

## B. PHARMACY

### Syllabus ♦ Semester-8

**Elective subject-7** name with code: **13PH0809 Cosmetic Science**

#### Course Objective

This subject deals with cosmetic products, cosmetic excipients, skincare products and their methods of preparation and evaluations.

#### Course Outcomes

Upon completion of the course, the student shall be able to

1. Know the regulations about cosmetics and cosmetic excipients.
2. They will be knowing the preparations of various skincare products like creams, antiperspirants, deodorants, hair care products etc.
3. They also know about the role of herbs in sunscreens.

#### Teaching and assessment scheme:

Teaching Scheme (Hours)			Credits	Theory/ Tutorial Marks			Practical Marks		Total Marks
Theory	Tutorial	Practical		CSE	IA (I)	ESE (E)	TW	Viva (V)	
3	1	0	4	10	15	75	0	0	100

#### Theory syllabus

**Teaching hours: 45 Hours**

##### Unit-1

**10 Hours**

**Classification of cosmetic and cosmeceutical products:** Definition of cosmetics as per Indian and EU regulations, Evolution of cosmeceuticals from cosmetics, cosmetics as quasi and OTC drugs. Cosmetic excipients: Surfactants, rheology modifiers, humectants, emollients, preservatives. Classification and application. Skin: Basic structure and function of the skin. Hair: Basic structure of the hair. Hair growth cycle. Oral cavity: Common problem associated with teeth and gums.

##### Unit-2

**10 Hours**

**Principles of formulation and building blocks of skincare products:** Face wash, Moisturizing cream, Cold Cream, Vanishing cream and their advantages and disadvantages. Application of these products in the formulation of cosmeceuticals. Antiperspirants & deodorants: Actives & mechanism of action. Principles of formulation and building blocks of Haircare products: Conditioning shampoo, Hair conditioner, anti-dandruff shampoo. Hair oils. Chemistry and formulation of Para-phenylene diamine based hair dye. Principles of formulation and building blocks of oral care products: Toothpaste for bleeding gums, sensitive teeth. Teeth whitening, Mouthwash.

##### Unit-3

**10 Hours**

**Sun protection, classification of sunscreens and SPF:** Role of herbs in cosmetics: Skin Care: Aloe and turmeric Haircare: Henna and amla. Oral care: Neem and clove. Analytical cosmetics: BIS specification and analytical methods for shampoo, skin cream and toothpaste.

##### Unit-4

**8 Hours**

**Principles of cosmetic evaluation:** Principles of sebumeter, corneometer. Measurement of TEWL, Skin Color, Hair tensile strength, Hair combing properties Soaps, and syndet bars. Evolution and skin benefits.

##### Unit-5

**7 Hours**

**Oily and dry skin:** causes lead to dry skin, skin moisturisation. Basic understanding of the terms Comedogenic, dermatitis. Cosmetic problems associated with hair and scalp: Dandruff, Hair fall causes. Cosmetic problems associated with skin: blemishes, wrinkles, acne, prickly heat and body odour. Antiperspirants and Deodorants- Actives and mechanism of action.

**Tutorials will be based on the above syllabus.**

**Teaching hours: 15 Hours**

#### Recommended references (Latest edition)

1. Harry's Cosmeticology, Wilkinson, Moore, Seventh Edition, George Godwin.
2. Cosmetics – Formulations, Manufacturing and Quality Control, P.P. Sharma, 4th Edition, Vandana Publications Pvt. Ltd., Delhi.
3. Textbook of cosmetology by Sanju Nanda & Roop K. Khar, Tata Publishers.
4. Textbook of Cosmetics by M. Vimaladevi.