Formulation and evaluation of lip bam

Mahesh Sunil bhandurge[1], Krushna Pandurang Jadhav[2], Kartik Vilas Jadhao[3], Prof. Aishwarya D. Ghuge[4], Dr Swati Deshmukh[5]

[1,2,3]Student, Shraddha Institute of Pharmacy, Washim
[4]Assistant Professor, Shraddha Institute of Pharmacy, Washim
[5]HOD, Shraddha Institute of Pharmacy, Washim

1).INTRODUCTION:-

Lip balm is a product which is put on lips so they will not dry when a person is outdoors in the Sun and wind. Lip balm is usually Made from petrolatum. Some types of lip balm also include Sunscreen to protect the lips from sunburn. Lip balm comes in tubes And small pots with screw-On lids. Lip balm is often used during the winter, because the cold winter winds can dry out a Person's Lips so that they are cracked and hurting (this is called having "chapped" lips).

What is the purpose of lip balm?

The purpose of all lip balms, even those called salves or butters, is to protect the lips. They Contain a moisturizing ingredient (such As petroleum jelly, shea butter, or lanolin) that prevents Water loss. Wax is added to help lip balm stick to lips.

What is the history of lip balm?

Lip balm was first marketed in the 1880s by Charles Browne Fleet, though its origins may be
Traced to earwax. More than 40 years Prior to the commercial introduction of lip balm by
Fleet, Lydia Maria Child recommended earwax as a treatment for cracked lips In her highly-popular book, The AmericanBotanical Identification of Beetroot: Beet, (Beta vulgaris), also called beetroot, common beet, or garden beet, one of the four Cultivated forms of the plant Beta vulgaris of the amaranth family (Amaranthaceae), grown For its edible leaves and taproot.Beetroots are frequently roasted or boiled and served as a side dish. They are also commonly Canned, either whole or cut up, and Often are pickled, spiced, or served in a sweet-and-sour Sauce.The leaves of garden beets can be cooked like spinach or eaten fresh if picked young. Beetroots Are a good source of riboflavin As well as folate, manganese, and the antioxidant betaine.

Anatomy of lips:-

The lips serve as organs of prehension, suction and speech. It Is composed of the skin, superficial fascia, orbicularis muscle And the muscles inserted around it (areolar tissue & mucous Membrane). The margins of the lips are covered with dry, red Mucous membrane, continuous with the skin and containing Numerous vascular papillae and touch corpuscles. The Mucous membrane internally is reflected from the upper and Lower lip upon the gums, and in the median line forms two Folds of superioris and inferioris [10,12]. The areolar tissue or submucous layer contains the coronary Vessels which completely encircle the buccal orifice near the Free margin of the lips. The coronary vessels are the superior And inferior coronary arteries which arise from the facial. The Superior coronary is larger than the inferior, and anastomoses With its fellow of the opposite side and gives off a small Artery to the septum arteriaseptinasi. Compression of this Artery will sometimes control nasal hemorrhage [12]. The Superior labial or coronary vein begins as a plexus in the Orbicular is muscle of the upper lip, passes with the coronary Artery and drains into the facial vein a little below the alae of The nose of the veins which drain the lower lip the inferior Coronary empties into the facial a little below the superior Labial; but the chief branch from the lower lip descends as a Rule to the submental vein, thence to the facial or often to the Anterior jugular [9,10,12]. The nerves supplying the lower lip are derived from the Mental which emerges from the bone through the mental Foramen and sends large twigs to the mucous membrane, the Integument and the fascia of the lip and chin. Some of the Lymphatic vessels of the lips pass to a gland just above the Body of the hyoid bone, while others pass to the sub Maxillary glands. The labial glands are in the submucous Layer of the lips around the orifice of the mouth. They secrete A mucous fluid. Mucous retention cysts develop when the Ducts of these glands become occluded [12].

Lips Disorder:-

Swelling:-An allergic reaction can make the lips swell. The reaction may be caused by sensitivity to certain foods or Beverages, drugs, lipstick, or airborne irritants. When a cause Can be identified and then eliminated, the lips usually return To normal. But frequently, the cause of the swelling remains a Mystery. A condition called hereditary angioedema may Cause recurring bouts of swelling. Nonhereditary conditions Such as erythema multiforme, sunburn, cold and dry weather, Or trauma may also cause the lips to swell.

Sun Damage:-Sun damage may make the lips, especially The lower lip, hard and dry. Red speckles or a white filmy Look signal damage that increases the chance of subsequentcancer. This type of damage can be reduced by covering the Lips with a lip balm containing sunscreen or by shielding the Face from the sun's harmful rays with a wide-brimmed hat.

Discoloration:-Freckles and irregularly shaped brownish Areas (melanotic macules) are common around the lips and May last for many years. These marks are not cause for Concern. Multiple, small, scattered brownish black spots may Be a sign of a hereditary disease called Peutz-JeghersSyndrome, in which polyps form in the stomach and Intestines. Kawasaki disease, a disease of unknown cause that Usually occurs in infants and children 8 years old or younger, Can cause dryness and cracking of the lips and reddening of The lining of the mouth.

Sores:-A raised area or a sore with hard edges on the lip May be a form of skin cancer. Other sores may develop as Symptoms of other medical conditions, such as oral herpes Simplex virus infection or syphilis. Still others, such as Keratoacanthoma, have no known cause.

ADVANTAGES OF LIP BALM :-

a. Lip balms help to protect the natural health and beauty of The lips.
b. Sun block lip balms are proved to prevent ultraviolet rays From hurting the lips.
c. They are not gender specific products and both men and Women can use them.
d. Lip balm products help to protect lips affected by cold Sores, chapping and dryness.
e. Contact of the product with the skin will not cause a Sensation of friction or dryness, and should allow the forming Of a homogeneous layer over the lips in order to protect the Labial mucous susceptible to environmental factors such as UV radiation, dryness and pollution.
f. It refreshed, renewed and also addresses lip-related Symptoms resulting from colds, flu and allergies.
g. The use of natural lip cosmetic to treat the appearance of The face and condition of the skin.

2).LITERATURE REVIEW:-

1).Miss Nilofer Shaikh:- etal 2018.

Lip balm is a product which is put on lips so they will not dry when a person is outdoors in the Sun and wind. Lip balm is usually Made from petrolatum. Some types of lip balm also include Sunscreen to protect the lips from sunburn. Lip balm comes in tubes And small pots with screw-On lids. Lip balm is often used during the winter, because the cold winter winds can dry out a Person's Lips so that they are cracked and hurting (this is called having "chapped" lips).

2). D. Bharanidharan:-etal 2022.

Cosmetics are important in today's lifestyle. To embrace a more natural way of living, Practically every industry is currently embracing green, including the cosmetics sector. For a Healthy lifestyle, natural foods, herbal remedies, and natural healing techniques are the best Options. There is also a high demand for organic vegetable products. The use of herbal Cosmetics in personal care products has multiplied several times.[1] With regard to their Consistency, herbal extract-based cosmetics for skin and hair care are highly well-liked. TheTerm "herbal" denotes safety in contrast to synthetic products, which have several negative Impacts on people's health.

3). P. Telange Patil:-etal 2021.

The lip-care products for everyday basis contains harmful heavy metals and preservatives Other than leaching through The pores on your lips, these heavy metals and other chemicals Can also be accidently ingested. Lip balm formulations are most Widely used to enhance the Beauty of lips and add glamour touch to the make-up. Lip balms offer a natural way to maintain And Promote healthy lips. Current cosmetic lip products are

based on use of enormous chemical Ingredients which has a various side Effects. Hence, an attempt has made to study the natural Ingredients which is used to formulate the natural lip balm. The natural Lip balm can made Using naturally occuring base ,oils,colour, flavouring agent etc. Organic lip balm nourishes the Lips and help to Get hydrated and protect lips which was affected by the dryness. Organic lip Balm can be better option for treatment of various Lip issues. Beetroot lip balm was found to Posses the antioxidant.

4). Mayuri Kadu:- etal 2014.

Cosmetic plays a significant role in today's life style. Moreover current trend is going green in almost all industries Including cosmetics to adopt more natural way of life. The Preferable choices are natural food, herbal medicines and Natural curing practices for healthy life and also there is much Demand for the organic vegetable products. The usage of Herbal cosmetics has been increased to many folds in Personal care system. Natural products have been used for Folk medicine purposes throughout the world for thousands of Years. Many of them have pharmacological properties such as Antimicrobial, anti-inflammatory and cytostatic effects. They Have been recognized as useful for human medicine. Herbal extracts are cultivated all over the world and is prime Name in horticulture sector. Cosmetics made up of herbal Extracts for skin care and hair-care are very popular for their Reliability.

5). Lorenzo Martini:-etal 2014.

Photosensitization occurs when skin (especially areas Exposed to light and lacking significant protective hair, wool, Or pigmentation) becomes more susceptible to ultraviolet light Due to the presence of photodynamic agents. Photosensitization Differs from sunburn and photodermatitis, as both of these Condition result in pathologe skin changes without the Presence of a pho todymmic agent. The trend of the new Organic Cosmetic (and peculiarly the modern "Juice Beauty Care") need To se manifold plants for extmeting the most aniple selection Of natuml juices that are useful as pigments in order to display Eye-shadows, foundations, pencils, fards aux paupiers, coloured Crearms and pastes, but even for yielding biological colorants.

3) AIM AND OBJECTIVE.

AIM:-Evaluation & Formulation of lip balm from beta vulgaris.

OBJECTIVE:-

1) Gives natural moisture to lips.
2) It makes the lips soft.
3) Repairs dry and chapped lips.
4) Lip balm restore original colour of lips.
5) Prevent lips dryness.

4) PLAN OF WORK :-

Step 1:- Collection Of herbal drug.
Step 2:- Authentication of drug.
Step 3:- Method of preperation**.**

1) Weight variation.
2) Mixing.
3) Seiving.

Step 4:- Evaluation of product.

1) PH.
2) Viscosity.
3) Moisture content.

Step 5:-Collection & Storage.

4) PLANT / DRUG PROFILE :-

Beet root:-'Beta vulgaris' (Beet root juice).
Therapeutic class:- Beta vulgaris. Sikn care ingredient.
Synonyms:- Beet, Sugar beet, Chard, Genus beta, Root vegetable.
Biological source:- It is obtaine from root of beet root plant.
Family:- Chenopodiaceae.
Origin:- Europe and Africa.
Chemical Constituents:- Minerals, Amino acids, Phenolic acid, Flavonoid, Betaxanthin, and Betacyanin.
Pharmacognostic profile:-
Colour:- Deep Red or Purple.
Odour:- Strong scent.

Taste :- Sweet.

Fig 1:- Beet Root.

Composition:- A class of compounds cuties belacyanins a responsible for the red colour beetroot. The major compresponsible for the betonin this can be extracted from beetroots and Has the number 02 Vulgarente se ather compounds found beetroots that contribute The same chemical compounds that are responsible for the red colour beetroot are also responsible olour of beetroot for its abrity to turn urine red for the red coloBetonide is the compound that causes tresturia It has been suggested that the pigment is usually degraded by stomachiacid, explaining why the affect is not always evident only when the stomach orld'salf is not few enough to degrade me The pigments pigments are are forge enoughcomsuets present in urma However, if bos zoo been sggested that genetic factors could fluence whether people experience beaturin.
Mechanism of action:- Betalains are strong antioxidant agents that protect the body from oxidative stress, helping reduce inflammation, whereas betaine is crucial for fluids and electrolytes balance, and studies suggest it can help enhance athletic performance. Nitrate promotes blood vessels relaxation, lowered blood pressure, and better blood flow.
Uses of beet root:-
Slows ageing.
Brightens Skin.
Hydrates Skin.
Anti-inflammatory Properties.
Improve digestive health.
Support brain health.
Have some anti-cancer properties.

6) MATERIAL & METHODS:-

1) Beet root juice:-

Ingredients Name:- Beet Root juice.

Therapeutic class:- Beta vulgaris. Skin care ingredients.

Fig 2:- Beet Root juice.

Composition:-A class of compounds cuties belacyanins a responsible for the red colour beetroot. The major compresponsible for the betonin this can be extracted from beetroots and Has the number 02 Vulgarente se ather compounds found beetroots that contributeThe same chemical compounds that are responsible for the red colour beetroot are also responsible olour of beetroot for its abrity to turn urine red for the red coloBetonide is the compound that causes tresturia It has been suggested that the pigment is usually degraded by stomachiacid, explaining why the affect is not always evident only when the stomach orld'salf is not few enough to degrade me The pigments pigments are are forge enoughcomsuets present in urmaHowever, if bos zoo been sggested that genetic factors could fluence whether people experience beaturin.

Mechanism of action:-

Betalains are strong antioxidant agents that protect the body from oxidative stress, helping reduce inflammation, whereas betaine is crucial for fluids and electrolytes balance, and studies suggest it can help enhance athletic performance. Nitrate promotes blood vessels relaxation, lowered blood pressure, and better blood flow.

2) Coconut oil:-

It Contains nourishing fatty acids and linoleic acid which help retain the moisture in the skin and help protect and hydrate your skin.

Fig 3:-Coconut oil.

Composition:-

Coconut oil primarily consists of saturated fats, with over 90% of the fatty acids being saturated. The main types of saturated fats in coconut oil are medium-chain triglycerides (MCTs), specifically lauric acid, caprylic

acid, and capric acid. Lauric acid is the most abundant fatty acid in coconut oil, making up about 47–53% of its composition.In addition to these fatty acids, coconut oil also contains small amounts of mono- and polyunsaturated fats, as well as trace amounts of vitamins E and K. It's important to note that while coconut oil is high in saturated fats, its unique composition of MCTs has led to various health claims and uses in cooking, skincare, and other applications.

Mechanism of action:-

Coconut oil is a popular natural remedy for skincare, believed to offer several benefits due to its unique composition. The mechanism of action for coconut oil on the skin involves its chemical constituents and their interaction with the skin's physiology:

Moisturization:- Coconut oil is rich in fatty acids, especially lauric acid, which has emollient properties. When applied to the skin, these fatty acids help to trap moisture, preventing water loss and keeping the skin hydrated. This can be particularly beneficial for dry or dehydrated skin.

Antimicrobial activity:-Lauric acid, along with other fatty acids present in coconut oil, exhibits antimicrobial properties. It can help inhibit the growth of bacteria, fungi, and viruses on the skin, making coconut oil a potential treatment for certain skin infections such as acne, eczema, and fungal infections.

Anti-inflammatory effects:-Some research suggests that coconut oil may have anti-inflammatory properties when applied topically. This can help soothe irritated or inflamed skin conditions such as eczema, dermatitis, or sunburn.

Antioxidant protection:- Coconut oil contains antioxidants, such as vitamin E, which help neutralize free radicals that can damage skin cells and contribute to premature aging. By protecting the skin from oxidative stress, coconut oil may help maintain a youthful appearance and reduce the risk of wrinkles and fine lines.

Skin barrier enhancement:-The fatty acids in coconut oil can help strengthen the skin's natural barrier function. By forming a protective layer on the skin's surface, coconut oil helps prevent moisture loss and protects against environmental aggressors like pollution and UV radiation.

3) Almond oil:-

To use almond oil for your lips, simply apply a small amount to clean, damp skin and massage it in gently until absorbed. You can use it on its own or mix it with your favorite moisturizer or essential oils for added benefits.

Fig 4:-Almond oil

Composition:-

Almond oil composition varies depending on factors like the type of almonds used (sweet or bitter) and the method of extraction. However, generally, almond oil is primarily composed

Fatty acids:-Almond oil contains mainly unsaturated fatty acids, including oleic acid (omega-9) and linoleic acid (omega-6). These fatty acids contribute to its moisturizing and emollient properties.

Vitamin:-Almond oil contains mainly unsaturated fatty acids, including oleic acid (omega-9) and linoleic acid (omega-6). These fatty acids contribute to its moisturizing and emollient properties.

Minerals:-Almond oil contains trace amounts of minerals such as zinc, magnesium, and potassium, which can nourish and replenish the skin.

Protein:-Almond oil contains proteins that can help repair and strengthen the skin and hair.

Mechanism of action:-

Almond oil is a popular natural ingredient in skincare due to its numerous benefits. Its mechanism of action for skin health involves several factors:

Moisturization:-Almond oil is rich in fatty acids, such as oleic acid and linoleic acid, which are excellent moisturizers. These fatty acids help to lock in moisture, keeping the skin hydrated and supple. The emollient properties of almond oil make it effective for soothing dry and irritated skin.

Gentle cleansing:-Almond oil can also be used as a gentle cleanser to remove makeup and impurities from the skin without stripping away its natural oils. It can be especially beneficial for those with sensitive skin who may react to harsher cleansing agents.

4) Beeswax:-Beeswax is perhaps the most essential ingredient in our lip balms. This is because it contains Natural moisturizers that lock in Moisture from the air and help keep the skin looking firm and Plump.

Fig 5:-Beeswax

Composition of beeswax:-

Pure beeswax from Apismellifera consists of at least 284 different compounds. Not all have been completely identified but over 111 are volatile.At least 48 compounds were found to contribute to the aroma of beeswax. Quantitatively, the major .compounds are saturated and unsaturated monoesters, diesters, saturated and unsaturated hydrocarbons, free acids and hydroxy polyesters.The composition of wax from Asian honeybee species is much simpler and contains fewer compounds in different proportions (Phadke et al., 1969, 1971; Phadke and Nair, 1970, 1973 and Narayana, 1970).

Mechanism of action:-

Beeswax as an emulsifying agent of cosmetics provides elasticity, plasticity and increases skin adhesiveness. Due to its properties, it is a valuable ingredient in the manufacture of lipsticks, sticks, and creams.

5) Vitamin E capsule:-

Vitamin E can also help to close up those painful cracks in the skin that are caused by dryness And cold weather. By applying the Award-winning AM/PM Tinted Lip Balm with Vitamin E, You can seal up these cracks and keep the skin of your lips soft, supple.

Fig 6:-Vitamin E capsule.

Composition of Vitamin E capsule:-

Vitamin E is fat soluble, so dietary supplement products are usually in the form of the vitamin, esterified with acetic acid to generate tocopheryl acetate, and dissolved in vegetable oil in a softgel capsule. For alpha-tocopherol, amounts range from 100 to 1000 IU per serving.

Mechanism of action:-

The mechanism of vitamin E (alpha-tocopherol)-mediated low-density lipoprotein lipid peroxidation. It has been found that alpha-tocopherol mainly inhibits the production of new free radicals, while gamma-tocopherol traps and neutralises the existing free radicals.

6) Rose water:-

Rose water is useful as a perfume for good fragrance.

Fig 7:-Rose water.

Composition:-

Water:-The primary component of rose water is, of course, water. It serves as the solvent for extracting the beneficial compounds from the rose petals.

Essential oil:-Rose water contains small amounts of essential oils extracted from rose petals. These oils contribute to the distinctive fragrance of rose water and may also provide some of its therapeutic benefits. The main components of rose essential oil include geraniol, citronellol, nerol, and various other aromatic compounds.

Vitamin:-Rose water may contain trace amounts of vitamins, including vitamin C, vitamin A, and vitamin E. These vitamins contribute to the nourishing and rejuvenating properties of rose water for the skin.

Fragrance of compound:-Apart from essential oils, rose water may contain other fragrance compounds that contribute to its floral scent. These compounds are responsible for the pleasant aroma associated with rose water.

Acids:-Rose water may contain organic acids, such as citric acid and malic acid, which contribute to its slightly acidic pH. This pH level is similar to that of healthy skin and helps to maintain the skin's natural balance.

Mechanism of action:-

Rose water has been used for centuries as a natural beauty product, particularly for skin care. Its mechanism of action on the skin involves several factors

PH Balancing:-Rose water has a slightly acidic pH, which is similar to the skin's natural pH. Using rose water on the skin helps to balance its pH levels, which is essential for maintaining healthy skin barrier function.

Antibacterial properties:-Rose water has natural antibacterial properties that can help cleanse the skin and prevent bacterial growth, making it beneficial for acne-prone skin. Overall, the mechanism of rose water for skin involves hydrating, balancing pH, reducing inflammation, providing antioxidant protection, tightening pores, and cleansing the skin, leading to healthier, more radiant skin.

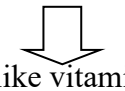
METHOD OF PREPERATION :-

Following steps involved in preparation of lip balm from Beta vulgaris.

Collect the Beet root and wash with water.

Take60 ml beetroot juice add 30 gm of coconut oil.

Add beeswax melt in a water bath at 55-60ºC.



Add all other ingredients like vitamin E, Rose water & stirred continuously.

A mixture is poured in a container air dried at room temperature.

The container put into the ice bath for 10 minutes.

7) EVALUATION OF LIP BALM:-

Texture:- The formulated lip balm sample was placed on the base of the AMETEK Brookfield CT-3 Texture Analyzer. Cylinder probe (TA39) Was attached to the load cell since it is the most suitable probe for cosmetic products.

Colour:-The colour analysis of lip balms was evaluated using the Konica Minolta CR-400 chroma meter. This chroma meter has three Indicators which contributing to lightness , redness and yellowness of the tested sample.

PH:-In this study, the pH meter model HI-2211-01 was used to measure the pH value for all formulated lip balm. The pH meter was Calibrated using a buffer solution before continuing the pH measurement of the lip balm. The pH value for the lip balm sample was Measured and recorded. The pH of lip balm was determined in order to investigate the possibility of any side effects. The pH study Was carried out by dissolving 1gm of sample into 100 ml water. The pH measurement was done using pH meter. pH of lip was near neutral.

Greasinesse:- Greasiness test was examined to identify the amount of oil in the formulated lip balm. In this study, 4 g of lip balm was placed on the filter paper, and the sample was left at room temperature for 24 hours.

Stability testing:-Three best formulations that showed the nearest values of all physicochemical properties with the commercial lip balm were selected And scrutinised for their stability. The stability test for lip balms was conducted for 4 weeks to evaluate the sustainability of them when placed at two different Temperatures (chiller, 4 ± 1°C and room temperature, 27 ± 1°C). The other physicochemical tests, including pH, colour and texture Of the lip balm were conducted for every week of the stability test period. Prepared lip balm was placed for accelerated stability studies at room temperature (25.0+-3.00C), refrigeration (4+-2.00C) and oven temperature (40.0+-2.00C) for 30 days .After 30 days it was again characterized for organoleptic properties, Melting point, spreadability and pH.

Melting point:-The sample of lip balm is taken in a glass capillary whose one end was sealed by flame. The capillary containing Drug dipped in liquid paraffin inside the melting point apparatus . Melting was determined and melting point was reported.

Organoleptic properties:-The formulation was studied for physical appearance, colour and odour. The presence of coarse particles and Consistency were used to evaluate the texture and homogenecity of the formulations.

Skin Irritation test:- It is carried out by applying lip balm on the skin for 10 min.

Test of speradability:- The test of spreadability consisted of applying the product repeatedly onto a glass slide to visually observe The uniformity in the formation of the projective layer and whether the stick

fragmented, deformed or broke during Application.Prepared lip balm , initially has shown G- Good: uniform, no fragmentation, perfect application, with any deformation at room temperature.

Effectiveness test on papers:-Finally, after taking out the lip balm from chiller, it was tested by applying the lip balm on a piece Of paper. This process is important to determine colour obtained from different sources. It also can determine the effectiveness of the colour product.

Skin sensitivity:- It was carried out by applying the product in the form of a patch on the skin for 30 min and observe the reaction As- N -No reactionR-Redness of the skin Itching, swelling , inflammation.

8).RESULT & DISCUSSION:-

Melting point:- Melting point of lip balm was found to be in the range of 68ºc- 69ºc, which matches the appropriate melting point Of between 65º-75ºc.

Organoleptic properties:- Prepared lip balm has shown cream colour with pleasant odour.

Observation Table :-

Sr.no.	**Parameter**.	**F1.**	**F.2**	**F3.**
1.	Colour	Yellow	Light cream	Cream
2.	Odour	Strong	Scent	Pleasant
3.	Apperance	Good	Excellent	Smooth

Table no.1:- Observation.

Test of Speradibility:- Prepared lip balm has initially shown G- Good : uniform , no fragmentation , perfect application , without Any deformation at room temperature.

Speradibility Test:-

Sr.no.	**Formulation.**	**Speradibility.**
1.	F1	Uniform
2.	F2	No fragmentation
3.	F3	Perfect application

Table no.2:- Speradibility Test.

Measurement of pH:- pH of lip balm was near to neutral pH i.e. 7.2, this would not cause any irritation to lips.

PH Test:-

Sr.no.	**Formulation.**	**PH.**
1.	F1	7.5
2.	F2	7.4
3.	F3	7.2

Table no.3:- PH Test.

The other evaluation study Confirms the advantages of using natural ingredients in this lip balm. Further, beetroot a Natural lip balm and vitamin E an antioxidant provides added advantages to the formulation. Further studies like in-vivo are required to confirm the safety and efficacy of the formulated Lip balm. Cosmetics chemists choose from thousands of ingredients when they create new products, but they are always careful to select ones With chemical properties that enhance the look, feel, and use of the product they are making.

9).CONCLUSION & SUMMERY:-

The formulated lip balm shows good stability at 40 ˚C and it is easily spreadable and Uniform. The natural constituents present in lip balm provide fewer side effect than the Commercially available ones. The pH of the lip balm matches with that of the skin so it is Compatible with the skin. Thus the results signifies that the natural ingredients used in lip balm produce good aesthetic property with a more stable product. The other evaluation study Confirms the advantages of using natural ingredients in this lip balm. Further, beetroot a Natural lip balm and vitamin E an antioxidant provides added advantages to the formulation. Further studies like in-vivo are required to confirm the safety and efficacy of the formulated Lip balm. Cosmetics chemists choose from thousands of ingredients when they create new products, but they are always careful to select ones With chemical properties that enhance the look, feel, and use of the product they are making. For instance, no one wants lip balm to Be too hard, which is why most homemade lip balm recipes call for some type of oil or butter. Oils are generally thick, viscous Liquids at room temperature and are usually emollients,

meaning that they soften and smoothen the skin. Butters are another kind Of emollient; they are soft, but not liquid, at room temperature. On the other hand, a super soft, runny lip balm would be too messy, So waxes, like beeswax, which are solids at room temperature, are added to thicken the recipe. The "perfect" product means getting Just the right ratio of emollients to waxes. The aim of current research work was to prepare lip balm by using maximum possible natural ingredients . Mainly Beetroot extract chosen as a colouring agent, rose water used as a flavouring agent , vitamin E capsule used as an antioxidant, Almond oil was used as moisturizing agent.

REFERENCE:-

1. SitiNural Huda Mohammad Azmin , NurshafieeraIdayu Mat Jaine and MohdShukri Mat NorPhysicochemical and sensory evaluation of moisturising lip balm using natural pigments from Beta vulgaris. Article in Cogent Engineering : July 2020.
2. Pooja Thakur and VinaykumarKadibagil , Evaluation of Yastimadhuadi lip balm for its effect on Osthasphutana. International Journal of Biology, Pharmacy and Allied Sciences (IJBPAS) Dec.2021
3. JadhavApurvaVinodkumar , GodseKritiChandrahar , DeshmanePrajaktaPradip . Formulation and Evaluation of Organic Lip balm . Indo Americal Journal of Pharmaceutical Research , 2019.
4. IrmavatiAkma Abdul Hapiz , Jemima Japakumar , JivinthiranJayagobi , Mohammad AzfarJamaluddin and SharmilaArumugam . Production of lip balm from Natural Dyes . 3rd International Conference of Computer, Environment, Agriculture, Social Science, Health Science, Engineering and Technology (ICEST)2018.
5. A.R. Fernandes , M.F.Dario , C.A.S.O. Pinto, T.M. Kaneko , A.R. Baby , M.V. R. Velasco , Stability evaluation of organic lip balm.
6. Stefan B., Beeswax : Production, Properties, Composition, Control Beeswax book, chapter, 2016: 1: 1-19.
7. Kokate CK , Purohit AP, Gokhale SB Textbook of Pharmacognosy , 49th edition Pune : NiraliPrakashan ,2014.
8. P.L. Kole, H. R. Jadhav, P. Thakurdesai, A.N. Nagappa , Cosmetic Products of Herbal extracts , Natural Product Radiance
9. Grindlay D , Reynolds T. The Aloe vera Phenomenon . A review of the properties and modern uses of the leaf parenchyma gel 1986.
10. Savalkar M.B. et al . Formulation and evaluation of Herbal Lipstick using Amaranthusdubis, J. pharm.Res 2018.
11. Rizvi S , Syed Tasleem , Abbas S. "The role of Vitamin E in Human health and some diseases" SQU Medical Journal , 2014.
12. Suruchi. K., Review on natural lip balm International Journal of Research in Cosmetic Science Universal Research Publications, 2014
13. V.N. Meena Devi , V.N. Ariharan and P.P. Nagendra Annatto: (2013) Eco- friendly and Potential source for natural dye , International Research Journal of Pharmacy 2018.
14. Miracle Herbs, 2019.
15. Jayshri C. Pawar , Ujjwala Y. Kandekar , Vijaya S. Vichare and Pranali N. Ghavane Production and Analysis of Lip balm using Herbal Resources- Journal of Pharmaceutical Research International 33 (59A) : 540-546,2021 Article No. JDRI 79884.
16. Tanvi Mehta , Megha Gandhi , Mina Sinhar and Dhara A. Chavda . Studies on Formulation and evaluation of Organic Honey lip balm World Journal of Pharmacy and Pharmaceutical Sciences.
17. Kapoor VP. Herbal Cosmetics for Skin and Hair Care [Internet]. NIScPR Online Periodicals Repository, 2005; 4: 306–14. Available.
18. Kole PL, Jadhav HR, Thakurdesai PA, Nagappa AN. Cosmetics Potential of Herbal Extracts, 2005.
19. Jain M, Shriwas S, Dwivedi S, Dubey R. Design, development and characterization of Herbal lipstick containing natural ingredients. Am J Life Sci Res, 2017.
20. Sharma P.P. Cosmetics- Formulation, manufacturing, and quality control. VandanaPublications Pvt. Ltd, 2014.
21. Vineetha K, Koland M. Investigation of a Biodegradable Injectable, 2017.

22. Suthar MH, Singh V, Jain P. Formulation and evaluation of herbal lipstick from Pomegranate pigments. J PharmacognPhytochem, 2022.
23. Azmin SNHM, Jaine NIM, Nor MSM. Physicochemical and sensory evaluations of Moisturizing lip balm using natural pigment from Beta vulgaris. Cogent Eng, 2020.
24. M. Kadu, S. Vishwasrao, and S. Singh, International Journal of Research in Cosmetic Science 2018.
25. V.P. Kapoor, Natural Product Radiance 4, 306–314 (2005). Google Scholar 2005.
26. S. Deshmukh, M. Chavan, M. Sutar and S. Singh, Int J Pharm Bio Sci. 4, 139–144 (2013).
27. B. J. Kukreja and V. Dodwad, International Journal of Pharma and Bio Sciences 3, 46–52 (2012).
28. M.A. Mundo, O.I. Padilla-Zakour and R.W. Worobo, International Journal of Food Microbiology 97, 1–8 (2004).
29. Chaudhari, N. P., Chaudhari, N. U., Chaudhari, H. A., Premchandani, L. A., Dhankani, A. R., &Pawar, S. P. (2018).
30. Dhawan, D., Sharma, S., Ph, I., & Scholar, D. (2019).
31. Cosmetics industry applications | Food Technology Corporation. (2019).