

Subject Code: BP809ET	Subject Title: COSMETIC SCIENCE -THEORY
Pre-requisite Subject	- NONE -

Scope: This subject is designed to impart fundamental knowledge on cosmetics.

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

1. To understand key building blocks for various formulations
2. To know current technologies in the market
3. To know various key ingredients and basic science to develop cosmetics and cosmeceuticals
4. To know scientific knowledge to develop cosmetics and cosmeceuticals with desired Safety, stability, and efficacy.

Teaching Scheme (Hours per week)				Evaluation Scheme (Marks)		
Lecture	Tutorial	Practical	Credit	Theory (T)		Total Marks
				University Assessment	Continuous Assessment	Theory
3	1	NA	4	75	25	100

Subject Contents			
Sr. No.	Topic	Total Hours	Weight (%)
1	UNIT - I 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 skin. Hair: Basic structure of hair. Hair growth cycle. Oral Cavity: Common problem associated with teeth and gums.	10	22
2	UNIT - II Principles of formulation and building blocks of skin care products: Face wash, Moisturizing cream, Cold Cream, Vanishing cream and their advantages and disadvantages. Application of these products in formulation of cosmeceuticals. Anti- antiperspirants & deodorants- Actives & mechanism of action. Principles of formulation and building blocks of Hair care 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.	10	22
3	UNIT - III Sun protection, Classification of Sunscreens and SPF. Role of herbs in cosmetics:	10	22

	Skin Care: Aloe and turmeric Hair care: Henna and amla Oral care: Neem and clove Analytical cosmetics: BIS specification and analytical methods for shampoo, skin cream and toothpaste.		
4	UNIT - IV 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.	08	18
5	UNIT - V Oily and dry skin, causes leading 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 odor. Antiperspirants and Deodorants- Actives and mechanism of action	07	16

Recommended Books: (Latest Editions)

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. Text book of cosmeticology by Sanju Nanda & Roop K. Khar, Tata Publishers