

Roll No.....

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SCHOOL OF CHEMICAL AND LIFE SCIENCES
B.Sc (HONS), CHEMISTRY (FYUP), SEMESTER-I
Paper Name: Chemistry of Cosmetics and Perfumes
Paper Code: BCH-MIC-101

Time: 2.5 hours

Maximum Marks: 60

Note: This paper has 3 sections A, B, and C, Attempt all the three sections

Section A: Answer all the questions; **Section B:** Answer any 3 out of 5; **Section C:** Answer all the questions, each question has an internal choice

Abbreviations Used

CLO- Course Outcome, PLO- Program Outcome, BTL- Bloom Taxonomy Level: BT level 1-Remember; BT level 2-Understand; BT level 3-Apply; BT level 4-Analyse; BT level 5-Evaluate, BT level 6-Create

SECTION A

Q. No.	Question	BTL	CLO	PLO
Very Short Type Questions (Attempt all):		(1.5x10=15 marks)		
A 1.	Explain the use of ammonia and hydrogen peroxide in oxidative hair dyes.	2-3	1-3	1-3
A 2.	What is the role of emulsifying agents in the formulation of a cold cream? Give one example.	2-4	3-4	2-4
A 3.	What are sunscreens? Explain the significance of SPF in sunscreens.	1-3	2-3	2-5
A 4.	What are the ideal characteristics of nail lacquers?	1-2	2	3-4
A 5.	Why are preservatives used in various cosmetic preparations? Give one example of a preservative used in cosmetics.	2-4	2-5	3-5
A 6.	How do anti-perspirants function?	2	3	3
A 7.	What are gels? Explain its desirable properties.	2	3-4	3-4
A 8.	What is the difference between cosmetics and drugs? Give two examples of each.	2-5	3-5	3-4
A 9.	Mention one use each of eucalyptus oil, sandalwood, and rose oil in cosmetics.	2-4	3	2-3
A 10.	Talcum powder is made from talc. What are the three main elements in talc? What is the significance of zinc stearate in talcum powder?	1-3	3	2-3

SECTION B

Q. No.	Question	BTL	CLO	PLO
Long Type Questions (Attempt any TWO out of four):		(10x2=20 marks)		
B 1.	List the main ingredients of shampoo with their roles and explain the cleansing action of shampoo.	2-6	3-5	1-3
B 2.	What are the main ingredients in lipstick preparation? Give a detailed outline of the method of preparation of lipstick and its formulation.	2-6	2-5	2-4
B 3.	What are the common ingredients used in nail polish? What are their roles? Give a brief method of preparation of nail polish.	2-5	3-4	3-6
B 4.	Briefly discuss the role and mode of action of any five the following ingredients in cosmetic products: Titanium oxide, Nitrocellulose, Glycerin, Muscone, Lanolin, Triethanolamine, Kaoline	2-5	3-5	3-5

SECTION C

Q. No.	Question	BTL	CLO	PLO
Short Type Questions (Attempt all Questions):		(5x5=25 marks)		
C 1.	(a) What are the various categories of hair dyes? Discuss semi-permanent hair dye in detail. OR (b) What are the raw materials used in the manufacturing of deodorants? How are deodorants different from antiperspirants?	2-4 2-5	2-4	2-5 1-4
C 2.	(a) How are essential oils extracted from natural sources? Draw the structure of geraniol and illustrate its uses. OR (b) What are the toxic effects of cosmetics? How can they be minimized? Explain the role of aloe vera and turmeric in herbal cosmetics.	3-4 3-6	2-5	3-5 2-4
C 3.	(a) What is the importance of conditioners? What are the different types of surfactants used in shampoo? OR (b) Explain the formulation and method of preparation of suntan lotion. What is the difference between sunscreen and suntan lotion?	2-4 1-4	3-4	2-3 2-6
C 4.	(a) What are the properties of a good hair-removing cream? What are the two methods of hair removal? OR (b) What is the difference between vanishing creams and shaving creams? Give the steps involved in their formulation.	3-4 3-5	2-5	4-5 3-5
C 5.	(a) Specify the role of waxes and pigments used in lipstick. Give two examples of each. OR (b) What is the difference between hair gels and hair sprays? What is the use of propellants in hair sprays?	1-5 2-4	2-5	1-4 1-5