



D.B.F. Dayanand College of Arts and Science, Solapur.

Mahatma Anand Swami Skill Development Centre

Department of Chemistry

Name of Course: Certificate course in “Chemistry of Cosmetics and Perfumes”

Duration of the Course: 6 Months

Total Credits: 2

SYLLABUS FOR

Certificate course in “Chemistry of Cosmetics and Perfumes”

Structure of the Course:

- Skill Development Course in **Chemistry of Cosmetics and Perfumes** will be implemented for **B.Sc. II**.
- There will be one theory paper of **30 marks** and Practical of **20 marks**.

Class	Paper	Total Lectures	Examination Marks	Total Credits
B.Sc.-II	Theory	15	30	1
	Practical	10	10	0.5
	Project & Oral	05	10	0.5
Total		30	50	2

- Practical examination is 20 (10 + 10) marks and Duration of exam is **1.00 hr**.
- Theory paper has **30 marks** for examination.
- The Project may be on laboratory works/Field work/Industrial visit for 10 marks.
- The course is College Affiliated; the certificate of completion of course will be issued by college and submitted to university for fulfilment of curriculum.

Objective of the course-

1. To impart the theoretical and practical knowledge on basic principles of cosmetic and perfume chemistry.
2. To introduce students of Chemistry to the world of cosmetic chemistry.
3. To understand the cosmetics, cosmeceuticals.
4. To understand the cosmetics for the skin care products.
5. To get insight into the cosmetics skin, hair and nail care products.
6. To understand the basics of perfumes and perfume chemistry.
7. To provide a better knowledge of the characterization techniques for perfumes and cosmetics

Outcome of the course

1. Student will acquire the basic knowledge of cosmetic and perfume related to Chemistry.
2. Student will obtain the theoretical and practical knowledge cosmetic and perfume chemistry.
3. Student will understand the cosmetics for the skin care, hair and nail care products.
4. Student will expertise in the characterization techniques for perfumes and cosmetics.

Syllabus for Theory Paper

Chemistry of Cosmetics and Perfumes

Contact Hours- 15

Unit I- COSMETICS

05

Introduction to cosmetics: Definition, history and application. Cosmetology, Classification of cosmetics. Physiological effects of cosmetics, Modern developments in cosmetic chemistry, Introduction to cosmeceutical: definition, classification, mechanism of action.

Unit II- CHEMISTRY OF COSMETICS

05

Introduction to skin care cosmetics: classification, chemicals, properties, physiological effects. Study chemistry of some skin care products (creams, foundation, primer, lotions). Chemistry of nail polish and paints. Hair care products: Properties, classification, working mechanism, formulation, safety and chemistry of hair care products (shampoo, conditioner, gels, colouring agents etc.) Primary, secondary and tertiary treatment

Unit III- PERFUMES

05

Introduction to perfumes, history, classification of perfumes, the concept of aroma, types and physiological effects. Composition, formulation and working mechanism of perfume. Introduction to perfumery chemicals: Natural sources, natural identical and synthetic compounds.

Syllabus for Practical Paper

15

1. Preparation of Cosmetics (Hair and Skin) Products

Preparation of toners, cleansing agent, moisturizers, cream, body lotions, nail paint, nail paint remover, shampoos, conditioner, hair dye, hair serum

2. Preparation of Essential oils

Extraction of essential oils: Rose, Jasmine, Eucalyptus, Sandalwood

Preparation of Attar and Perfumes, Preparation and uses of Rose water

Reference Books-

1. Hilda Butler (editor), Poucher's Perfumes, Cosmetics, and Soaps 10th edition, Dordrecht: Kluwer Academic Publishers © 2010.
2. "Chemistry and Technology of the Cosmetics and Toiletries Industries", by D.F. Williams, Springer International Edition.
3. Anthony J. O'Lenick Jr.; Thomas G. O'Lenick, Organic chemistry for cosmetic chemists, Carol Stream, IL: Allured Publishing, © 2008
4. Beginning Cosmetic Chemistry by Schueller and Romanowsk, Allured Pub Corp; 3rd edition, 20089
5. Barel AO, Paye M, Maibach HI. Handbook of cosmetic science and technology. CRC Press; 2014

Question Paper Nature
Certificate course in Chemistry of Cosmetics and Perfumes

Time: 1 hr

Total Marks: 30

Q. 1. Choose the **most correct** alternative for the following and rewrite the sentence. 08

- 1) -----
a) b) c) d)
- 2)
3)
4)
5)
6)
7)
8)

Q. 2. Answer **any four** of the followings. 08

- i)
ii)
iii)
iv)
v)

Q. 3. Answer **any two** of the followings. 14

- i)
ii)
iii)