An uninterrupted galvanic current                      d. An interrupted galvanic current
8. The current that is used to tone muscles is called:  
 a. Faradic                      b. Galvanic                      c. Direct                      d. High frequency
9. The electrical device that changes alternating current into direct current is a:-  
 a. Rectifier                      b. Transformer                      c. Rheostat                      d. Capacitor
10. The electrical device that changes voltage is called a:  
 a. Transformer                      b. Rheostat                      c. Rectifier                      d. Capacitor
11. A fuse is an electrical device that:-  
 a. Changes one voltage into another  
 b. Protects apparatus or circuits from overloading  
 c. Changes alternating current into direct current  
 d. Controls the resistance of a circuit
12. A fuse in an electrical apparatus:-  
 a. Conducts material which cannot be oxidized  
 b. Is an isolating material  
 c. Is the best conducting part of the electrical circuit  
 d. Is the weakest part of the electrical circuit
13. The safety practices that should be observed in a beauty salon when using electrical appliances:-  
 a. Are according to international regulations for all enterprises  
 b. Are established by CIDESCO International  
 c. Are established by local authorities  
 d. Are the responsibility of the employer of the salon
14. Match the Column - Electrical units:
- | A           | B                                    |
|-------------|--------------------------------------|
| a. Ampere   | Measurement of electrical resistance |
| b. The Ohm  | Measurement of electrical power      |
| c. The volt | Measurement of electrical strength   |
| d. The watt | Measurement of electrical pressure   |

# Part 3

## FACIAL GALVANIC

- 3.1 Introduction**
- 3.2 Dis-incrustation**
  - a. Indicated for Use
  - b. Contra-indications
  - c. Precautions
  - d. Dangers
  - e. Working of the Machine
  - f. Sterlization
  - g. Benefits
- 3.3 Ionisation**
  - a. Indicated for Use
  - b. Contra-indications
  - c. Precautions
  - d. Dangers
  - e. Working of the Machine
  - f. Sterlization
  - g. Benefits
- 3.4 Procedure**
  - A. Deep Cleansing Treatment with Disincrustation
  - B. Anti Pigmentation Treatment with Ionisation
- 3.5 Self Assessment Questions**



A Galvanic facial can help increase the efficiency of any skin treatment. According to the individual skin type or the individual problem that someone wants to resolve, the skin is prepared at the start of the facial. To prepare the skin it is typical to use cleansing and ozone. Then a specialized formulation is used to start the Galvanic treatment.

This treatment can help remove sebaceous blockage and clear congestion that leads to acne



Galvanic Machine

### 3.1 INTRODUCTION

It is an excellent way to revitalize the skin and help the active ingredients of skin products to penetrate deep into skin than manual applications. It also reduces the oiliness of the skin for those prone to acne while helping to clean congestion. This type of facial helps improve the normal functions of the skin by helping to improve the skin's blood circulation. Products can be absorbed directly through the skin with this facial.



which makes it a good option for those who suffer from acne. During the facial process, a hydrating and nourishing substance needs to be applied in order for those with dry and normal skins to benefit from this type of facial. This is the best facial option to choose for those who need to rejuvenate and revitalize their skin.

**How does Galvanic Facial Therapy works:**

When used on skin it gives a steady, direct galvanic current of positive and negative ions through the skin.

Galvanic facial is based on the basic laws of electricity, "like poles repels each other, unlike poles attract each other." The two forces (+positive and -negative) pull together like a magnet and push the product into the deeper layers of the skin. The capacity of the skin absorption is increased by the galvanic ion and this improves the penetration of nutrition products (anti-wrinkle lotion) through the skin.

In addition, skin will be completely cleansed as negative ions force all the dirt and debris held within the pores to the surface. At the same time, the positive ions gives a fresh look and plumps the skin, banishing wrinkles.

**There are two rods:**

- a. **Carbon Rod** – To which electrode is attached.
- b. **Metal Rod** – To be held by client.

All electrodes must be firmly wrapped with moistened cotton wool before use.

This treatment involves the use of a galvanic current. It can be used in 2 ways.

- 1. To emulsify sebum, removing surface

oiliness, blockages and helping to regulate secretion. It is especially benefitted for oily, problem or mild acne skin. This process is known as desincrustation.

- 2 To introduce beneficial, ionized water soluble substances into the skin. This process is known as Iontophoresis and suitable for all skins.

**3.2 DISINCRUSTATION**

**Current:** Direct Current

**Product:**

- 1. Plain salt with water
- 2. Dis-incrustation gel

**Duration:** 6 to 8 min.

**Intensity:** 2-3 milliamps

**a. Indicated for Use**

- 1. Oily skin.
- 2. Mild acne skin.
- 3. Oily areas of combination skin.

**b. Contra-indications**

- 1. Hyper Sensitive skin, loss of skin sensation
- 2. Very dry, mature or dehydrated skins
- 3. Diabetic
- 4. Cuts, abrasions, inflammation
- 5. Excessive fillings, metal plates, pins, coils
- 6. Epileptics
- 7. Pacemakers, heart problems
- 8. Pregnancy
- 9. Highly strung or nervous clients
- 10. Highly vascular skin

**c. Precautions:**

- 1. Check instructor manual

