

Chemistry of Cosmetics and Hygiene Products

CREDIT DISTRIBUTION, ELIGIBILITY AND PRE-REQUISITES OF THE COURSE

Course title & Code	Credits	Credit distribution of the course			Eligibility criteria	Pre-requisite of the course (if any)
		Lecture	Tutorial	Practical /Practice		
Chemistry of Cosmetics and Hygiene Products	2	0	0	2	Class XII with Science	NIL

Learning Objectives

- To introduce the concept of cosmetics in terms of chemistry and their formulation.
- To make students understand the role of each ingredients in the preparation of the cosmetic products.
- To give an idea about the role of herbal ingredients in the making of any cosmetic product.

Learning Outcomes

After studying this course, the student will:

- Be familiar with the basic principles of various cosmetic formulations
- Be aware of different ingredients and their roles in cosmetic products.
- Appreciate the role of herbal ingredients in various cosmetic products
- Use safe, economic and body-friendly cosmetics
- Prepare new innovative formulations to achieve the aimed efficacies and effects

SYLLABUS

Practicals/Hands-on-training

60 hours

1. Definition, History and Classification of cosmetic & cosmeceutical products.

Skin Care Products: Basic structure and function of skin. Principles of formulation of skin care products. Role of herbs in Skin Care: Aloe and turmeric. General Ingredients and preparation of

(a) Preparation of Talcum powder (chemical based and herbal)

(b) Face cream/ vanishing cream/ cold cream/ suntan cream/lather shaving cream (any two)

(c) Body lotion

2. Hair Care Products: Basic structure of hair and classification of hair. Principles of formulation of Hair care products. Types of shampoo and conditioners. Role of herbs in Hair care: Henna and amla. Role of primary and secondary surfactants in shampoo. General Ingredients and preparation of

(a) Shampoo (chemical based and herbal)

(b) Conditioners

3. Hand Care and hygiene Products: Principles of formulation of hand sanitizers and hand wash. General Ingredients and preparation of:

(a) Hand wash

(b) Hand sanitizer

4. Nail preparation: Structure of nail, Nail lacquers, Nail polish remover. General Ingredients and preparation of:

(a) Nail polish and nail polish remover

5. Personal hygiene products: Total fatty matter, alkali content and pH of soaps. Bathing soap and toilet soap. Antiperspirants and deodorants. General Ingredients and preparation of

(a) Soaps

(b) Cream Soaps

6. Oral hygiene products: Common problem associated with teeth and gums. Role of herbs in oral care: Neem and clove. Principles of formulation of Oral hygiene products. Flavours and essential oils. General Ingredients and preparation of

(b) Tooth powder (chemical based and herbal)

(c) Tooth paste

Essential Readings

- Barel, A.O.; Paye, M.; Maibach, H.I. (2014), **Handbook of Cosmetic Science and Technology**, CRC Press.
- Garud, A.; Sharma, P.K.; Garud, N. (2012), **Text Book of Cosmetics**, Pragati Prakashan.
- Gupta, P.K.; Gupta, S.K. (2011), **Pharmaceutics and Cosmetics**, Pragati Prakashan
- Butler, H. (2000), **Poucher's Perfumes, Cosmetic and Soap**, Springer

Suggestive Readings:

- Flick, E.W. (1990), **Cosmetic and toiletry formulations**, Noyes Publications / William Andrew Publishing.
- Natural Ingredients for Cosmetics; EU Survey 2005
- Formulation Guide for cosmetics; The Nisshin OilliO Group, Ltd.

- Functional Ingredients & Formulated Products for Cosmetics & Pharmaceuticals; NOF Corporation

Examination scheme and mode:

Evaluation scheme and mode will be as per the guidelines notified by the University of Delhi