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DEPARTMENT OF CHEMISTRY
SCHOOL OF CHEMICAL AND LIFE SCIENCES
B.Sc (HONS), CHEMISTRY (FYUP), SEMESTER-I
Paper Name: Chemistry of Cosmetics
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.

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

Q.No.	Question	BTL	CLO	PLO
SECTION A		(1.5x10=15 marks)		
Very Short Type Questions (Attempt all):				
A 1.	Define cosmeceuticals. How do they differ from cosmetics and pharmaceuticals?	2-3	1-3	1-3
A 2.	What is the primary role of hyaluronic acid in skincare?	2-4	3-4	2-4
A 3.	----- is the essential oil occurs in cinnamon.	1-3	2-3	2-5
A 4.	----- is the example of pigment used in 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.	Draw the structure of the chief constituent of jasmine oil.	2	3-4	3-4
A 8.	What is the differentiate between Dye and Pigment?	2-5	3-5	3-4
A 9.	What is the role of ZnO in Face cream.	2-4	3	2-3
A 10.	Natural color of hair is due to _____.	1-3	3	2-3
SECTION B		(10x2=20 marks)		
Long Type Questions (Attempt any TWO out of four):				
B 1.	What are hair dyes? Explain the chemistry involved in hair dyes with suitable mechanism.	2-6	3-5	1-3
B 2.	What is talc? Explain the main ingredients in talcum powder and provide a detailed outline of the method for preparing talcum powder.	2-6	2-5	2-4
B 3.	What are the common ingredients used in Lipsticks? What are their roles? Give a brief method of preparation of Lipsticks.	2-5	3-4	3-6
B 4.	Briefly discuss the animal-based perfumery molecules.	2-5	3-5	3-5
SECTION C		(5x5=25 marks)		
Short Answer Type Questions (Attempt All Questions)				
C 1.	(a) Briefly explain the extraction of Eucalyptus oil OR What are sunscreens? Explain the significance of SPF in sunscreen.	2-4 2-5	2-4 2-4	2-5 1-4
C 2.	(a) Outline the ingredients present in the sandalwood oil and illustrate their uses. OR What are the toxic effects of cosmetics? How can they be minimized? Explain the formulations of eye shadow.	3-4 3-6	2-5 2-5	3-5 2-4
C 3.	(a) Explain the formulation of shampoo and the individual role of its ingredients. OR Discuss about the formulations of nail polish and nail polish removers	2-4 1-4	3-4 2-3	2-3 2-6
C 4.	(a) Explain the methods of hair removal. Outline the formulation of hair-removing creams. OR What are vanishing creams? Give the steps involved in their formulation.	3-4 3-5	2-5 3-4	4-5 3-5
C 5.	(a) Explain the role of Surfactant; Vitamin and Fatty acid in cosmeceutical industry. OR Explain the chief constituents of rose oil.	1-5 2-4	2-5 2-4	1-4 1-5