

# Formulation And Evaluation Of Herbal Moisturizing Cream

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**Abstract**—The herbal cosmetics are those when natural herbs and their products used for their aromatic value in cosmetic preparation among consumers for herbal products triggered the demand for natural products and natural extracts in cosmetics preparations. cream are semi solid preparations meant for external application without friction. They are applied directly to skin with the help of some absorbent material, such as, cotton wool or gauze soaked in it. Formulation of aloe vera cream, formulation of menthol cream and aloe vera cream with arrow root powder is prepared using different composition. These formulations were evaluated with different evaluate on parameters like Homogeneity, Appearance, After feel, Acid Value, pH measurement, Irritancy test, Viscosity, Accelerated stability testing, Subjective Properties, Spreadability. Type of emulsion test, Sensitivity Test, Washability Test, statistical analysis, In vitro permeation studies, Test for thermal stability, Determination of total fatty matter, Determination of water content, Patch test. The objective of this review is to compile the information of different herbal formulations of cream and its evaluation. Herbal cream formulations studied by many researchers and this information can be used by many researchers for novel herbal cosmetic formulations with new herbs. The herbal cosmetics are those when natural herbs and their products used for their aromatic value in cosmetic Preparation among consumers for herbal products triggered the demand for natural products and natural extracts in cosmetics preparations. cream are semi solid preparations that is for external application without friction. They are applied directly on the skin with the help of some absorbent material, such as, cotton wool or gauze soaked in it. Formulation of aloe vera cream

## I. Introduction

Cream is defined as semisolid emulsions which are oil in water (o/w) or water in oil (w/o) type and these semisolid emulsions are intended for external application. Cream is classified as oil in water and water in oil emulsion. It is applied on outer part or superficial part of the skin and its main ability is to remain for a longer period of time at the site of application. The function of a skin cream is to protect the skin against different environmental condition, weather and gives soothing effect to the skin. The word Cosmetic derived from a Greek word – kosmesticos that means to adorn. From that time any Materials used to beautification or promoting appearance is known as cosmetic. The word “cosmetics” Actually stems from its use in Ancient Rome. They were typically produced by female slaves known as “cosmetic” which is where the word “cosmetics” stemmed from. Cosmetics are used to enhance appearance. Makeup has been around for many centuries. The first known people who used cosmetics to enhance their Beauty were the Egyptians. Makeup those days was just simple eye coloring or some material for the body. Now-a-days makeup plays an important role for both men and women. The importance of cosmetics has Increased as many people want to stay young and attractive. Cosmetics are readily available today in the form of creams, lipstick, perfumes, eyeshadows, nail polishes, hair sprays etc. Other cosmetics like face powder Give glow to the skin after applying the base cream. Then we have lipsticks, which are applied by many women of all ages. They are made from wax and cocoa butter in the desired amount. Cosmetics like creams, gels, and colognes are used on a daily basis by both women and men. Creams act as a Cleanser for the face in many circumstances. More recently anti- ageing creams have been manufactured which Can retain younger looking skin for many years. The best cleansing agents are cleansing cream, soap and Water. Cosmetic creams serve as a skin food for hard, dry and chapped skin. It mainly lubricates, softens and Removes

unwanted dirt from the skin. Some popular fat creams that are used include Vaseline and Lanolin. Dry creams are used in the manufacture of soap and gelatin which is used as a base for the skin. Herbal Cosmetics, here referred as Products, are formulated, using various permissible cosmetic ingredients to form the base in which one or more herbal ingredients are used to provide defined cosmetic advantages only, shall be called as "Herbal Cosmetics". The herbal cosmetics are those when natural herbs and their products used for their aromatic value in cosmetic preparation among consumers for herbal products triggered

the demand for natural products and natural extracts in cosmetics preparations. cream are semi solid preparations meant for external application without friction. They are applied directly to skin with the help of some absorbent material, such as, cotton wool or gauze soaked in it. cream may be used for local action as cooling, soothing or protective purposes. Herbal c r e a m , here referred as Products, are formulated, using various permissible cosmetic ingredients to Form the base in which one or more herbal ingredients are used to provide defined cosmetic advantages only, Shall be called as "Herbal Cosmetics". The herbal cream are those when natural herbs and their products Used For their aromatic value in cosmetic preparation among consumers for herbal products triggered the Demand For natural products and natural extracts in cosmetics preparations. cream are liquid preparations that is for External application without friction. They are applied directly to skin it the help of some absorbent material, Such as, cotton wool or gauze soaked in it. Lotion may be used for Local action as cooling, soothing or Protective purposes

Cosmetics means any composition intended to be rubbed, poured, sprinkled, or scattered on, or introduced into, or else applied to, the mortal body or any part of the body for sanctification, beautifying, promoting attractiveness, or altering the appearance, and includes any papers intended for use as a element of dress. The study of cosmetics is called "cosmetology". It's the treatment of skin, hair, nails and includes manicure, pedicure, applying of artificial nails on special occasion, hair styling, shampooing hair, body hair junking, chemical hair relaxers or straighteners, colouring, hair extensions and toupee treatment. Cosmetics are the products which are generally used to beautify the skin and also to purify the skin. From that time the materials which are used to promoting appearances or to beautify the skin are called as cosmetics. From ancient time till now people are still using herbal cosmetics for the beautification of skin. cream is the water in oil emulsion. Cold cream gives the prolonged contact time in the site of application as compared to the other semisolid dosage form or formulation. They give elegance to the skin and it is not that much greasy. Due to the oil phase, it gives an emollience to the skin.

Creams are semisolid emulsions that are intended for application to the skin or mucous membrane. Depending on the ratio of water to grease, the cream can either be water-miscible and easily removed or thick and sticky. It's the topical drug that is suggested the most. Since it is less oily, dirty, and sticky, the majority of patients prefer it Herbal extracts are now often used in cosmetic products to improve attractiveness and appearance. Prior to the development

of the allopathic medical system, traditional medical systems that had developed over centuries governed the world's healthcare. The latter strategy was swiftly embraced by consumers and presently has a dominating position in the healthcare industry since in depended on contemporary biology and chemistry for both research and therapy. The dose form (cream, powder, soaps, solutions, etc.) and the body portion or organ to which they will be applied help categorize herbal cosmetics (cosmetics for skin, hair, nail, teeth, and mouth, for example).The stratum corneum's water content and the lipids on the skin's surface must be in balance to preserve the skin's look and functionality. Since the skin is the body's outermost covering, it is continually exposed to many external stimuli. This equilibrium may be upset by both endogenous and exogenous influences. Frequently using cleansers, detergents, and topical irritants like alcohol and hot water can also remove the lipids from the skin's surface different types of skin issues were caused by skin barrier disruption. most prevalent issue is a loss of water content which leads to dryness of skin such as roughness, scaling, fissures, redness and an uncomfortable sense of tightness, often with itching and stinging. Treatment with moisturizer aims at keeping skin integrity and well-being by producing a healthy appearance of the individual. Numerous moisturizers are marketed as natural, secure, organic, and herbal, yet all moisturizers have the same fundamental qualities. Most of the available moisturizers employ synthetic adhesives, emulsifiers, perfuming agents, colours, surfactants and thickeners to build the basis. Natural agents must be used in place of hazardous synthetic agents at the base.

The objective of this research work was to develop the moisturizing cream which does not cause any side effects or adverse reactions. The cream also acts as a skin tone in day-to-day life by giving even skin tone. It also possesses vitamin E which provided required nourishment to the skin.

Skin is the outermost tissue of the body and the largest organ in terms of both weight and surface area. It has an area of approximately 16,000 cm<sup>2</sup> for an adult and represents about 8% of the body weight. As seen in Figure 1, skin has a very complex structure that consists of many components. Cells, fibers and other components make up several different layers that give skin a multi-layered structure. Veins, capillaries and nerves form vast networks inside this structure. In addition, hairs stick out from the inside of skin. Numerous fine hair furrows are scattered over the surface of skin. Skin performs a wide variety of functions resulting from chemical and

physical reactions inside these components. The major function of skin is to act as a barrier to the exterior environment. It protects the body from friction and impact wounds with its flexibility and toughness. Harmful chemicals, bacteria, viruses and ultraviolet light are also prevented from entering the body by the skin. It also prevents water loss and regulates body temperature by blood flow and evaporation of sweat. The skin is the outermost tissue of the body and the largest organ in terms of both weight and surface area. It has an area of approximately 16,000 cm<sup>2</sup> for an adult and represents about 8% of the body weight. Skin has a very complex structure that consists of many components. Cells, fibers and other components make up several different layers that give skin a multi-layered structure. Veins, capillaries and nerves form vast networks inside this structure. In addition, hairs stick out from the inside of skin. Numerous fine hair furrows are scattered over the surface of skin. Skin performs a wide variety of functions resulting from chemical and physical reactions inside these components. The major function of skin is to act as a barrier to the exterior environment. It protects the body from friction and impact wounds with its flexibility and toughness. Harmful chemicals, bacteria, viruses and ultraviolet light are also prevented from entering the body by the skin. It also prevents water loss and regulates body temperature by blood flow and evaporation of sweat.

These functionalities are critical to our well-being. The secretion of sweat and skin lipids cause the elimination of a number of harmful substances resulting from metabolic activities in the intestines and the liver. Furthermore, skin has a large amount of nerve fibers and nerve endings that enable it to act as a sensory organ.

The concept of beauty and cosmetics is as ancient as mankind and civilization. Indian herbs and their significance are popular worldwide. An herbal cosmetic has a growing demand within the world market and is a useful gift of nature. Herbal formulations always have attracted considerable attention due to their good activity and relatively lesser or nil side effects with synthetic drugs. Herbal cosmetics are defined because the beauty products which possess desirable physiological activity like healing, smoothing appearance, enhancing and conditioning properties due to herbal ingredients. Now-a-days the usefulness of herbs within the cosmeceutical production has been extensively increased in the care system and there is an excellent demand for the herbal cosmetics. Cosmetics are the substances intended to be applied to the physical body for cleansing, beautifying, promoting attractiveness, and altering the looks without affecting the body's structure or functions. But the usage of synthetic products becomes very harmful from time to time for the youth also as our surroundings. Various synthetic compounds,

chemicals, dyes and their derivatives proved to cause various skin diseases having numerous side effects. Thus we are using herbal cosmetics to the maximum amount as possible. The basic idea of skin care cosmetics lies deep within the Rigveda, Yajurveda, Ayurveda, Unani and Homeopathic systems of medicine.

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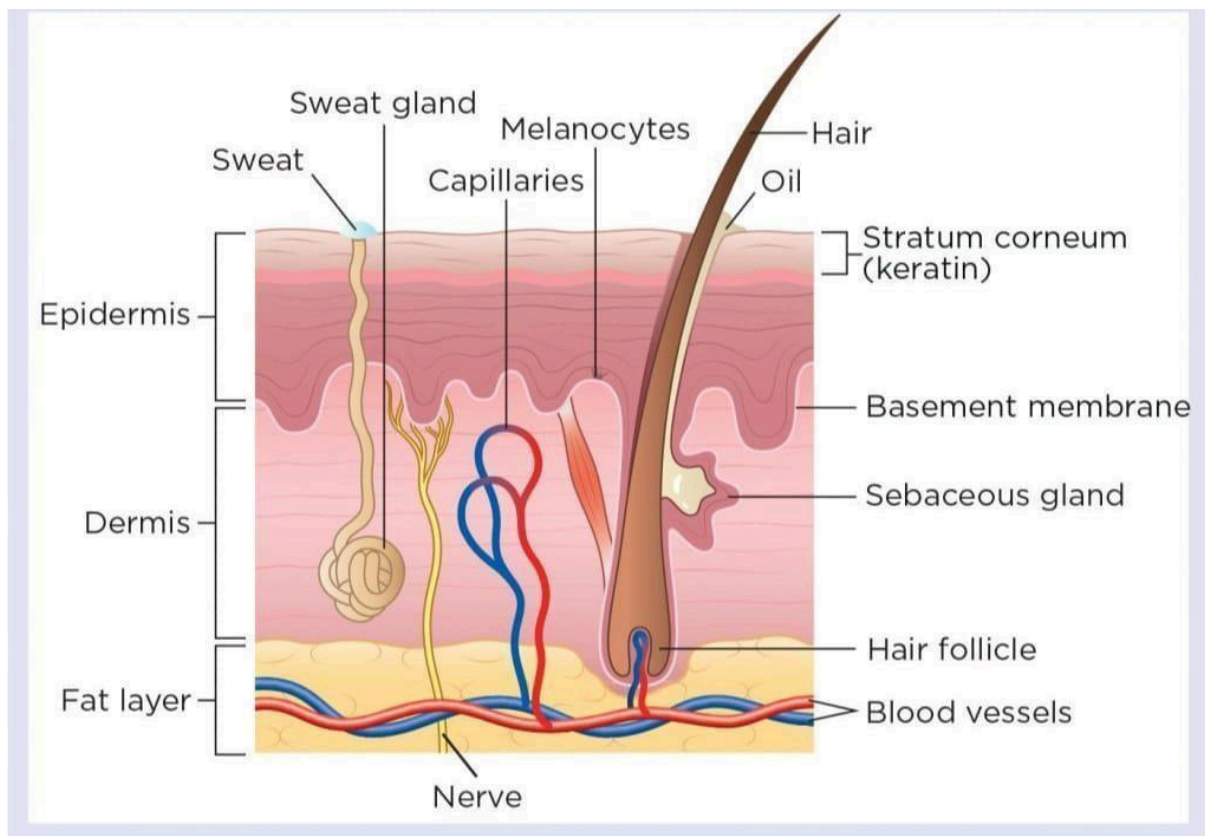
Various synthetic compounds, chemicals, dye and their derivative proved to cause various skin diseases having numerous side effects. Thus we are using herbal cosmetics as much as possible. The basic idea of skin care cosmetic lies deep in the Rigveda, Yajurveda, Ayurveda,

Unani and Homeopathic system of medicine. These are the products in which herbs are used in crude or extract form. These herbs should have varieties of properties like antioxidant, antiinflammatory, antiseptic, emollient, anti seborrhatic, antikerolytic activity and antibacterial etc. Cosmetics are developed to reduce wrinkles, fight acne and to control oil secretion. For various types of skin ailments formulations like skin protective, sunscreen, antiacne, antiwrinkle and antiaging are designed using varieties of materials, either natural or synthetic.

### **Human skin:-**

The skin is the largest organ of the body, with a entire area of about 20 square feet. The skin protects us from germs and the elements, helps regulate body temperature, and permits the sensations of touch, heat, and cold. Skin has three layers:

- The epidermis, the outermost layer of skin, provides a waterproof barrier and creates our skin tone.
- The dermis, beneath the epidermis, contains tough connective tissue, hair follicles, and sweat glands.
- The deeper subcutaneous tissue (hypodermis) is made of fat and connective tissue. The skin colour is Created by special cells called melanocytes, which produce the pigment melanin. Melanocyte is located in the epidermis.



**Figure No:- 1 Structure of skin**

**The skin also:**

1. Regulates body temperature
2. Stores water and fat
3. Is a sensory organ
4. Prevents water loss
5. Prevents entry of bacteria
6. Acts as a barrier between the organism and its environment
7. Helps to make vitamin D when exposed to the sun.

The skin is the body's largest organ, made of water, protein, fats and minerals. Your skin protects your body from germs and regulates body temperature. Nerves in the skin help you feel sensations like hot and cold. human skin, in human anatomy, the covering, or integument, of the body's surface that both provides protection and receives sensory stimuli from the external environment. The skin consists of three layers of tissue: the epidermis, an outermost layer that contains the primary protective structure, the stratum corneum; the dermis, a fibrous layer that supports and strengthens the epidermis; and the subcutis, a subcutaneous layer of fat beneath the dermis that supplies nutrients to the other two layers and that cushions and insulates the body.

Human skin, more than that of any other mammal, exhibits striking topographic differences. An example is the dissimilarity between the palms and the backs of the hands and fingers. The skin of the eyebrows is thick, coarse, and hairy; that on the eyelids is thin, smooth, and covered with almost invisible hairs. The face is seldom visibly haired on the forehead and cheekbones. It is completely hairless in the vermilion border of the lips, yet coarsely hairy over the chin and jaws of males.

## II. REVIEW OF LITERATURE

The literature survey is focused on following points-

- 1) Saudagar R. B. 1 and Sisodiya M. H., Review on Herbal Cosmetics, World Journal of Pharmaceutical Research, Volume 7, Issue 7, 573-591.

Herbal cosmetics are the preparations used to enhance and improved the human appearance. The aim of the present research was to formulate and prepared herbal cream for the purpose of moistening and nourishing the skin

- 2) A review on herbal cosmetics Lovepreet Kaur, Ajeet Pal Singh, Amar Pal Singh, Taranjit Kaur St. Soldier Institute of Pharmacy, Lidhran Campus, Behind NIT (R.E.C), Jalandhar-Amritsar by pass NH-1 Jalandhar 144011, Punjab , India. Volume 9, issue 3 ,2021

- a) Coconut oil has a primarily anti-inflammatory and hydrating properties in the skin.
- b) Has a anti oxidant property .
- c) Coconut oil is excellent as a face moisturizer and soften.

- 3) Sahu T, Patel T, Sahu S, Gidwani B, “Skin cream as Topical Drug Delivery System: A Review” Journal of Pharmaceutical and Biological Sciences, 2016; 4(5):149-154

Aloe is also common in both traditional Chinese and Ayurvedic medicine. The name Aloe vera is derived from the Arabic word “Alloeh” meaning “shining bitter substance,” while “vera” in Latin means “true”. The plant Aloe vera has a history dating back to biblical times. There are over 250 species of Aloe grown around the world.

- 4) Namita and Nimisha Development and Evaluation of Herbal Cosmeceutical for Skin Care International Journal of Pharmaceutical BioScience 2013 Apr , (P) 86 – 92

Now-a-days the usefulness of herbs in the cosmeceutical production has been extensively increased in personal care system and there is a great demand for the herbal cosmetics.

- 5) Dhyani A, Chander V, Singh N. Formulation and evaluation of multipurpose herbal cream. Journal of drug delivery and therapeutics. 2019; 9(2): 341-343.

Irritancy test:

Mark an area (1sq.cm) on the left hand dorsal surface. The cream was applied to the specified area and time was noted. Irritancy, erythema, edema, was checked if any for regular intervals up to 24 hrs and reported.

- 6) Rajeswari R, Umadevi M, Rahale S, Pushpa R, Selvavenkadesh, Kumar K Sbhownik  
D. Aloe Vera: The Miracle Plant Its Medicinal And Traditional Uses In India  
2012;1:118-124.

cosmetological Importance Of Aloe:

Aloe vera has been used since ancient times for healing infection and burns. However with the improvement in cosmetology, it has been proved that Aloe vera is a very important component of cosmetics

- 7) Mali AS, Karekar P, Yadav AV. Formulation and evaluation of multipurpose herbal cream. International Journal of Science and Research. 2015; 4(11): 1495-1497.

Herbal cosmetics are the preparations used to enhance the human appearance. The aim of the present research was to formulate the herbal Cream for the purpose of Moistening, Nourishing, lightening & Treatment of various diseases of the skin.

Different crude drugs; Aloe barbadensis (Aloe Vera leaves),

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### III. NEED OF FORMULATION

Herbal moisturizing cream have now become an important part of the face care and beauty care routine. Moisturizing cream are one of the best and effective skincare products that everyone should use for clear and glowing skin. They come for every type of skin both for men and women.

### IV. AIM AND OBJECTIVE

#### AIM:

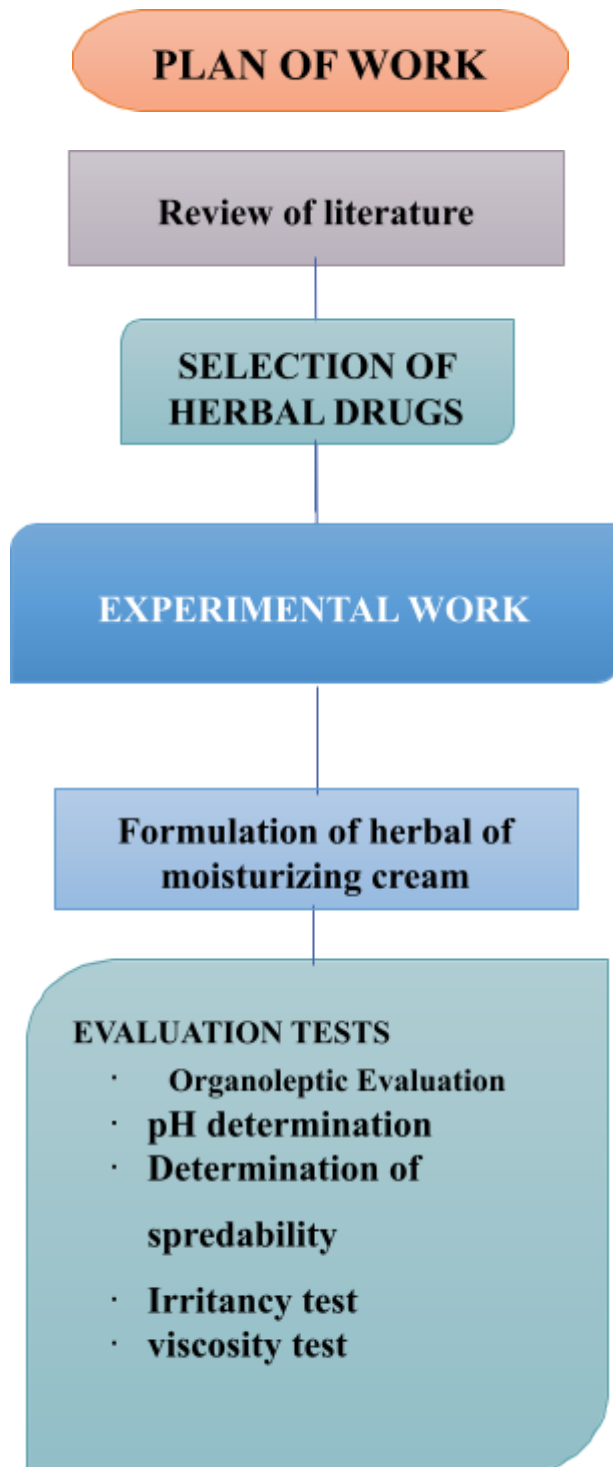
The aim of this work is to formulate and evaluate an herbal moisturizing cream for glowing skin by using natural ingredients. The ingredients such as bees wax, coconut oil, aloe vera gel, borax, rose water, were purchased from local market.

#### OBJECTIVE:

† The main objective of the work is to formulate and evaluate a herbal moisturizing cream for cosmetic purpose from locally available in local market.

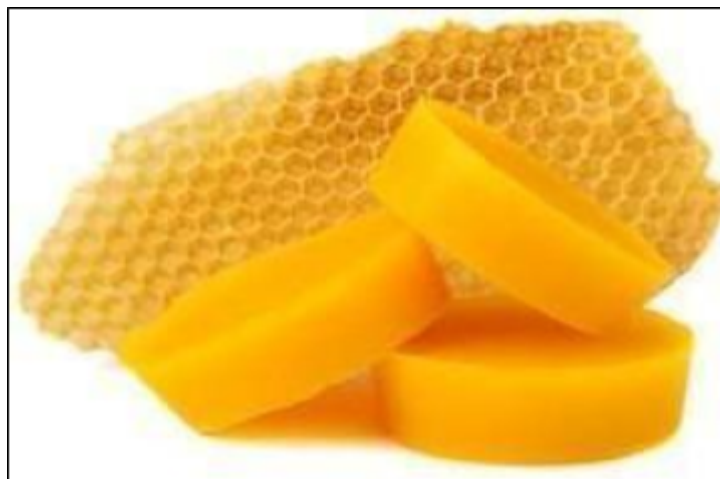
† The main aim of our work is to develop a herbal moisturizing cream which can give multipurpose effect, like moisturizer, reduce acne and skin irritation, reduce skin diseases like eczema, psoriasis, dry skin, wrinkles, rashes etc. and also adding glow to the face

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## V. DRUG AND EXCIPIENT PROFILE

**Bees wax**



**Figure No:- 2 Bees wax**

- **Botanical name:-** cera alba
- **Synonym:-** paraffin-wax
- **Biological source:-** Bees wax is a naturally occurring wax produced in the bees hives by honey bees a mellifera
- **Family:-** Apidae
- **Chemical constituents:-** esters, hydrocarbon, free fatty acids and other\_chemical  
Constitutes
  - In cosmetics, wax hydrates, conditioners, Soothes and relaxes the skin.
  - Exfoliates, repairs damage and heals the skin
  - A restorative reduced look
  - It counteracts the signs of aging, reduces itching and irritation and creates a long-lasting protective moisture barrier.
  - Combating environmental pollutants Beeswax is also an ideal natural exfoliator.
  - Removes dead skin cells.
  - Keep skin soft and moisturized.
  - Beeswax is a great choice for many skin types

## Coconut oil



**Figure No:- 3 Coconut oil**

- **Botanical name:-** Cocos nucifera
  - **Synonym:-** Argan oil
  - **Biological source:-** Coconut oil is the oil expressed from the dried solid part of endosperm of coconut, Cocos nucifera L., belonging to family Palmae
  - **Family:-** Arecaceae (Palm family)
  - **Chemical constituents:-** Fatty acid, caprylic acid, stearic acid, oleic acid
- 
- Coconut oil has a primarily anti-inflammatory and hydrating properties in the skin.
  - Has an antioxidant property .
  - Coconut oil is excellent as a face moisturizer and soften.
  - Coconut oil acts as a great scrub.
  - Coconut oil for dry skin can be used as a deep treatment to nourish dry and cracked skin, replenishing lost moisture and strengthening the skin barrier to retain it.
  - Coconut oil has also been found to help treat eczema and reduce its symptoms of dry, scaly and itchy skin that is prone to rashes.

## Aloe vera



**Figure No:- 4 Aloevera gel**

- **Botanical name:-** Aloe barbadensis miller
- **Synonym:-** Aloe barbadensis Mill. Aloe barbadensis var. chinensis Haw
- **Biological source:-** Aloes is obtained from the dried juice of the leaves of aloe barbadensis miller. □ **Family:-** Liliaceae
- **Chemical constituents:-** Barbaliin, Aloin, Isobarbaloin, aloe-emodin, and aloesone, Aloinoside A&B, resins.
- **Uses:**
  - Anti-inflammatory
  - Anti-aging
  - Treats dry skin
  - Treats stretch mark.
  - Is used as a moisturizer, to reduce pimples And acne and also used for treatment of Burn Wounds.
  - It is used as an antifungal and anti-Inflammatory and it is also used to reduce scar,

Pigmentation, redness and itching of the skin.

- In Addition to moisturizing the skin, aloe Vera gel can Ease or soothe conditions like Forsibite.
- Aloe Vera Gel can help your skin in hot and frigid weather.
- If your skin is damaged from a mild case of frostbite, Aloe Vera gel may help your tissues regrow more Quickly and boost healing

### † **Cosmetological importance of aloe:**

Aloe vera has been used since ancient times for healing infection and burns. However with the improvement in cosmetology, it has been proved that Aloe vera is a very important component of cosmetics. It contains almost 20 amino acids, minerals like calcium, magnesium and sodium in sufficient quantities, enzymes, vitamins, polysaccharides, nitrogen and other components that make it a miracle beauty herb. Some of the most important applications of Aloe vera for purpose of Cosmetology are being explained here briefly.

#### □ **Itching and Blisters:**

Aloe vera also provides relief from itching and also helps to treat blisters. Aloe contains vitamin B1, B2, B6, B12 and vitamin C that provide soothing and pleasing sensation to skin

#### □ **Skin Aging:**

Aloe vera initiates the synthesis of elastin as well as collagen. These proteins are essential for preventing the aging of the skin

#### □ **Acne:**

Aloe vera helps to eradicate acne scars by performing as an immune booster and an anti inflammatory agent. Beauty products composed of Aloe vera may diminish the rigorousness of acne. It is also composed of the chemical ingredients which have the property to save the skin to initiate the acne

#### □ **Freshness:**

Aloe vera impart the sensation freshness. It helps in increasing distribution of blood therefore providing easier oxygen exchange among the cells, hence giving them nourishment

## Sun-burns:

Aloe Vera has an outstanding possession in diminishing the hurting of sunburn. For this purpose, it is rubbed directly on skin. The fresh fluid from the plant or Aloe vera containing after-sun creams may be used for sun-burns

### ☐ **Moisturizing Agent:**

Aloe vera may also be used for softening and moisturizing the skin. There are so many products available in the market containing Aloe vera which may be used post-showering to obtain the skin in super soft shape. Aloe vera gel, cream or lotion applied on the face forms a delicious cover that helps to shield the skin from dust and other natural elements which may be injurious to the skin

### ☐ **Pigmentation:**

Melanin is a pigment which is responsible for the color of the human skin. Hyper pigmentation is a situation in which large amount of melanin is synthesized. This generally happens due to excess exposure of the skin to the sun. In reaction to UV rays in sunbeams, the skin cells called melanocytes initiate to synthesize melanin. This increased synthesis of melanin is responsible for the emergence of darkened patches on the skin. Aloe vera has the property of diminishing the pigmentation and dark spots on the face

### ☐ **Skin Eruption:**

Aloe vera containing creams are beneficial for skin eruptions. Aloe vera gels have been proved to be the best remedy for burns and wounds. Actually, cellular regeneration, antibacterial and anti-fungal activities of Aloe vera make it useful for skin eruption

## Borax



## Figure No:- 5 Borax

- **Botanical name:-** Sodium borate
- **Synonym:-** Borax decahydrate
- **Biological source:-** The most commercially important deposits are found in Turkey; Boron, California; and Searles Lake, California. Also, borax has been found at many other locations in the Southwestern United States
- **Family:-** Boron
- **Chemical constituents:-** Sodium,
  - [1] Borax is used prophylactically or prophylactically in the cosmetics industry. This slows the growth of bacteria in the humidifier Creams, shampoos, gels, lotions and body washes, Scrubs and bath salts.
  - [2] Cosmetics manufacturer Using borax as a buffer or emulsifier
  - [3] Prevent separation of product components
  - [4] Borax as raw material
  - [5] It kills skin bacteria and removes dead skin cells. And excess fat.
  - [6] Penetration Which makes it relatively safe for skin and limited use number.
  - [7] Borax is used in the cosmetics industry.
  - [8] Prevent or slow the growth of bacteria in humidifiers
  - [9] Products such as creams, shampoos, gels, lotions and body washes Bombs, scrubs and bath salts.
  - [10] My producer Borax cosmetics are used as a temporary remedy or emulsifiers to protect product ingredients It separates.

## 1. Rose water



**Figure No:- 6 Rose water**

- I. **Botanical name:-** Rosa damascena
- II. **Synonym:-** Attar of roses
- III. **Biological source:-** Rose water is extracted from the flowers of Rosa damascene.
- IV. **Family:-** Rosaceae family
- V. **Chemical constituents:-** Phenyl ethanol, linalool, citronellol, nerol, geraniol

[11] Rose water can clam your skin

[12] It has anti aging property

[13] Rose water makes great facial mist

[14] It can be used to create fragrance

[15] Rose water is a powerful ingredient in a facial treatment

[16] May hydrates the skin

[17] May help balance skin pH level

[18] Has a Anti-inflammatory effect

**VI. Role of ingredients****Table No: 1 Role of ingredients**

<b>Sr.No</b>	<b>Ingredients</b>	<b>Use</b>
1.	Bees wax	Stiffening agent in cosmetics
2.	Coconut oil	Moisturizer with antiseptic effect
3.	Aloe vera gel	Cooling property and is anti-inflammatory
4.	Borax	Antiseptic, anti-inflammatory
5.	Rose water	Vehicle

## VII. MATERIAL AND EQUIPMENTS

### Material

Bees wax

Coconut oil

Aloe vera gel

Borax

Rose water

### Equipments

Beaker

Stirrer

Heating mental

Thermometer

## VIII. METHOD OF PREPARATION

**Dissolve borax in rose water at 70°C on a water bath**



**Melt the wax with coconut oil and aloevera gel in another beaker on water bath**



**Keep the temperature at about 70°C Pour borax solution into molten wax at the same temperature with constant stirring**



**Stirr the mass constantly when the temperature drops to about 45°C**

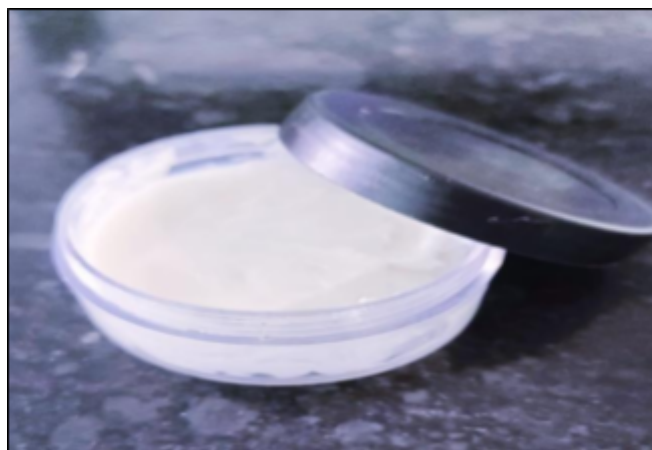


**Pour the formulation in wide mouth container and lable it.**

**Table No: 2 Formulation of herbal moisturizing cream:**

Sr. No	Ingredients	F 1	F 2	F 3	F 4	F 5
1.	Bees wax	2 gm	3 gm	4 gm	1 gm	2.5 gm
2.	Coconut oil	3 ml	4 ml	5 ml	6 ml	7 ml
3.	Alovera gel	0.59 gm	1 gm	2 gm	2 gm	1.5 gm
4.	Borax	0.1 gm	0.2 gm	1 gm	2 gm	2 gm
5.	Rose water	3 ml	4 ml	5 ml	4 ml	3 ml

Five different formulations were prepared with varying concentrations of all ingredients named as F 1 to F 5. Concentration of each ingredient was mentioned in Table 2.



**Figure No: 7 herbal moisturizing cream Evaluation of Herbal cream:**

- Fig. 1. Organoleptic character
- Fig. 2. Homogeneity
- Fig. 3. PH determination
- Fig. 4. Determination of spreadability
- Fig. 5. Irritancy test
- Fig. 6. Washability
- Fig. 7. viscosity

**TABLE I. Organoleptic character:**

The organoleptic properties such as color, odour, texture and state was observed and is shown in the table no 3

**TABLE II. Homogeneity:**

The formulation were tested for homogeneity by visual appearance and by touch.

**TABLE III. pH determination:**

5 g cream was taken and dispersed in 50 ml distilled water and then pH was measured by using digital pH meter.



**Figure No:- 8 Determination of pH by using digital pH meter**

**TABLE IV. Determination of Spreadability:**

Sample was applied between two glass slides and was compressed to uniform thickness by placing 100gm weight for 5 minutes. Weight was added to the pan. The time required to separate the two slides, i.e. the time in which the upper glass slide moved over the lower slide was taken as measure of spreadability. It was Calculated using the formula:

$$\text{Spreadability} = \frac{M \times L}{T}$$

M-Weight tide to upper slide,

L- Length moved on the glass slide ,T-time taken



**Figure No: 9 Determination of spreadability**

**TABLE V. Irritancy test:**

Mark the area (2 cm) on the left-hand dorsal surface. Then the cream was applied to that area and the time was noted. Then it is checked for irritancy, erythema, and edema any for an

interval up to 24 h and reported.



**Figure No: 10 Irritancy**

**TABLE VI. Washability:**

A portion of cream was applied over the skin of hand and allowed to flow under the force of flowing tap water for 10 minutes. The time when the cream completely removed was noted.

**TABLE VII. Viscosity:**

Viscosity of cream was done by using Ostwald viscometer at a room temperature of 25 °C using L1 Spindle at 100 RPM. According to the results all the three formulations showed adequate viscosity

## IX. RESULT AND DISCUSSION

### 1. Organoleptic character:

Herbal moisturizing cream was evaluated for organoleptic parameters showed in the table . the colour of prepared formulation was white. The odour of prepared formulation was

pleasant. And good acceptable which is desirable to cosmetic formulations. **Table No:**

### 3 Organoleptic character

Sr.no	Parameter	Observations
1.	Colour	White
2.	Odour	Pleasant
3.	Texture	Smooth
4.	State	Semi-Solid

### 2. pH determination:

**Table No: 4 pH determination**

Sr.No	Formulation	pH
1.	F1	6.47
2.	F2	6.41
3.	F3	6.12
4.	F4	6.35
5.	F5	6.65

**3. Determination of spreadability:****Table No: 5 Determination of spreadability**

Sr.No	Formulation	Time (sec)	Spreadability (gm*cm/sec)
1.	F1	11	22.9
2.	F2	14	15
3.	F3	8	32.7
4.	F4	18	20
5.	F5	20	25

**4. Irritancy test:****Table No: 6 Irritancy test**

Sr.No	Formulation	Irritancy effect	Erythema	Edema
1.	F1	Normal irritancy	No	No
2.	F2	No	No	No
3.	F3	No	No	No
4.	F4	No	Slight erythema	No
5.	F5	No	No	No

**5. Viscosity:****Table No: 7 viscosity test**

<b>Sr.No</b>	<b>Formulation</b>	<b>viscosity</b>
1.	F1	4100
2.	F2	4200
3.	F3	4100
4.	F4	4200
5.	F5	4100

## X. DIRECTION OF USE

- Rub your palms together to warm up the cream
- Use your hands to massage the cream into your body in small circular motions.



## XI. RESULT

All the three formulations A, B, and C showed good appearance, pH, determination of spreadability also the formulations A, B, and C showed no redness, erythema and irritation during irritancy study and they were easily washable.

## XII. CONCLUSION

The present work focus on the potential of herbal extracts from cosmetic purposes. The

uses of cosmetic have been increased in many fields in personal care system. The Use of bioactive ingredient in cosmetic influence biological functions of skins and Provide nutrients necessary for the healthy skin. There are numerous herbs available naturally having different uses in cosmetic preparations for skincare as antioxidants. The present study revealed that herbal cosmetic are very safe and does not produce any toxic and adverse reactions compare to marketed cosmetics products. Herbal cream we will avoid skin problems. By using Aloe Vera gel, Coconut oil and Rose water the cream showed a multipurpose effect and all these herbal ingredients showed significant different activities. Based on results and discussion, the formulations were stable at room temperature and can be safely used on the skin.

### **XIII. FUTURE SCOPE**

Formulations gain market value in accordance with market analysis and environmental factors. By using a moisturizing cream, you may give your skin a softer, younger-looking appearance by making it more water-rich and less prone to evaporate. Only a few applications for moisturizing creams include skin care, tissue healing, anti-aging, and other functions. Worldwide concerns over environmental pollution- related skin illnesses and other healthrelated problems have raised demand for moisturizing creams. The benefits of the all- natural, multifunctional goods are increasing demand for them. Customer acknowledging the advantage. This is necessary for future generations.

According to market data and environmental conditions, formulations increase in value on the market. You can give your skin a softer, younger-looking appearance by applying a moisturizing lotion to make it more water-rich and less likely to evaporate. Thickeners, which keep the skin moisturized. are the hidden ingredient in moisturizers Skin care, tissue repair, anti-aging, and other uses for moisturizing creams are among their limited uses. The demand for moisturizing creams has increased due to global concerns over environmental pollution- related skin diseases and other health-related issues. Demand for the all-natural, multipurpose products is rising as a result of their advantages. Customer recognizing the benefit. Future generations will need this.

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